

# ECONOMIC & FISCAL IMPACT MODEL FOR BROWNFIELDS PROPERTY REUSE:

## PHASE II PALOUSE CASE STUDY & SOFTWARE TOOL

Final Draft Report

Prepared for:

State of Washington Department of Ecology

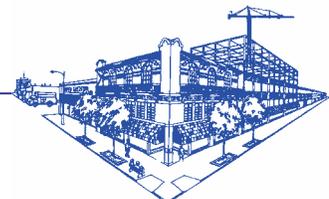
Toxic Cleanup Program

July 2009



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Economic and Development Services



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# **Economic & Fiscal Impact Model for Brownfields Property Reuse: Phase II Palouse Case Study & Software Tool**

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## AT-A-GLANCE SUMMARY

This report represents Phase II of a project to assess the economic and financial benefits of redeveloping brownfield properties in the state of Washington. Phase I (completed in 2007) was intended to outline the framework for an economic and fiscal model that could be applied to the evaluation of brownfield property reuse in both urban and rural communities. Key elements of the Phase I framework process include evaluation of potentially available national metrics, elements of private feasibility, public sector return on investment, and community benefits.

*This Phase II report is aimed to apply an economic and fiscal impact model for brownfields property reuse to a specific case study community in Washington State.* Palouse, a small eastern Washington town of just over 1,000 residents, serves as a noteworthy example because of its proactive efforts toward site reuse and overall community revitalization.

Phase II also encompasses development of a user-friendly computer application that can be used in applying the economic and fiscal model to varied brownfield sites in diverse geographic settings statewide.

An important premise of this economic and fiscal modeling process is that *sustainable brownfields reuse* typically can be expected to require acceptance on three levels:

- *Reuse feasibility* – meaning that the redevelopment generates private and public investment capital at least equal to the cost of remediation, site improvements and redevelopment.
- *Return on public investment* – based on an expectation that significant brownfield redevelopment may involve public investment and/or regulatory support justified by the potential for long-term fiscal benefits to affected state and local governmental agencies.
- *Community & environmental benefits* – covering economic factors that can be quantified such as added jobs, payrolls and business revenue together with non-market factors ranging from reduced risk to public health to opportunities for open space and amenity development.

What follows is a summary of major findings and observations from this Phase II report.

***The Palouse Case Study.*** Palouse, Washington, has been awarded an Integrated Planning Grant (IPG) from the State of Washington Department of Ecology (DOE) to evaluate environmental conditions and redevelopment opportunities of the former Palouse Producers site (of approximately 20,000 square feet). The community was selected as a case study for this supplemental economic and fiscal modeling process due to the strong record of local/state partnership and the opportunity for coordination with the IPG grant underway.

Palouse is located in the Whitman County, approximately two miles west of the Idaho border and 15-16 miles north of Pullman in eastern Washington. As of 2009, the state of Washington estimates in-city population at 1,010 residents, with countywide population of 43,300. The Palouse Producers site has two existing buildings – a 2-bay service station and a metal shed.

The subject property is situated between Main Street and the Palouse River at the eastern edge of a compact and pedestrian-friendly, 3-block long downtown area experiencing continued business vitality. More than 20 Main Street businesses are identified, together with key public and community uses such as the Post Office, Palouse Library, City Hall, Printing Museum, Health Center, public park and restroom. The downtown offers a distinctive historic character that has proven attractive for local residents and as a draw for visitors from the university communities of Pullman, Moscow and beyond.

**Reuse Feasibility.** From a private perspective, sustainable property reuse requires an ability to generate revenue that is at least equal to cost and produce a return on investment comparable to what the owner/investor could secure from comparable investments of similar use, scale and risk. The focus of this economic modeling process is on the interests of the private property owner, developer and investor. This perspective places primary emphasis on the ability of a particular property – including a reclaimed brownfield site – to *stand on its own* financially over both short and long-term time horizons.

In preliminary meetings with the City of Palouse, DOE and local stakeholders, six alternative strategies have been outlined that public agencies might consider for involvement with cleanup and reuse of brownfield sites. The *first three options* assume that the City of Palouse takes responsibility for controlling the site, cleanup and then disposition of the property:

- *Option 1* – involves the City in cleanup and greening the site (for habitat value with no fully enclosed structures placed back on the site)
- *Option 2* – involves City responsibility for cleanup and then leasing the site (to another party for redevelopment)
- *Option 3* – is similar except that the City sells the property once the site is fully remediated (to another party for redevelopment)

With the *next three options*, the role of the City extends to also include on-site construction:

- *Option 4* – involves the City in creating open space with park improvements including possible open structure (generously estimated at \$150,000 compared to recent City experience with restroom facilities further west on Main Street)
- *Option 5* – involves the City in cleanup, building a structure for site reuse (and then leasing the new building and site to a third party for reuse)
- *Option 6* – is similar except that the City sells the building and property (once the new structure is completed)

As often occurs with *real world* redevelopment projects, this preliminary evaluation yields no clear front runner as the most likely candidate for property reuse. Even uses that represent a *good fit* for some criteria fare poorly on others. Some overall observations can be made that may be useful as part of the community planning process for site reuse:

- *Light industrial and/or warehouse* uses represent a potentially good fit as a short-term or interim use of the property assuming that existing structures can still be used, but is not seen as a viable long-term reuse of the site.
- *Commercial and institutional* uses appear to fit well in terms of site suitability, meeting potential market need, compatibility with current zoning and strong community interest, and yielding taxable revenue – but with challenges of addressing cleanup and flood protection costs in a way that will prove financially feasible.
- *Residential* should be considered as a potentially viable use due to site location and amenity value together with proximity to Pullman and Moscow – but is also a conditional use within Palouse’s high density zone and could be expected to involve the highest level of environmental cleanup and flood protection related cost.
- *Park and open space* potentially minimizes cleanup and flood control cost but would also yield the least economic value in terms of potential jobs, property value, and tax revenue to the community.

Two reuse concepts have been more specifically evaluated with this assessment – a one-level (7,500 square foot) commercial building for retail and/or office use and a three-level (22,500 square foot) mixed use development with ground floor retail and upper level residential. Total development cost – including site acquisition, remediation/flood protection and other site work, building construction, soft costs, and owner profit – is estimated at nearly \$3.6 million for the full three-story project and just over \$1.5 million for the one-level retail only development.

Achieving a financially sustainable development may prove challenging for either project concept. However, preliminary financial *pro forma* analysis indicates that both concepts can come close to project feasibility if the resulting development can attract *top of market* rents and/or sales values coupled with public or other contributed funding. Contributed funding could be aimed to cover costs of site acquisition, environmental remediation, flood protection, and possible provision of tax incentives available under Washington State statute together with deferral of a typical private developer fee until justified by project income.

***Return on Public Investment.*** If reuse feasibility represents the first leg of the *triple play* for brownfields redevelopment, the community’s return on investment (ROI) comes next. Based on the full build-out of a three-level project with ground floor commercial and upper level residential uses, this project could be expected to generate an estimated \$211,000 in *one-time* sales tax and real estate excise tax (REET) with construction.

Post-development, *ongoing* tax revenues to state and local governmental jurisdictions are estimated to be in the range of \$135,000 per year (in 2009 dollars). This includes revenue from property, sales and state business and occupation (B&O) tax sources.

The cumulative *net present value* (NPV) of one time and ongoing taxes is estimated at \$1.9 million to state and local jurisdictions over a 20-year period. This figure includes a proposed reduction in property tax over the first eight years, assuming that residential units have limited property tax abatement as provided for by state statute if implemented by the local governing body of the City Council.

If developed as a one-level structure, one time taxes would drop by more than half to about \$98,000, due to the smaller amount of construction and resulting sales tax involved. Ongoing tax revenues would drop, but much less dramatically, to about \$103,000 per year due to continuation of commercial uses subject to retail sales tax.

***Community & Environmental Benefits.*** The third and final leg of the *triple play* for brownfields redevelopment is represented by what may be described as direct and economic multiplier benefits which are identified for the Palouse Producers site as construction and post-development ongoing benefits including calculation of direct (on-site) plus indirect and induced (or multiplier) benefits – both during and post-construction:

*Benefits of Full Mixed Use Development During Construction:*

- Approximately 38 total jobs locally and throughout the region lasting for the approximate duration of construction.
- Total direct + indirect/induced payroll locally and regionally of nearly \$1.7 million.
- Local and regional added business revenue impact of \$5.1 million.

*Benefits Of Ongoing Operations (Post-Construction):*

- An estimated 27 jobs locally and regionally (primarily associated with ground floor commercial space).
- Total payroll of just over \$830,000 per year, averaging close to \$31,000 per worker.
- Added annual business revenue from on-site business activity of over \$2.5 million.

If a 1-story commercial building were constructed (instead of the full 3-story mixed use project), direct *construction* benefits to the community would be reduced to less than one-half (42%) of the economic impact associated with the larger project. *Post-development* ongoing economic benefits would change by less than 5%, as most of the ongoing employment and associated economic impact is related to ground floor commercial space use (under either development scenario).

While detailed quantification of non-market values attributable to brownfields cleanup is beyond the scope of this economic modeling process, discussion of non-market attributes is important to broaden the strategic assessment. This discussion informs decision-makers of the significant benefits associated with brownfields cleanup that often may not otherwise appear within a more conventional economic analysis.

For the Palouse Producers site, a broad array of benefits identified have been grouped into eight overall non-market functions:

- *Human health* – by creating a site safe for renewed activity by Palouse residents and less risk for further contamination of the Palouse River.
- *Ecosystem services* – as one step toward an integrated long-term approach to Palouse river habitat and riparian restoration.

- *Recreation* – with opportunities for river access directly on-site and further enhanced with future opportunities for a community-wide river trail system.
- *Amenities* – including options ranging from on-site viewing to public art including access from the adjoining street right-of-way.
- *Proximate land values* – expected to be improved for adjoining properties with abatement of existing on-site contamination and site reuse.
- *Containment of urban sprawl* – by encouraging in-town residential and business growth.
- *Social & community values* – as a next step in the Palouse downtown and community revitalization process.
- *Passive (non-use) values* – even for persons who never actually visit but hear the Palouse success story as an example for other rural communities in Washington State and nationally.

**Case Study Findings.** Five key findings emerge as applied to this Palouse case study:

- There are a wide range of alternatives that could be considered for reuse of the Palouse Producers site – including commercial/institutional, residential and/or park/open space.
- Any reuse is dependent on remediation of remaining contamination; any use involving new enclosed building structures also is dependent on achieving appropriate flood protection.
- The reuse that does emerge should be a concept that facilitates the community’s vision while also proving to achieve market and financial feasibility.
- Commercial/institutional and/or residential reuse is most viable if configured to serve both local community and regional market demand.
- The opportunity for reuse of the Palouse Producers site and continuing community revitalization is greatly strengthened by an on-going track record of partnerships regionally and statewide.

**Application Statewide.** The goal of Phase I and Phase II reporting has been to outline and then test a framework for an economic and fiscal impact model applied to the evaluation of brownfields property reuse in the state of Washington. *Phase I* (completed in 2007) addressed questions of national metrics, and demonstrated the viability of creating a modeling process of potential value for state agencies, local governments and owners/developers as a common framework for evaluation of costs and benefits associated with site-specific brownfield projects.

*Phase II* (this report) builds from Phase I with the purpose of testing the modeling process with a case study community and development of a software tool applicable for a range of brownfields redevelopment projects statewide. The Palouse case study demonstrates the applicability of the model framework to a smaller community and smaller site redevelopment. Further refinement may be suggested as a community-led reuse vision emerges in conjunction with the Integrated Planning Grant (IPG) process now underway. A software tool has also been completed (as documented with Appendix B) and is intended for subsequent beta testing and application in conjunction with other brownfields economic and fiscal impact assessments statewide.

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## I. INTRODUCTION TO PHASE II BROWNFIELD REUSE

This report represents Phase II of a project to assess the economic and financial benefits of redeveloping brownfield properties in the state of Washington. An earlier Phase I report (first completed in July 2007) outlined an initial framework for an economic and fiscal model that could be applied to the evaluation of brownfield property reuse in both urban and rural communities.

This Phase II report is aimed to apply an economic and fiscal impact model for brownfields property reuse to a specific case study community in Washington State. The community selected is Palouse, located in eastern Washington, a community of just over 1,000 residents. Phase II also encompasses development of a user-friendly computer application that can be used in applying the model to varied brownfield sites in diverse geographic settings statewide.

### PROJECT BACKGROUND

As of 2009, there are an estimated 11,465 cleanup sites in the state of Washington.<sup>1</sup> Of this number, 30% are identified as having a notice of No Further Action (NFA) with another 26% as reportedly cleaned up. The remaining 44% consist of cleanups that are pending, in progress or in a monitoring status.

Working in partnership with other state and federal agencies, the State of Washington Department of Ecology (DOE) and the Department of Commerce (DOC formerly Community, Trade and Economic Development or CTED) are vitally interested in the recycling of once productive, but now underutilized, brownfield sites back into the *economic mainstream*.

***Brownfields Defined.*** The U.S. Environmental Protection Agency (EPA) has defined brownfields as “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”<sup>2</sup>

While the State of Washington does not have a similar statutory definition of brownfields, recent work of DOE acknowledges that any type of property can be a brownfield, not just industrial or commercial uses. In effect, brownfields are properties that cannot be built on or developed because they are polluted with hazardous substances or other contaminants.

***Federal Brownfields History.*** Federal involvement with environmental cleanup is governed primarily by the *Comprehensive Environmental Response, Compensation and Liability Act of 1980* (also known as CERCLA or Superfund). The act was aimed to address abandoned hazardous waste sites throughout the U.S. – including approximately 1,410 Superfund sites nationwide (as of 2005). In 1993, EPA began to address identified and potential contaminated sites not on the national priority list through its Brownfields Economic Development Initiative.<sup>3</sup>

CERCLA was amended by the *Superfund Amendments and Reauthorization Act of 1986 (SARA)* and by the *Small Business Liability Relief and Brownfields Revitalization Act of 2002*. The latter legislation is of particular note for incentives provided to encourage brownfields cleanup and reuse, including authorization of grants separate from Superfund. With passage of the

Brownfields Act, bona fide prospective purchasers, contiguous property owners, and innocent landowners also could claim liability protections contingent on the performance of an “all appropriate inquiry.”

***State of Washington Action.*** The primary State of Washington legislation affecting brownfields cleanup is the *Model Toxics Control Act (MTCA)*.<sup>4</sup> This act first went into effect as the result of Initiative 97 passed by the voters of Washington in 1988. Rules were first published in February 1991 with amendments in January 1996 and February 2001.

MCTA defines a two-step approach for cleanup involving establishing cleanup standards and selecting cleanup actions. The act contains provisions for site reporting and cleanup decisions, cleanup and monitoring, and administrative procedures for remedial actions including independent cleanup, voluntary cleanup, prospective purchase/consent decree, and enforcement action.

While there is no explicit definition of brownfields with MTCA, the legislation recognizes the need to promote the cleanup and reuse of vacant commercial and industrial property. Similarly, brownfields redevelopment addresses substantive goals of the state’s Growth Management Act (GMA) as with reduction of unnecessary urban sprawl, although there is no direct mention of brownfields reuse in the GMA statute.

Pursuant to MCTA, there are now two administrative pathways for conducting cleanups – formal sites and independent cleanups. With the formal DOE guided process, greater liability protection is available as through prospective purchaser consent decrees, consent decrees for potentially liable parties, and agreed orders for potentially liable parties and innocent purchasers.

Brownfield cleanups more often follow the administrative pathway through the Voluntary Control Program (VCP), developed to deal with less contaminated sites. VCP can offer DOE staff consultation together with opinion or comfort letters on the adequacy of the cleanup proposal and the likelihood of obtaining a No Further Action (NFA) determination at the completion of the cleanup, but with less assurance of liability protection.

***Current State of Washington Brownfields Responsibilities.*** Current brownfield program responsibilities of DOE and the Department of Commerce (DOC formerly CTED) are predicated on partnerships involving the state, King County, and the Cities of Seattle, Spokane and Tacoma in a Brownfields Coalition. The Coalition is intended to make it easier for local governments, property owners and developers to return brownfields to a useful purpose by helping with logistics and funding. The state makes available a broad range of cleanup and redevelopment programs through DOE, DOC and other agencies – as detailed in Appendix A to this report.

***Reuse Impediments.*** CTED has identified a number of impediments affecting the real or perceived value of investing in and revitalizing contaminated properties. Impediments most often cited include:

- Liability concerns associated with acquiring or foreclosing on contaminated property.
- Financial uncertainty surrounding the net return on investment (ROI) if the property is revitalized.

- The time to complete assessment and cleanup before redevelopment can occur, during which economic conditions associated with feasibility of reuse can change dramatically.
- The growing challenge of attracting private investment in a much less robust economic environment.
- Greater interest in community rather than purely private-sector led solutions to defining and implementing reuse opportunities sustainable both short and longer term.

The first three factors have been challenging for some time, though there has been significant progress addressing liability concerns for prospective purchasers. The latter two factors have emerged as increasingly important in the last few years – based both on experience with successful redevelopment and changing economic conditions.

*Three Generations of Brownfields Programs.* Both nationally and in the state of Washington, brownfields redevelopment has evolved to what might be considered as the third generation of cleanup and redevelopment activity:

- The *first generation* can be traced to the period of the 1980s to early 1990s, with states adopting laws patterned on the federal CERCLA (exemplified by MCTA in Washington State). The approach was focused on regulatory action premised on property owner liability for cleanup.
- A *second generation* of cleanup activity emerged in the mid-1990s to early in this decade. States expanded their scope of activity to less contaminated sites with Voluntary Cleanup Programs (VCPs), and private sector-led redevelopment.
- A *third generation* of brownfields redevelopment is now underway involving greater collaboration between state and local government, more community-led redevelopment partnerships, and leveraging resources from multiple public and private sources. Implicit is the recognition that private investment is not as likely to prove sufficient to assure cleanup and reuse on its own, especially in smaller communities and in an economic climate of recession with prospects for a constrained real estate market in the years immediately ahead.

This Phase II economic and fiscal impact modeling process is prepared in recognition of this new generation of activity that can be expected to become even more important with economic recovery over the next 3-5 years. This new approach is exemplified by the case study selected with this Phase II report.

## PURPOSE OF BROWNFIELDS IMPACT MODELING

The overall purpose of brownfields impact modeling is to develop an economic and fiscal impact model that can be used in forecasting economic benefits that may be realized from investing in brownfields revitalization. More specific objectives are to:

- Develop an economic forecast and fiscal impact model compatible with the state’s taxing structure suitable to forecast short and long-term revenues associated with a given reuse of brownfields property.

- Define nationally accepted economic development metrics for measuring revitalization success that can be used at the local, state and national levels.
- Field test the model on two brownfield sites with a known reuse and document the case studies for publication.
- Develop a software tool that may be used on a wider variety of redevelopment projects by CTED with its brownfields clients.

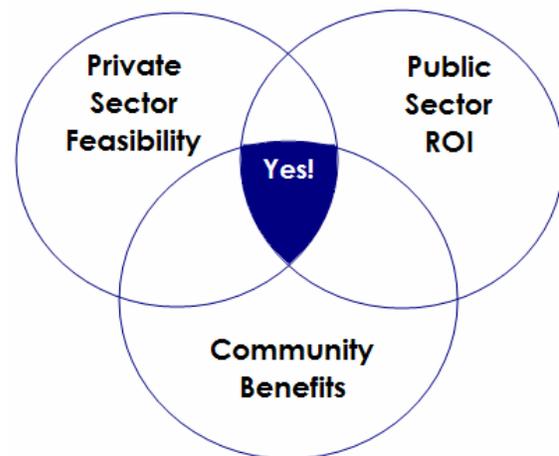
By measuring the fiscal impacts of idle versus recycled properties, CTED is interested in encouraging more local governments and private owners/investors to become engaged in acquiring and cleaning up idle or abandoned properties to encourage reuse.

## THE TRIPLE PLAY OF BROWNFIELDS REUSE

An important premise of this economic and fiscal modeling process is that *sustainable brownfields reuse* typically can be expected to require acceptance on three levels:

- *Private sector feasibility* – meaning that the redevelopment generates an increase in property value at least equal to the cost of redevelopment (including private share of environmental remediation expense).
- *Public sector ROI* – based on an expectation that significant brownfield redevelopment may involve public investment and/or regulatory support justified by the potential for long-term fiscal benefits to affected state and local governmental agencies.
- *Community benefits* – covering both economic factors that can be quantified such as added jobs, payrolls and business revenue together with non-market factors ranging from reduced risk to public health to opportunities for open space and amenity enhancement. Community benefits also can be considered as the combination of social and environmental effects from brownfields remediation and reuse.

Figure 1. Brownfield Reuse – *Getting to Yes*



There are exceptions to this *triple play* scenario. Smaller reuse projects – such as recycling of former service stations – may be accomplished by private initiative alone, especially if located in a community with a strong real estate market. And some redevelopment may be for purely public use, not requiring private sector involvement.

In effect, the focus of this work is on redevelopment that is aimed at encouraging public and/or private investment and is of enough scale to attract both public sector involvement and community attention.

## BROWNFIELDS REMEDIATION COST, RESPONSIBILITY & RISK

Within the state of Washington, any party purchasing a contaminated site can expect to assume liability for the cleanup by coming into the chain of title. Unlike some states, there are no *hold-harmless* mechanisms in Washington State. However, a Prospective Purchaser/Consent Decree is available through the Washington State Department of Ecology.<sup>5</sup>

***Remediation Issues Affecting Reuse.*** Factors that negatively impact reuse feasibility are:

- *Added cost of development* – with a key difference between a greenfield (or previously undeveloped) versus brownfield (or contaminated) site attributable to the added cost that the brownfield site must incur for environmental remediation.
- *Responsibility for cleanup* – especially challenging when all previous, current and prospective owners are jointly responsible for cost of cleanup. This makes it difficult for a prospective purchaser/developer to know what their share of potential cleanup costs will be – and over what period of time this cost assignment will be resolved.
- *Risk associated with uncertainties of cleanup* – negatively affecting the developer pro forma due to: a) the potential variability in cost required for cleanup (which may be unknown at the time of acquisition); b) time delay prior to achieving resolution of chain of title issues and regulatory agency cleanup plan approval; c) possible liability claims from accidents or contaminant exposures in the past or during the cleanup; and/or d) uncertainty about future community acceptance.<sup>6</sup>

***Palouse Project Application.*** Costs for remediation will show up in estimates for:

- *Site development* – as extraordinary costs required for such items as environmental assessments and testing, removal of sources of contamination, treatment/removal/replacement of contaminated soils or aquatic areas, and ongoing monitoring (a cost that might be capitalized or carried as an ongoing operating expense).
- *Building rehabilitation* – reflecting work needed for abatement within an existing structure (for such items as asbestos or other hazardous materials abatement or cleanup of areas damaged by petroleum-related or other historical chemical spills).

***Leveling the Playing Field.*** If greenfield and brownfield sites are essentially equal on other criteria, the greenfield site will attract developer attention first as the more feasible alternative. To compensate, the brownfield site will need to demonstrate other offsetting advantages such as:

- Amenity or location value upon redevelopment that supports higher sales values or rents than with the greenfield site.
- Public financial incentives to reduce the privately borne portion or risk associated with project remediation cost.
- Permit expediting to level the playing field or, better, offer more rapid permit processing (including environmental and zoning approvals) than is available for the greenfield site.

These approaches are all considered with the Palouse case study provided by this report.

## APPROACH TO MODELING PROCESS

DOE has contracted with the economic and development consulting firm E. D. Hovee & Company, LLC to prepare Phase II of the Washington State economic and fiscal impact model for brownfield property reuse assessment. Cascade Planning Group has served as project subconsultant.

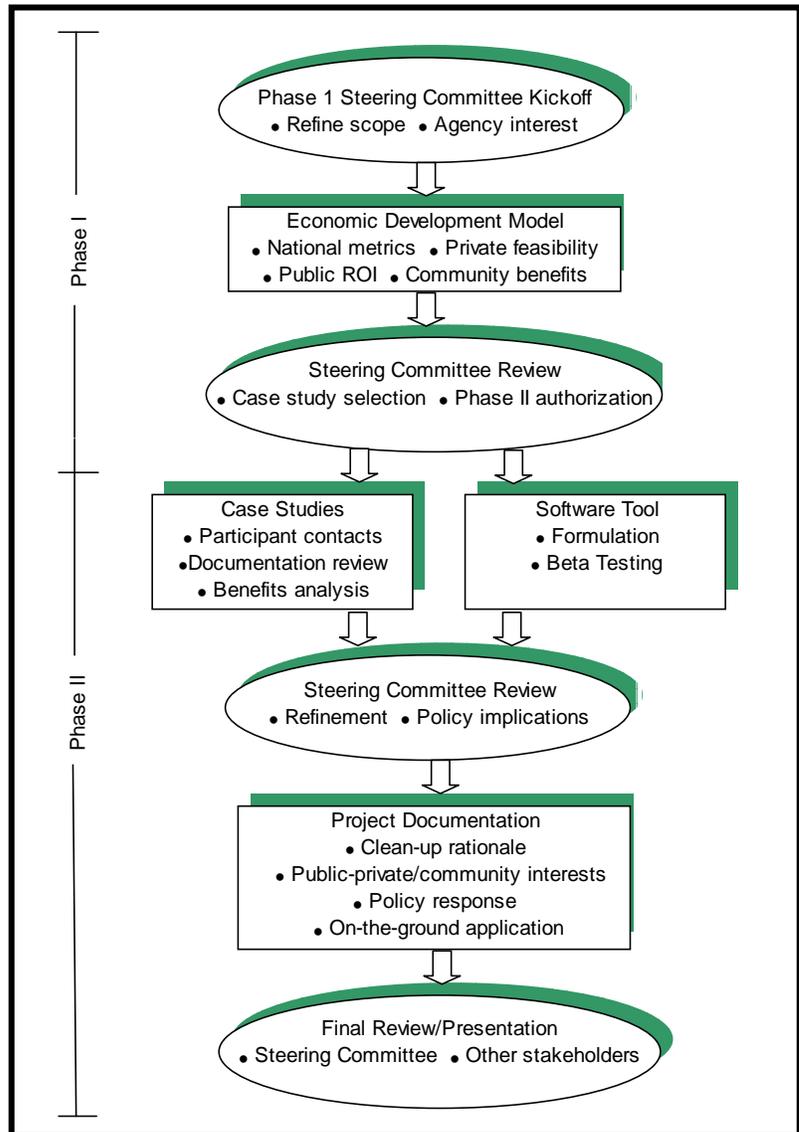
A *two phase* approach has been taken for the economic impact modeling process:

- *Phase I* (the 2007 report) – outlined an initial framework for an economic and fiscal impact modeling process. Key elements of the Phase I framework process include evaluation of potentially available national metrics, elements of private feasibility, public sector return on investment, and community benefits.
- *Phase II* (this report) – is intended as the next step to apply the model to an initial case study and to development of a computer/software tool that can be used by local governments and private firms in the evaluation of future brownfield reuse and related economic development projects.<sup>7</sup>

Review of project deliverables and overall guidance with Phase I was provided by a Steering

Committee with public and private sector representation. A similar review process is anticipated in conjunction with this Phase II report.

Figure 2. Brownfields Modeling Work Plan Flow Chart



## PHASE I REPORT ORGANIZATION

*As noted at the outset, this Phase II report is aimed to apply an economic and fiscal impact model for brownfields property reuse to a specific case study community in Washington State.*

Palouse, a small eastern Washington town of just over 1,000 residents, serves as a noteworthy case study example because of its proactive efforts toward site reuse and overall community revitalization. A major objective of this modeling process is to create a tool that can be used by governmental agencies, economic development organizations, private landowners and investors to mutually assess the site and community specific benefits versus costs associated with brownfields reuse.

Consequently, the remainder of this Phase II report is organized to cover model application with the Palouse case study and statewide application via a spreadsheet software template. Specifically covered are the following topics:

The Palouse Case Study  
Reuse Feasibility  
Return on Public Investment  
Community & Environmental Benefits  
Case Study Findings  
Statewide Application

Two appendices are also provided with this report. *Appendix A* provides an updated listing of national/state cleanup incentives. *Appendix B* covers a detailed description of the Software Model Tool also being submitted with this Phase II economic and fiscal modeling process.

*This is a Phase II draft report intended for review with DOE and project partners including the State of Washington Department of Commerce (DOC formerly CTED). Revisions with the Phase II process may be made based on questions and suggestions received.*

## II. THE PALOUSE CASE STUDY

The economic and fiscal impact modeling completed in Phase I was intended to be demonstrated with one or more specific case study communities involving actual or potential brownfields reuse. With this Phase II report, the State of Washington Department of Ecology (DOE) has identified the town of Palouse, Washington, for this initial case study analysis. We begin with a description of the site and community context, followed by a review of pertinent market information and associated indicators of downtown vitality.

### SITE & COMMUNITY CONTEXT

Palouse is located in the Whitman County, approximately two miles west of the Idaho border and 15-16 miles north of Pullman in eastern Washington. As of 2009, in-city population is estimated at 1,010 residents, with countywide population of 43,300.<sup>8</sup>

**Palouse Brownsfield Site.** DOE has funded an Integrated Planning Grant (IPG) with the City of Palouse to assess cleanup and reuse of what is known as the former Palouse Producer site.<sup>9</sup> The site is centrally situated in the downtown area of Palouse, bounded by Main Street and the Palouse River. Based on a *Targeted Brownfield Assessment (TBA) Report* completed for the property in May 2008, the property has experienced a varied set of business activities over time:

- History of on-site business and development activity extends back more than a century. From 1888-1940, the property was the location of a wagon wheel shop, drug store, butcher, dentist, boarding facility, stable, general store, saddle shop, harness shop, and welding shop.
- From 1940-1955, a blacksmith shop was located on the site.
- Conoco constructed a service station on the property in 1955 – involving use of both above ground and underground storage tanks.
- In 1977, Palouse Producers purchased the property for use as a bulk fuel storage and service center.
- The Palouse Producers property was purchased by the current owner in 1996 and was initially used for welding fabrication, though the site is currently used only for storage.

Figure 3. Palouse Producers Site



The approximately 20,000 square foot site currently has two structures – a 1,740 square foot, two-bay service station and a 1,160 square foot, metal sided storage facility.

**Contamination & Remediation.** Operations that have created environmental concerns are related to historical commercial business activities on-site. In 1985, Palouse Producers was cited

by DOE for petroleum spills resulting in release of petroleum to the Palouse River. Remediation of the contaminated soil and groundwater occurred in 1984 and 1985.

DOE conducted added groundwater and soil sample testing in 1992-1993. In 1994, two remaining monitoring wells were decommissioned with a resulting statement that the site no longer represented a significant environmental threat.

Subsequent soil samples in 1999 indicated that petroleum remained in site soil and groundwater. The May 2008 TBA report also documented added contaminants of concern that included arsenic, cadmium, manganese, lead, and low levels of pesticides. Remaining issues appear to be located in “pockets of contamination” rather than widespread high levels of contamination.

The 2008 TBA analysis included an initial estimated cost of \$286,200 for site remediation involving:

- Excavation and disposal of remaining contaminated soils including backfill with completed soil.
- Installation of three permanent monitoring wells between existing structures and the river.
- Preparation and implementation of a long-term monitoring plan
- Semiannual sampling of contaminants of concern for five years.

**Site Cleanup & Reuse Initiatives.** The TBA report came as the result of the City of Palouse successfully working with the EPA (Region 10, Seattle Office) starting in 2006. Results of this initial TBA analysis served as the basis for subsequent award of an Integrated Planning Grant (IPG) from DOE in 2009. Palouse is one of two initial IPG funding awards made in the state.

Objectives of the work program resulting from this Integrated Planning Grant are for the community to conduct the necessary planning to:

- Clean up and restore a contaminated brownfields site and return it to a beneficial use.
- Repair and restore a section of riverbank along the North Fork of the Palouse River.
- Promote economic development in the community through long-term visioning.
- Integrate the downtown business district with public right-of-ways to promote recreational and lifestyle opportunities available with the North Fork Palouse River.
- Build upon community successes in recent years of restoring public infrastructure and right-of-ways to benefit all local citizens.



Service bays from Main Street



Example of salvage on site



Palouse River at back of site

## COMMUNITY & MARKET CONTEXT

Reuse opportunities for the Palouse Producers site are set within the context of community interests and broader local and regional market trends – of potential benefit for not just this site but the longer term economic development of Palouse. More specifically, this context includes review of recent community initiatives, preliminary interests expressed for site reuse, and local and regional market demographics.

***Recent Current Community Initiatives.*** Palouse was chosen for the recently awarded DOE Integrated Planning Grant due in large part to the community's recognized track record for interagency coordination and project accomplishment. This is especially impressive for a city with just over 1,000 residents.

Over the last decade, the City of Palouse has engaged in a series of collaborative planning and project implementation with other federal, state and local agencies. Agency partners have included WSDOT (Washington State Department of Transportation), TIB (Transportation Improvement Board), EPA (Environmental Protection Agency), DOE (Department of Ecology - FCCAP program), CERB (Community Economic Revitalization Board), and Whitman County .08 Committee.

Results of these collaborative partnerships have included streetscape improvements to Main Street and Whitman Avenue (including rail line upgrades), construction of a downtown park and public restroom project, extension of sewer to nearby residential areas to remediate septic issues, and a Palouse River mobile home acquisition project currently underway.

***Community Reuse Interests.*** Based on interests expressed early on with the Integrated Planning Grant process and a subsequent community meeting on July 6, 2009, the following types of uses have been consistently mentioned to date:

- *Commercial / institutional* use with particular community interest in ground floor retail, possible boutique hotel, and university related use including possible business incubator. Office potential is also considered with this reuse analysis though this has not been identified as a community priority to date (though incubator potential has been identified as of interest).
- *Residential* activity appears to be of interest, especially the opportunity for apartments that might be located above retail. Other related multi-family housing product types might include townhouse or condominium development. Single family use could also be a possibility, though this has not been mentioned as a community interest.



Agriculture remains pivotal to the Palouse area economy



New lighting & banners enliven downtown



Palouse River just east of site

- *Park and open space* reuse also has generated considerable community interest. Options to consider might include a city park or plaza, river access and recreation space, and/or open space with habitat restoration.

While the site’s most recent use has been for an industrial purpose, this has not been identified as a likely community priority, especially as the site is eventually redeveloped. However, it is conceivable that this could represent a temporary or interim use, especially if accompanied by steps toward continued site cleanup and remediation.

This initial list of community interests and potential priorities is expected to be refined with more detailed community planning workshop sessions conducted starting in September of this year.

### ***Local & Regional Market Demographics.***

Opportunities for reuse of the Palouse Producers site also are appropriately considered in the context of the local and regional market that could be drawn to and served by this property – whether for commercial, residential or open space/recreational use. Key market indicators assessed on a preliminary basis with this reuse report are outlined here:

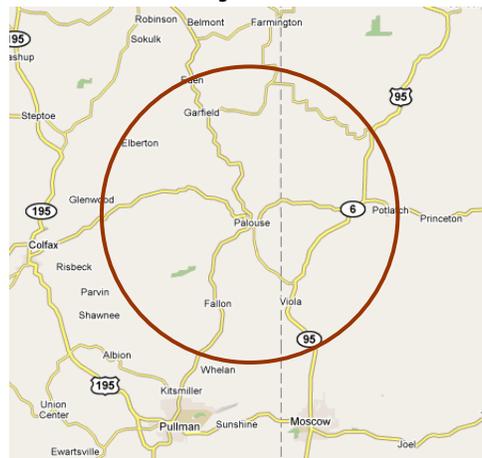
#### ***Market Area Populations:***

- The *primary* market (or customers) for any new development on the project site will come from within the City of Palouse itself and its 1,010 residents, shopping locally for day-to-day purchases as for groceries.
- A somewhat larger *secondary* market is comprised not only of in-city residents but those within an approximate 8-9 mile radius from Palouse and for whom a drive to Palouse may be as close or closer than travel to Pullman or Moscow. As of 2009, there are about 5,050 residents within this radius including those who live in the roughly 750-person community of Potlatch, Idaho.
- A *destination* market that may attract occasional trips for specialty shops, dining, entertainment, and the small town character offered by Palouse. Due to distance from major highways, Whitman and Latah Counties can be expected to serve as the primary source of destination activity, though some visitors undoubtedly will be drawn from beyond the immediate area. These two counties (including the university communities of Pullman and Moscow) have a combined 2009 population estimated at 79,200.

**Figure 4. Market Area Maps**  
**Primary Market Area**



**Secondary Market Area**



**Destination Market Area**



Source: ESRI.

Population levels have been relatively stable across all three market areas since 2000, and are projected to remain so over the next five years as well.

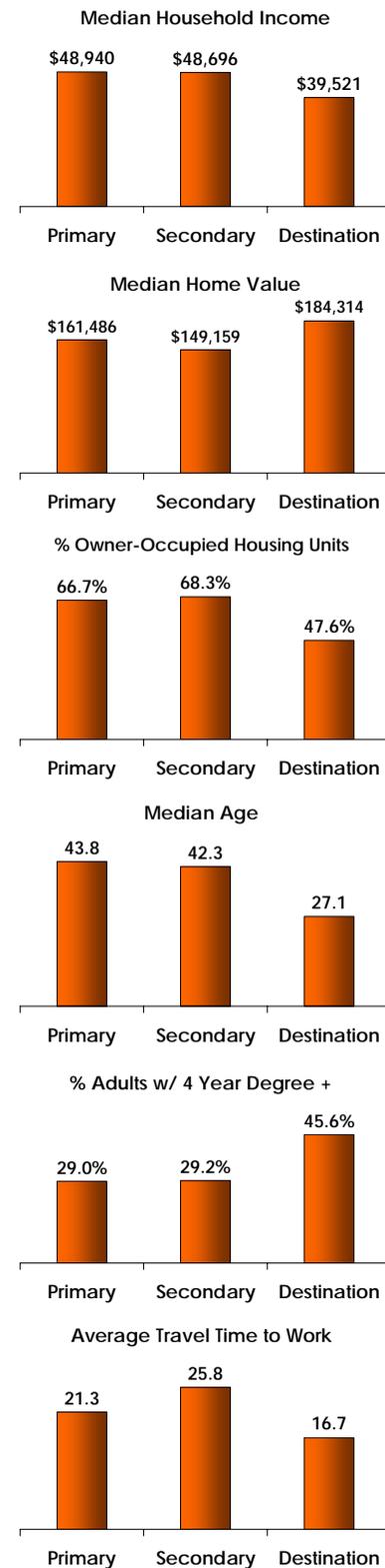
*Trade Area Demographics:*

- As of 2009, residents of *Palouse* have a higher household median income (estimated at \$48,940) than is the case for the two county area, albeit with lower typical home values, somewhat older residents and levels of adult educational attainment below those of residents throughout the entire two-county area.
- Persons living *within 8-9 miles* of Palouse exhibit higher rates of owner-occupied housing, are likely to experience longer commutes to work, and tend to have a higher proportion of younger children than do residents of either Palouse or the larger two-county area.
- The demographics of *Whitman and Latah Counties* are strongly influenced by the two university campuses resulting in high concentrations of both student and faculty populations. Not surprisingly, the two counties as a whole have higher proportions of rental units, relatively low median age and very high educational attainment (with 46% of adults over 25 having either a bachelor’s or graduate degree).

*Retail & Dining Need:*

- At all three market area geographies, there is substantial *sales leakage* – when residents travel outside their local community to make purchases elsewhere.
- Due to the small size of local populations, the *primary and secondary trade areas* do not offer enough added retail potential that would be predicated on serving local customers only. In most cases, the calculated demand of added space for a particular business is not enough to support a competitively sized operation. Also noted is that many local customers can be expected to shop larger format stores for those items typically purchased on the basis of price and selection – such as for general merchandise including discount retail.
- Residents of *Whitman and Latah Counties* make close to one-third of their purchases outside the two-county area – in places as diverse as Spokane, the Tri-Cities and Lewiston. There is significant regional sales leakage in dining as well as retail categories such as home

Figure 5. Demographics



Source: ESRI.

furnishings, apparel, sporting goods, hobby/book and other specialty stores for which small independent retailers can successfully compete for both local and destination clientele.

Discretionary purchases lost to retailers in the two-county market are most likely to be recaptured in a specialty shopping district that is attractive, easily walkable, and perhaps just a bit out of the ordinary. These are all interests that can be captured by the ambience of relaxed shopping, dining and strolling in Palouse.

*Taken together*, it is the combination of community interests, demographics across multiple trade areas, and retail/service potential that will help to better define potentially viable reuse opportunities in the months ahead. These are opportunities that could be addressed by development of the subject Palouse Producers site, or separately with added retail and services to serve resident and visitor interests at other locations in the downtown area.

## DOWNTOWN VITALITY

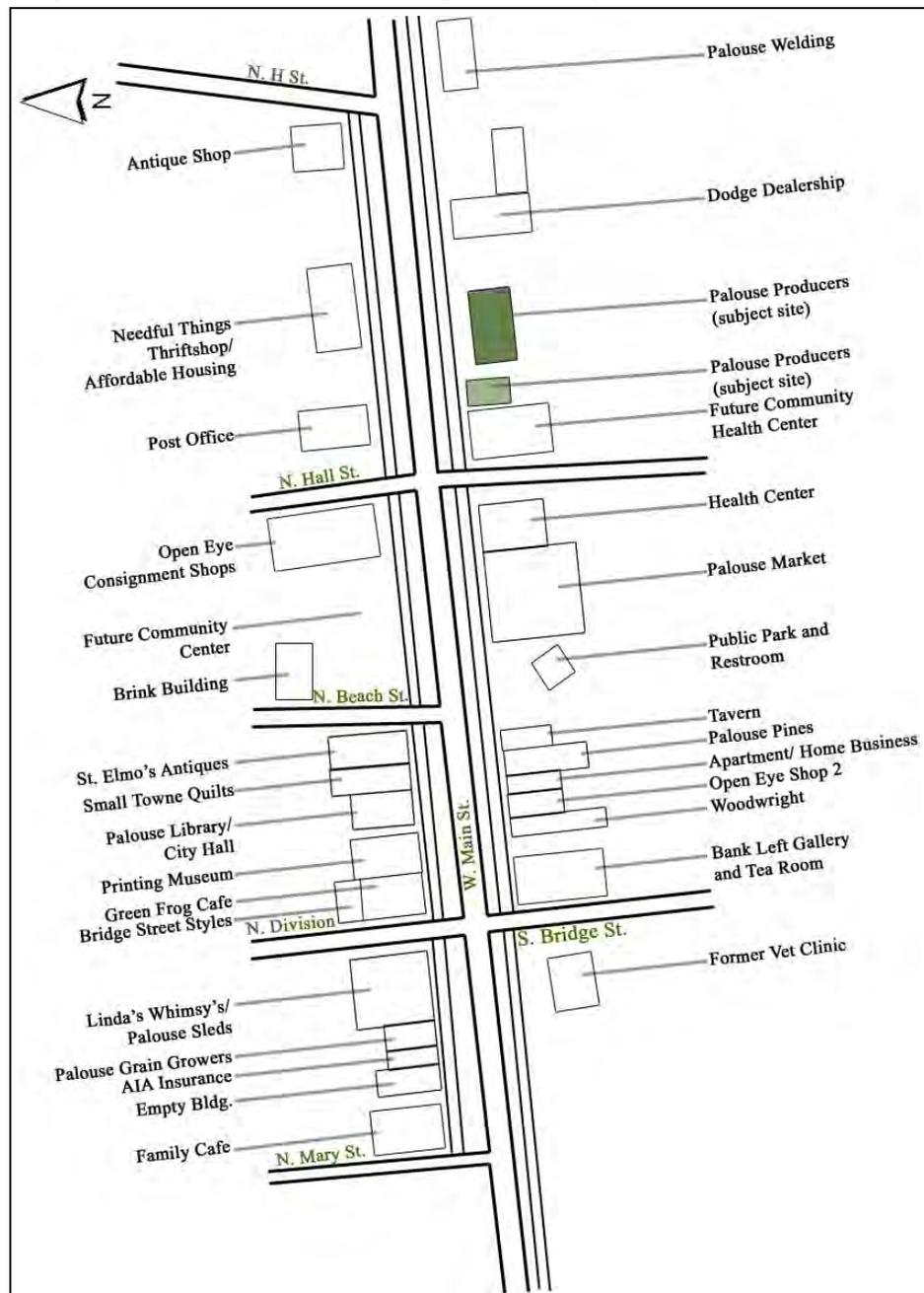
The next several pages of this report provide a general orientation to downtown Palouse followed by a block-by-block review of the buildings and streetscape along Main Street.

### *Built Environment.*

Downtown Palouse offers a rich mix of business and community use spaces in a compact, walkable, 3-block, authentic Main Street setting. More than 20 existing businesses are identified, with the highest density of activity on the block between Division/ Bridge and Beach Streets, plus the north side of the block between Division and Mary Streets.

Key public and community uses include the Post Office, Palouse Library, City Hall, Printing Museum, Health Center and public park and restroom. Building vacancies are few in number and interspersed – with key noted vacancies including the Old Palouse Producers site (subject of this analysis) and an adjoining major building (now being renovated as the future Community Health Center).

Figure 6. Downtown Building Inventory



Source: E. D. Hovee & Company, LLC.

**Visual Characterization.** Perhaps the best way to get acquainted is by walking the street. This page and the next provide a *walking tour* of the three primary blocks of downtown Palouse. Walking east on Main Street, this page shows a few views of the block between *Mary Street and the site*. North side properties are to the left of each page; southside to the right.



Viewing the first block (left) from an angle shows how the varied buildings relate to one another. What is striking about Palouse is the historic character of the buildings and continuity of frontage on the street.



On the corner of Mary Street and Main Street is the *Family Cafe* (also left) where many locals gather to dine and enjoy the company of familiar faces. This illustrates the type of business that can effectively cater to local clientele and draw visitor interest.



Just a small grassy patch away from the Family Cafe is a compilation of attached businesses including *AIA Insurance* and *Palouse Grain Growers* (left).



Other local businesses *Linda's Whimsy's* and *Sleds* inhabit the distinctly red slat building (left). Across the street on the corner of Bridge and Main stands the only non-residential building on the south side of the block, which once housed a veterinary clinic (right).



Coming in from the west and crossing the bridge on West Main, one immediately notices the pastoral character of the Palouse River at Hayton Green Park. The river wraps around and parallels Main Street for the length of the downtown area.



*Continuing east past N. Division/ Bridge Street ...*



The *Green Frog Café* (left) at the corner of Bridge Street and Main Street is often the first place travelers see in downtown, as highways cross here. The former bank (now a gallery and tea room) is on the corner across the street.



Attached to the cafe (left) is a local museum, a brick building trimmed in a hunter green as seen thru much of downtown. *Woodwright* continues this color theme (right).



The Palouse Library, midblock, carries its own sense of charm with a pocket park (left). Reflecting the white facade of the library stands *Open Eye Consignment* together with rental apartment and home business use.



*Small Town Quilts* occupies a bold red building (left) while *Palouse Pines Mercantile* across the street (right) fits into the street façade with other adjoining uses.



Taken together, this block illustrates a comfortable mix of 1-, 2- and 3-story buildings side-by-side on Main Street.



Finally, the Northwest corner of Beach and Main is home to *St. Elmo's Antiques* (left) while across the street is a place to gather and mingle at the local tavern.



### Passing Beach Street ...



On the Northeast corner of Main and Beach is a vacant lot planned as the future home to a new community center. Across the street, public toilets are located conveniently in a petite park with benches (right). A sculpture graces the foreground; the Palouse River is at the other end of this open space.



The Palouse Community Center *thermometer* (left) well illustrates local initiative working together toward accomplishment of important community goals. Across the street (right), the *Palouse Market* is a major daily draw for customers.



Adjacent to the lot planned for Community Center use is an antique store (left). The current *Palouse Health Center* is situated across the street (right), next door to the Palouse Market.



*Continuing past Hall Street ...*



To the left is the *U.S. Post Office*. In Palouse, the Post Office represents an important daily gathering point and source of customers for nearby businesses. To the right is the planned site for the new *Health Clinic* (currently being remodeled).



Left is the *Needful Things Thrift Shop*. Across the street (right) is the first building on the *subject Palouse Producers site*. This is a metal building (of approximately 1,160 square feet currently used for storage).



Looking left is a good place to notice another community initiative with attractive streetscape – including a Palouse Main Street Sign and historic period streetlight. Looking right across the street is the second subject building on the site, a former two bay service station building (of about 1,740 square feet).



Left is an antique building at Main and H Street. On the right is a Dodge automobile dealership.



In effect, the Old Palouse Producers site offers a downtown location but also a transition to neighborhood and rural areas just beyond.

### III. REUSE FEASIBILITY

This discussion turns from a general overview of the Palouse community to the market and financial feasibility of reusing the subject Palouse Producers property. We begin with a general overview of varied reuse perspectives to be considered and public development strategies to facilitate reuse of a brownfields site, as with this property. This is followed by identification and evaluation of specific reuse concepts and two more detailed site specific development programs together with associated development cost, valuation upon completion, and mechanisms for closing any remaining financial gap.

#### REUSE PERSPECTIVES & FEASIBILITY ANALYSIS

The determination of whether cleanup and reuse of a brownfield site is viable will vary depending on who is looking at a site. Perceptions also can vary depending on factors such as level of for-profit versus philanthropic motivation, access to capital, and tolerance for project and financial risk.

***Varied Perspectives.*** Perspectives on reuse feasibility will be affected based on whether the party of interest is a private or public owner/investor – or an occupant as operating a business or resident:

- A private owner, developer and investor typically is focused on the financial viability of the reuse of a specific parcel of *real estate*. From a private perspective, sustainable property reuse typically requires an ability to generate revenue that is at least equal to cost and produce a return on investment comparable to what the owner/investor could secure from comparable investments of similar use, scale and risk. The potential for financial return on investment in property becomes the focus of the initial transaction and ongoing involvement.
- In contrast, a public or non-profit owner may have objectives that are equally or more important for reuse than financial viability of the specific site. This *broader set of interests* may include reduction of contamination, protection of community health, and creation of amenity values or economic benefits that are of benefit not just to the property being redevelopment but for the entire community.
- The business occupant's interest may be substantially different – as the primary focus is on the profitability of a *business enterprise* rather than the value of the underlying property itself. If the business owner is also the owner of the property, the owner will pay attention to both business and property – but with varying degrees of emphasis.
- Similarly, a *resident occupant* of property may have interests that are different from those of a real estate investor. As an occupant, the focus is on the utility and enjoyment of the property – whether as a primary or secondary resident. If the occupant is also the homeowner, multiple interests are again represented. Focus on property value (rather than intrinsics of property use) may be more pronounced during periods of rapid price appreciation as has been the case until recently in many communities around the state.

***Financial Pro Forma Analysis.*** A technique commonly used to assess the market and financial feasibility of a real estate investment project is called a financial *pro forma* analysis.

This involves a projection of future expectations based on what the owner/investor knows or can reasonably anticipate regarding demand for the reuse intended, in conjunction with estimation of resulting costs and revenues associated with development and ongoing property utilization.

The purpose of the pro forma is to assess the financial feasibility of a proposed real estate or related capital investment project. Fundamental feasibility questions are two-fold:

- *Will the property be worth more after redevelopment than what it cost to purchase and redevelop?* Project valuation upon completion is compared with cost of development (including allowance for a competitive profit margin). Financially feasible investments are those for which projected valuation upon build-out *exceeds* the cost of development. The answer to this question is of more importance to a private owner than for a public or non-profit owner that may be willing to invest in redevelopment for benefits that extend beyond the bounds of the property itself.

For mixed use development, the analysis can be complicated by the combination of *for sale* product (as with condominiums and townhomes) and *for rent* product (as with the ground floor retail space). To compare “apples with apples,” all of the development products are evaluated on the basis of valuation supported as of the time of build-out and subsequent lease-up to a level of what is viewed as normalized occupancy.<sup>10</sup>

- *Can funding be secured that is adequate to cover project costs, both for development and ensuing operations?* This is a question of importance to both private and public investors, but often in different ways. For the private investor, sources of investment funds are typically debt (as with a mortgage) and equity (the owner’s own investment). Revenues are usually predicated on what is received in the form of rents or unit sales on the property – as needed to cover both operating expenses and debt service (or mortgage payments).

These are also considerations for the public or non-profit investor, but with one important difference. The public/non-profit investor may also secure funding from non-project sources such as grant or other contributed sources of income.

## **PUBLIC DEVELOPMENT ROLE & DEVELOPMENT STRATEGIES**

At the time the Phase I economic and fiscal modeling process was completed in 2007, a primary focus was on addressing development feasibility of site remediation primarily from a private investment perspective. Since then, there has been growing recognition from DOE and other practitioners of brownfields redevelopment that successful reuse requires greater public sector participation.

As stated by a 2009 analysis conducted for DOE on *Linking Toxics Cleanup and Redevelopment*, it is becoming increasingly important to “emphasize community-wide planning and stakeholder involvement, state-level strategic planning for brownfields reclamation, as well as integration within a broader sustainable development agenda.”<sup>11</sup> Based on a review of case studies in and outside of Washington State, “community planning and stakeholder involvement, in various forms, were part of most of the successful cases studied.”

These conclusions are consistent with the *third generation* of brownfields redevelopment now underway. This new approach involves more community-led redevelopment partnerships, leveraging from multiple public and private sources. This approach can also involve direct public sector involvement in securing the property, taking a more active role in property cleanup and, in some cases, in long-term redevelopment as well. It is to these alternative public development strategies that we now turn in the context of choices that might be made for redevelopment of the Palouse Producers site.

***Optional Public Development Strategies.*** In preliminary meetings with the City of Palouse, DOE and local stakeholders, six alternative strategies have been outline that public agencies might consider for involvement with cleanup and reuse of brownfield sites. The *first three options* assume that the City of Palouse (or similar public entity) takes responsibility for controlling the site, cleanup and then disposition of the property:

- *Option 1* – involves the City in cleanup and greening the site (for habitat value with no fully enclosed structures placed back on the site)
- *Option 2* – involves City responsibility for cleanup and then leasing the site (to another party for redevelopment)
- *Option 3* – is similar except that the City sells the property once the site is fully remediated (to another party for redevelopment)

With the *next three options*, the role of the City extends to also include on-site construction:

- *Option 4* – involves the City in creating open space with park improvements including possible open structure (generously estimated at \$150,000 compared to recent City experience with restroom facilities further west on Main Street)
- *Option 5* – involves the City in cleanup, building a structure for site reuse (and then leasing the new building and site to a third party for reuse)
- *Option 6* – is similar except that the City sells the building and property (once the new structure is completed)

***Framework for Comparing Alternative Strategies.*** All options assume demolition of existing structures on the property. For purposes of comparing *apples to apples* with this analysis, it is assumed that a building of approximately 7,500 square feet is constructed with Options 5 and 6 (most likely involving a 1-2 level structure).

These optional strategies are compared across three time periods critical to the development process:

- *Pre-development* – typically consisting of steps including community visioning and planning, feasibility or due diligence analysis, and acquisition (or other means of site control).
- *Cleanup and redevelopment* – involving steps for this site that could include environmental cleanup/remediation, site work (including demolition and infrastructure), flood control, and building construction.

- *Post-development* – over a multi-year period illustrated as Years 1-10, 10-20 and 20-30 extending over the time period of any debt amortization and an anticipated minimum useful life of any new structures on-site.

On the next two pages, all costs indicated with the six examples are illustrated on a per square foot of site area basis. Costs are generalized and subject to refinement depending, in part, on specific use concepts considered.

With each option, two revenue alternatives are indicated:

- ✓ *High revenue* for best case conditions predicated on local jurisdiction recovery of pre-development plus cleanup, site work and flood control costs from non-local sources plus realization of *top-of-market* conditions for lease or sales value.
- ✓ *Low revenue* for worst case conditions assuming little to no local jurisdiction recovery of pre-development and cleanup costs together with more *typical prevailing market conditions* in Palouse and nearby rural communities at present.

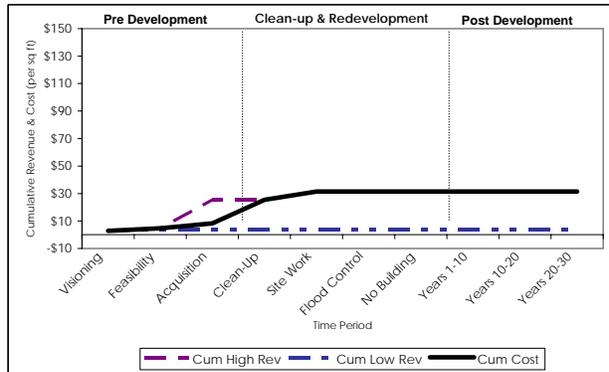
**Figure 7. Palouse Producers Reuse Notes**

- ✓ Approximate 20,000 square foot site
- ✓ Two existing buildings on-site totaling approximately 2,900 square feet
- ✓ Preliminary cleanup cost based on 2008 TBA report – adjusted for inflation and contingency factors (though will likely vary with the specific proposed reuse)
- ✓ Site work including removal of existing two building structures
- ✓ No added cost for public infrastructure to serve property redevelopment (would require verification for specific proposed reuse)
- ✓ Location in flood plain requiring fill and/or floodproofing for substantial renovation or new building construction (estimated at an approximate 15% cost premium for this preliminary assessment)
- ✓ Placement of 7,500 square foot structure in the scenarios with new buildings included (Options 5 and 6)
- ✓ Total new commercial building construction costs of approximately \$100 per square foot (including soft costs)

**Scenarios Evaluated & Compared.** On the following two pages, multi-year financial results of these six alternative development concepts are compared and contrasted – both in narrative and graphic form. The *first three options* illustrated on this page assume direct City involvement in site cleanup but not in subsequent site development.

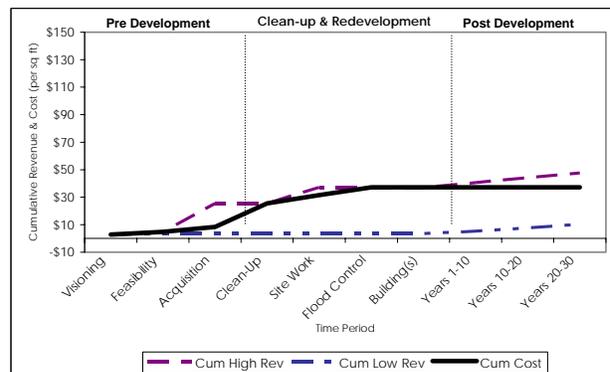
**Option 1** – involves the City in cleanup and greening the site (for habitat value with no fully enclosed structures placed back on the site). Of all the options considered, this is the lowest cost scenario as it involves no investment in placing fill on the site or other action for floodproofing. Rather, the site would be left for habitat or open space use and no other on-site development.

With a *high revenue* scenario, the City would obtain outside funding for 100% of its costs (as from grant sources), ideally in advance of incurring expense. By comparison, the *low revenue* scenario assumes that except for some up-front planning money, the City (or other local responsible parties) would be responsible for cleanup.



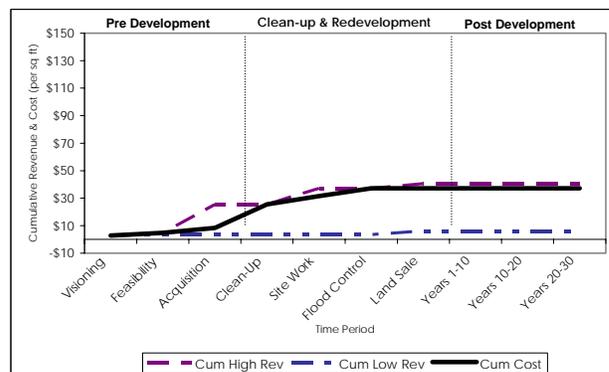
**Option 2** – involves City responsibility for cleanup and then leasing the site (to another party for redevelopment). City incurred costs could be substantially above those of Option 1 if the City takes responsibility for funding of flood protection (elevation or floodproofing) as a means to incent another user to lease the property, unless offset by grant funding as with the high scenario.

In this case, the City conceivably could generate a mild surplus over time due to the relatively low value of land lease income in Palouse compared to other project costs. However, with the high scenario, the direct financial benefit to the City increases somewhat over time – in later years of the lease term.



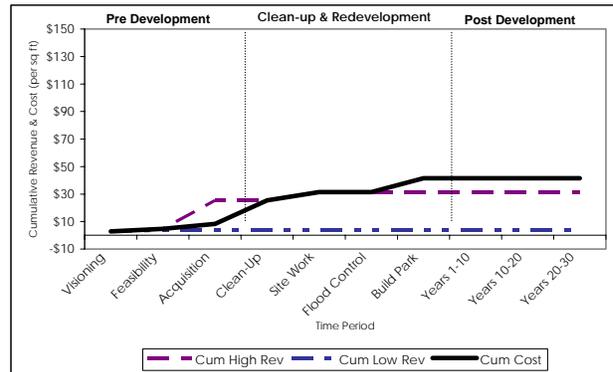
**Option 3** – is similar except that the City sells the property once the site is fully remediated (to another party for redevelopment). In addition to receipt of funding for pre-development, cleanup and flood-proofing, the City receives a one-time sales price (assumed to be in the range of \$3.50 per square foot of land area).

In effect, the land sales price could be anticipated to represent less than 10% of the total cleanup and related project costs to make the site ready for development. This yields some added immediate cash flow to the City but without the added longer term upside potential of the Option 2 lease approach.

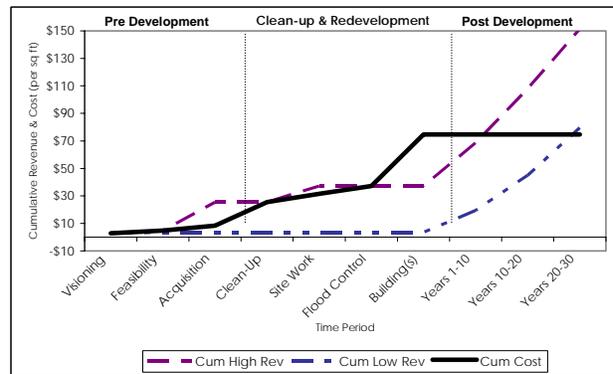


With the *next three options*, the role of the City extends to also include any on-site construction of the site.

**Option 4** – involves the City in creating open space with park improvements including possible open structure (generously estimated at \$150,000 compared to recent City experience with restroom facilities further west on Main Street). This option likely represents a net financial loss to the City unless the park improvements could be funded by a source other than the City. However, it is also the lowest cost option of the three options illustrated that involve a City role with on-site building development (on this page).

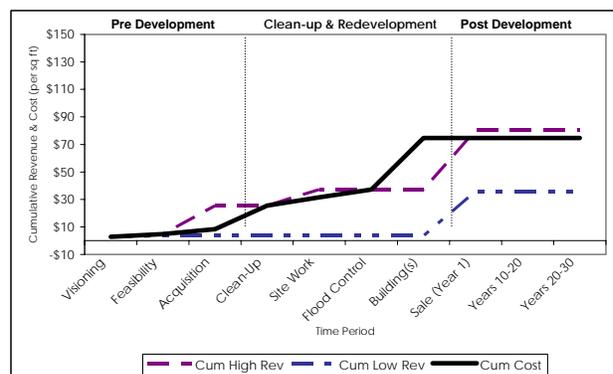


**Option 5** – involves the City in cleanup, building a structure for site reuse (and then leasing the new building and site to a third party for reuse). The degree to which the City can realize a net financial benefit depends not only on funding for cleanup and related costs, but also the extent to which a quality redevelopment can attract rents above current top-of-the market rates for Palouse.



In a *high revenue* scenario, rents could be strong enough to potentially yield substantial financial benefits in later years post-development; however, the City would experience some loss in early years unless the structure were debt financed. In a *low revenue* scenario (reflecting current rental rates for commercial property), it could prove much more challenging for the City to recoup its building investment. In effect, the City would be providing added funding to help incent additional new development and reuse in the downtown area.

**Option 6** – is similar except that the City sells the building and property (once the new structure is completed). Best case valuation might be in the range of 10-20% above building cost as a one-time return on the investment in building cost. The City could absorb a loss if the value generated was not enough to cover the building construction cost and/or did not generate revenue adequate to fully cover cleanup, site work and flood control costs.



**Summary Notes.** Taken together, these options illustrate the relationship between risk and reward that can apply to publicly led as well as private redevelopment. Options 1-3 involve less public cost. Options 4-6 whereby the City takes on a more entrepreneurial role involve greater cost and risk, but also greater reward – including the opportunity to better leverage continued downtown revitalization. These optional strategies also illustrate the importance of securing outside funding support for the extraordinary site costs associated with remediation of contamination and site preparation including flood protection.

## ALTERNATIVE REUSE CONCEPTS

There is sometimes a tendency to move too quickly toward proposing a specific reuse for a development opportunity parcel. Potential pitfalls of an overly quick planning process are even greater for a brownfield site, due to added project complexity and uncertainty over prospective outcomes.

While the details of brownfields cost, responsibility and risk are described in greater detail in a subsequent section of this study report, it is noted now that any preliminary assessment needs to take the added complexity of brownfields redevelopment into account right from the start.

Suggested as an evaluation tool for consideration is a simple *matrix approach* to compare different prospective property uses versus a series of economic, fiscal and community criteria. While this sketch level analysis may lead to conclusions that need to be further tested and refined (in minor or significant ways), it can be useful as a means to distinguish between the most and least promising reuse alternatives. In effect, this serves as one way to *narrow the field* of viable reuses.

***Uses Considered.*** In beginning the site planning process, it is useful to consider the broadest possible array of potential reuse opportunities. By casting a *wide net* initially, it is possible to include uses that might not otherwise be considered but could nonetheless prove viable to the success of a brownfields redevelopment project.

Consistent with the economic modeling provided throughout this report, uses considered include variations of industrial/warehouse, commercial/institutional, residential and parks/open space use.

***Evaluation Criteria.*** The following criteria are suggested for evaluation of alternative uses to be considered at the initial conceptual planning level:

- *Site is Suitable* – meaning that the location, topography and soils conditions are generally conducive to the uses being considered, including consideration of potential environmental conditions post cleanup.<sup>12</sup>
- *Serves Identified Market* – based on a pattern of observed demand at comparable properties within the same community or market area of the subject property.
- *Maximizes Taxable Value* – predicated on achieving a land and improvements value consistent with highest and best use when redeveloped and ideally adequate to support costs of environmental remediation and infrastructure to support the uses being considered.
- *Fits Current Zoning* – emphasizing uses permitted outright with local zoning preferred over those not allowed or discouraged, but conditional use and/or rezoning of the property may be considered in conjunction with a broader community redevelopment planning process.

- *Minimal Cleanup Cost* – which is likely with activities that either continue current use without structure removal (but on a temporary basis) or that require cleanup to lower cost commercial/industrial rather than residential standards.
- *Low Flood Control Cost* – favoring uses (including keeping existing structures) that do not require elevation of the site to 1+ foot above the 100 foot floodplain or flood-proofing of structures.
- *Minimizes Utility Needs* – with emphasis placed on current and prospective capacities of water and sewer infrastructure plus other specialized requirements (as for telecommunications and/or power upgrades).
- *Likely Support Indicated* – based on interest expressed to date as part of the Maul Foster Alongi planning process and meeting to discuss this economic and fiscal impact modeling process, subject to further refinement with added community meetings.

**Figure 8. Pertinent Palouse Zoning Provisions**

- ✓ Downtown properties including the subject site are part of the *high density* district (HD).
- ✓ Uses *permitted outright* include retail and wholesale sales, professional services, home occupations, gas stations/service, dining, lodging, personal service businesses, light manufacturing, trucking and rail facilities, schools, churches, community building, and public or private parks.
- ✓ *Conditional uses* that may be permitted include residential and agricultural businesses.
- ✓ All conditional uses and all outdoor improvements on Main Street are subject to *site review* recommendations of the site review committee.
- ✓ *Building height* is limited to 35 feet or two stories.
- ✓ *Parking requirements* are for 1 space per residential unit (or 1.5 spaces for apartments), 1 space per lodging unit, 1 space per 300 square feet of commercial floor area, and 1 space for every three industrial employees. For apartments, parking can be within 200 feet of the units served. For non-residential uses, parking can be within 800 feet of the structure being served.

This initial evaluation can be useful to screen out uses for which the site is clearly incompatible, while identifying potential front-runners warranting further consideration.

**Evaluation Rankings.** Within this initial evaluation matrix, uses considered can be assessed relatively quickly using a simplified guide for conformance with criteria patterned around the *fit* or compatibility between the use and the site, with a *three-step* scale as for:

● = Strong Fit      ○ = Possible Fit      ⊕ = Weak Fit

Reuse options for the subject Palouse Producers site are evaluated utilizing the matrix chart provided on the following page. *As noted, the chart is intended as a preliminary evaluation, for discussion and refinement based on community input and more detailed analysis of specific use options of greatest interest.*

Figure 9. Alternative Uses for Palouse Producers Site – Evaluation Matrix (Preliminary)

Use Considered	Site Is Suitable	Serves Identified Market	Maximum Taxable Value	Fits Current Zoning	Minimal Cleanup Cost	Low Flood Control Cost	Minimizes Utility Needs	Local Support Indicated	Comments
<b>Industrial / Warehouse:</b>									
Light Manufacturing	○	○	○	●	○	●	●	○	Possible interim use; businesses with potential hazard not allowed under city zoning
Warehouse/Distribution	○	○	○	○	○	●	●	⊕	Most appropriate as temporary use of existing structures; use not directly addressed with City zoning code
<b>Commercial / Institutional:</b>									
Office Space (single or multi-tenant)	●	⊕	●	●	○	⊕	○	●	Potential high amenity site with new structure & river views; likely requires a non-local anchor tenant
Local Service Retail	○	○	○	●	○	○	○	●	Located @ edge of downtown, possible reuse of existing service station building or all-new construction
Destination Retail	●	●	●	●	○	○	●	●	Opportunity to capitalize on river view/access; possible building reuse or all-new construction
Boutique Hotel / Event Center	●	●	●	●	○	⊕	⊕	●	Would anchor tourism opportunity and could serve as venue for special events (e.g. receptions, meetings)
WSU / U Idaho / Incubator Use	●	○	○	○	○	⊕	⊕	●	Possible specialized research/off-campus academic or business incubator in small town, high amenity location
<b>Residential:</b>									
Single Family	⊕	○	○	○	⊕	⊕	○	⊕	Commercial downtown site not likely suitable and would be relatively high cost for single family use
Townhouse / Rowhouse	●	○	●	○	⊕	⊕	○	○	Potentially viable on river but requires conditional use; possible mix with live/work use or corner commercial
Multi-Family Apartment	●	○	○	○	⊕	⊕	⊕	●	Could develop above retail; supports lower value than owner-occupied residential but may better fit local need
Multi-Family Condominium	●	○	●	○	⊕	⊕	⊕	○	Would support highest site value if there was market demand; less likely in current economic environment
<b>Park / Open Space:</b>									
City Park or Plaza	○	○	⊕	●	●	●	●	○	Duplicates existing park and breaks up continuity of commercial store frontage on Main Street
River Access / Recreation	●	●	⊕	●	●	●	●	●	Site could be used as kayak launch in conjunction with river restoration and/or destination retail/dining
Open Space / Habitat Restoration	○	●	⊕	●	●	●	●	●	Could be used as mitigation site; possible partial site use with recreation and/or limited retail (e.g. dining)

Legend: ● = Strong fit      ○ = Possible fit      ⊕ = Weak fit

Source: E. D. Hovee & Company, LLC. This matrix evaluation chart is preliminary and intended for illustrative purposes only.

**Analysis of Results.** As often occurs with *real world* redevelopment projects, this preliminary evaluation yields no clear front runner as the most likely candidate for property reuse. Even uses that offer a *good fit* for some criteria fare poorly on others. Some overall observations can be made that may be useful as part of the community planning process for site reuse:

- *Light industrial and/or warehouse* uses represent a potentially good fit as a short-term or interim use of the property assuming that existing structures can still be used and that there is no net added contamination. However, industrial is not seen as a viable long-term reuse of the site – especially once the existing structures are removed and the site is redeveloped.
- *Commercial and institutional* uses generally appear to fit well in terms of site suitability, meeting potential market need, compatibility with current zoning, and strong community interest (as expressed to date). Private uses could generate added taxable value (maximized if there is an on-site retail use with substantial taxable sales). Major challenges are addressing clean up and flood control costs in a way that will prove affordable for a commercial development and business tenant(s).
- *Residential* should be considered as a potentially viable use due to site location and amenity value together with proximity to Pullman and Moscow as for university related personnel. Apartments or condo units could be built above retail, while 2-story townhomes might offer opportunity for fee simple title but without as much ground level retail (except perhaps at the street intersection). Residential is a conditional use within the Palouse’s high density zone and could be expected to involve the highest level of environmental cleanup and flood protection.
- *Park and open space* use could range from a city park or plaza to river access/recreation to more passive open space with habitat restoration. This option potentially minimizes clean up and flood control cost but would also yield the least economic value in terms of potential jobs, property value and tax revenue to the community. It is possible that part of the property could be developed for park/open space (next to the river) in conjunction with building development on another portion of the site (fronting Main Street).

**Narrowing the Field.** At this time, it may be premature to eliminate too many of the potential uses from further consideration. Even based on this preliminary evaluation, some uses might be considered for elimination, to narrow the field of options considered – especially if the focus is on long-term reuse rather than short-term interim activity.

As noted above, industrial and warehouse activity is not viewed as the highest and best long-term use of the property. Primarily local service retail would likely prove challenging to support due to the higher rents associated with new construction and location at the edge of the downtown core. Retail that has a strong destination component plus local support base offers the best opportunity for financial feasibility. And single family residential does not appear to represent a good fit within the downtown area and would also involve proportionately higher costs of environmental remediation and flood protection of building square footage.

With this limited narrowing, there appear to be viable opportunities to consider for regional serving commercial/institutional, multi-family residential and park/open space use – whether independently or in some combination. Based on community input and user interest, it will be

important in the months ahead to refine the most viable development concepts together with more detailed assessment of resulting site remediation, flood protection, infrastructure and development costs – followed by estimation of valuation upon completion and gap funding support needs (if required).

## DEVELOPMENT PROGRAM

Once prospective uses have been evaluated, the next step is to outline an initial development program concept for feasibility testing. We start by describing the components typically included with a development program, then apply these concepts to the Palouse Producers site.

**Components of a Development Program.** The purpose of the *development program* is to delineate specific building and site uses for redevelopment of the subject brownfields property, covering such items as:

- *Site uses* – outlining locations of areas covered by building with allocation of remaining site area for uses such as access ways, surface lot parking and loading areas, landscaping, and open area/environmental buffer areas.
- *Building uses* – providing calculations of net useable (or rentable) and gross building area by type of industrial, commercial, residential and/or public/civic use, perhaps also including calculation of site development intensity through measures such as site coverage and number of floors developed.

**Old Palouse Producers Site.** The subject property occupies what we understand to be an approximately 20,000 square foot site on Main Street, between Hall and “H” Streets. The usable portion of the property is estimated at about 15,000 square feet, with Main Street frontage of about 140+ feet and usable depth of perhaps 105-110 feet.

Much or all of the remainder of the property fronting the Palouse River likely would be left in open space use – maintaining the riparian corridor along the river.

Figure 10. Subject Site Aerial Views



Source: Courtesy of Mike Milano, Palouse City Council.

Consistent with the results of the matrix evaluation of use alternatives, two generalized redevelopment concepts have been considered on a preliminary basis for the Palouse Producers property with this economic and fiscal impact analysis report:

- *A one-level commercial retail or office development* of about 7,500 square feet fronting Main Street. Illustrated are two buildings with a mid-development walkway from the street through to the river side of the property.

Building depth would be approximately 60+/- feet, leaving area behind for parking and open space amenity use. Parking could be provided on-street and/or behind the building depending on the type of use and anticipated parking need.

- *A three-story mixed use development* with a ground floor commercial component similar to that of the first concept, but with two floors of housing above. With approximately 7,500 square feet of gross building area per floor, the upper levels could include approximately 15 residential units.

For purposes of this preliminary analysis, this is allocated to include eight rental apartments (averaging 625-650 square feet per unit) and seven condominium units (averaging close to 1,100 square feet per unit). Condos most likely would be oriented to take advantage of river views. Residential parking would be provided behind the units, possibly with ancillary parking on the side street area.

The site and building program for the full three-level mixed use structure is outlined by the following chart. With either the one or three-level concept, the building footprint is estimated to comprise less than 40% of total site area.

**Figure 11. Building Concepts Illustrated**

**One Level Commercial Concept  
(Retail/Office/Institutional)**



**Three Level Mixed Use Concept  
(Commercial @ Ground Level, Residential Above)**



Source: E. D. Hovee & Company, LLC. Concepts are illustrative and intended for preliminary planning purposes only.

Figure 12. Palouse Producers Redevelopment Program  
(Three Level, Mixed Use Concept)

SITE DEVELOPMENT	Quantity	U/M	% of Site
<b>Site Area</b>	<b>0.46 acres</b>		
	20,000	sq ft	
<b>Site Usage</b>			
Building Footprint	7,500	gsf	38%
At Grade Parking/Loading	6,650	gsf	33%
Rights-of-Way	-	gsf	0%
Site Landscaping	-	gsf	0%
Open Space/Buffers	5,850	gsf	29%
<b>Total Site Area</b>	<b>20,000</b>	<b>gsf</b>	<b>100%</b>

**Building Demolition**                      **2,900 gsf**

BUILDING DEVELOPMENT	GSF	NSF/ GSF	NSF
<b>New Construction</b>			
Commercial Retail	7,500	100%	7,500
Residential Rental	6,000	85%	5,100
Residential Owner	9,000	85%	7,650
<b>Total New Construction</b>	<b>22,500</b>	<b>90%</b>	<b>20,250</b>
<b>Total Building Area</b>	<b>22,500</b>	<b>90%</b>	<b>20,250</b>
Excluding Parking	22,500	90%	20,250

Note:            GSF denotes gross square footage. NSF indicates net square footage of building area anticipated to generate property income.

Source:        E. D. Hovee & Company, LLC.  
Estimates are preliminary and for illustrative purposes only.

## CONSTRUCTION COST

A preliminary construction cost estimate can be prepared for the development program based on the development concept and use program noted above.

*Components of Construction Cost Estimate.* Three major components of the construction cost process are noted:

- *Site Development* – covering costs (as pertinent) related to demolition, site preparation (such as grading and soil compaction), at-grade parking and loading areas, on-site right-of-way/infrastructure development, flood control (either with fill or with allowance for building floodproofing), open space landscaping, and environmental remediation.
- *Building Rehabilitation* – for existing structures on the site of the brownfield deemed as potentially significant from an historical preservation perspective or otherwise offering market/financial advantages for rehabilitation rather than demolition. Rehabilitation costs

can vary widely, depending on such factors as the condition of existing structures, need for remediation (as with asbestos abatement), compliance with current codes, and adaptability to the reuse intended. Due to the uncertain nature of existing building conditions and suitability as well as potential costs and resulting low utilization of the site, a rehabilitation alternative is not included with the concepts evaluated for this preliminary analysis.

- *New Building Construction* – covering new buildings planned with site redevelopment after brownfield conditions have been ameliorated as required for the use intended. New construction is assumed with the two use concepts evaluated for this report.

**Palouse Producers Site.** Total construction cost for a full three-level development is estimated at \$2.6 million. This includes site development and building construction but does not yet include other costs – as for site acquisition and indirect (or soft) costs which range from architectural and engineering costs to permitting fees and interim financing during construction.

**Figure 13. Construction Cost (Three Level Mixed Use Concept)**

PROGRAM ELEMENT	Area (GSF)	Cost /GSF	Project Cost	Comments
<b>Site Development</b>				
Demolition	2,900	\$5.60	\$16,200	Removal of existing structures
Site Preparation	20,000	\$4.00	\$80,000	Excludes remediation cost
At Grade Parking/Loading	6,650	\$5.00	\$33,300	Applied with residential only
Right-of-Way/Infrastructure	-	-	-	Assumed @ no cost to project
Flood Control	20,000	\$4.50	\$90,000	Assumed @ 15% of ground floor cost
Open Space Landscaping	5,850	\$2.00	\$11,700	Applied with residential only
Environmental Remediation	lump sum		\$343,500	Adjusted per DOE input from TBA
<b>Subtotal Site</b>	<b>20,000</b>	<b>\$29</b>	<b>\$574,700</b>	Estimates subject to refinement
<b>New Construction</b>				
Commercial Retail	7,500	\$80	\$600,000	Excludes tenant improvements
Residential Rental	6,000	\$90	\$540,000	Wood frame construction
Residential Owner	9,000	\$100	\$900,000	Wood frame construction
<b>Subtotal New Building</b>	<b>22,500</b>	<b>\$91</b>	<b>\$2,040,000</b>	2009 pricing outside Puget Sound
<b>Total Construction Cost</b>			<b>\$2,614,700</b>	

Source: E. D. Hovee & Company, LLC. This example is intended for illustrative purposes only.

If just the *one-story* commercial development were to be built, construction cost is estimated at \$1.1 million (rather than the \$2.6 million figure above). This reduced cost figure covers the cost of a ground level commercial retail space plus pertinent portions of site development related expense.

## ALL-IN DEVELOPMENT COST

An *all-in* development cost estimate can now be prepared for the development program as outlined in the initial concept form. The term “all-in” means a cost estimate that not only includes cost of construction, but all other costs associated with site redevelopment.

**Components of Redevelopment Cost.** Costs incurred by a private owner or investor to redevelop a brownfield site can be categorized in a manner similar to those of other real estate investments, generally covering some combination of:

- *Site acquisition* – involving site donation or purchase for cash, with financing, or other means of site control as with an option agreement. In public-private development projects, the public may share in portions of site acquisition, for example, space that will become dedicated to cleanup, open space or long-term environmental buffer set-asides.
- *Site development* – covering costs not directly assignable to building construction upon reuse, including such items as demolition of existing structures, site grading, on-site parking/loading, on- and off-site infrastructure (roads, water, sewer, power, telecommunications, and costs associated with site remediation).
- *Building construction* – reflecting costs distinctive to industrial, commercial, residential, public use and mixed use building types, also varying depending on whether building rehabilitation or new construction is involved and the quality of the end use product.
- *Indirect or soft costs* – covering such items as Washington State sales tax, architectural and engineering fees, building permits, impact fees, costs of project marketing, and interim financing for project construction through to completion of lease-up or sales.
- *Developer (or Owner) Profit* – typically set at a level commensurate to other investments of comparable scale, type and risk – including options for the developer to invest not only in real estate but what may be perceived as more secure investment alternatives.<sup>13</sup>
- *Inflation (or cost escalation) to project completion* – especially important for projects completed in multiple phases. However, an alternative approach taken with this preliminary financial analysis is to show construction cost (as well as resulting revenues) in current year dollars, in effect indicating a net present value of construction cost.<sup>14</sup>

**Palouse Project Application.** The chart provided with the project pro forma (next section) provides a *rolled up* or summarized review of development cost for our hypothetical brownfields reuse project. For this Palouse site, total development cost is preliminarily estimated at:

- Nearly \$3.6 million for the full project (3-story, commercial/residential mixed use)
- Just over \$1.5 million for the retail only project (as a one-level, commercial building)

When considered on the basis of cost per square foot of building area, the larger 3-story building is estimated to cost less than \$160 per square foot. This is 22% below the \$205 per square foot figure associated with the retail only building. In effect, site costs including remediation and flood control are essentially the same with either concept but can be spread across more building area with the larger project.

## VALUATION UPON COMPLETION

This step in the financial pro forma analysis brings together all of the prior steps for an initial determination of overall project financial feasibility.

***Determining Financial Feasibility.*** A feasible project is one where the end use value upon completion of development (and occupancy) *exceeds* the total (or *all-in*) cost of development:

- *Project valuation* – equals the net sales proceeds received from all of the for sale components of the project (condo, retail pad sales, industrial/commercial building sales, etc.) *plus* the capitalized value of ongoing income-producing (or rented) portions of the property less ongoing operating expenses *plus* contributed funding from sources including public agency and/or private donor funding.<sup>15</sup>
- *Development cost* – equals the all-in cost of the project upon completion including site acquisition, site development, building construction, indirect (soft), developer profit and inflation (as applicable) to completion.

Projects for which valuation upon completion *exceeds* the all-in cost of development are those which demonstrate opportunity for financial feasibility. Projects where the reverse is true – cost exceeds value – should not be expected to be feasible without further pro forma refinement, including consideration of the potential for public-private partnership and associated incentives.

***Feasibility of Old Palouse Producers Site Redevelopment.*** Feasibility of both the full three-level mixed use and one-level retail only project concepts are compared by the financial pro forma (or valuation) chart on the following page.<sup>16</sup>

The relationship between valuation and cost is shown in two ways – valuation as a % of cost and remaining financial gap (if any). Valuation relative to cost is shown based on a) assumptions regarding potential contributed funding, versus b) without availability of contributed funding support. Contributed funding can come from sources including public funds (as from grants, local government investment and/or donations from private or non-profit entities).

Projects for which valuation is less than 100% of cost are viewed as not feasible – to lesser or greater degree – depending on the percentage ratio achieved. With the pro forma evaluation on the following page:

- Both projects are indicated as extremely challenging from a financial feasibility standpoint – even assuming top of market rental rates and sales values for the Palouse/Whitman County market area.<sup>17</sup>
- If these developments depended on user revenue (from rents or sales value) without any outside contributed income, only 64% of project cost would be supported by user/tenant valuation with the three-level full project. With the retail project, only 45% of project cost is supported by valuation generated from on-site rental income potential.

As is often the case in rural communities, this financial gap occurs because supportable rents or sales values are typically less than in metro areas while costs of development are roughly comparable. With the subject Palouse Producers site, costs of development are

even higher because of the need to also cover expenses of site remediation and flood protection.

- To create more of an equal playing field with other *shovel-ready* sites not facing substantial flood or contamination issues, this pro forma assumes that extraordinary costs including site acquisition, site prep, environmental cleanup and flood control are funded from contributed sources rather than from on-site user revenues.

With public-private participation, it is also assumed that the normal developer profit might be foregone or deferred. If this outside funding support can be secured, redevelopment comes close to feasibility – with valuation achieving 96% of project cost in either the full three-level project or the one-level retail only development.

- There is still a small remaining funding gap estimated at about 4% of project cost – estimated at \$129,000 for the full project and \$56,000 for the retail only development. However, given the very preliminary nature of this financial analysis, this is a relatively small variation that could be addressed in a variety of ways (further addressed below).

**Figure 14. Pro Forma Valuation upon Completion (1 & 3 Level Concepts)**

<b>PRO FORMA BUDGET ELEMENT</b>	<b>Unit Cost U/M</b>	<b>Full Project (3-Level)</b>	<b>Retail Only (1-Level)</b>	<b>Comments</b>
<b>Development Budget</b>				
Site Acquisition	\$3.50 per sf	\$70,000	\$70,000	
Site Development	\$28.74 per gsف	\$574,700	\$529,700	Site prep + cleanup + flood control
Building Construction	\$91 per sf site area	\$2,040,000	\$600,000	
Soft (Indirect) Costs	25% of site prep+building	\$567,800	\$196,600	Not added to cleanup cost
<i>Subtotal Development</i>		<u>\$3,252,500</u>	<u>\$1,396,300</u>	
Developer Profit	10% of development cost	\$325,300	\$139,600	Typical for private development
<i>All-In Project Cost</i>		<b>\$3,577,800</b>	<b>\$1,535,900</b>	
<b>Operating Budget (Rental Components)</b>				
Annual Gross Income		\$113,600	\$58,500	Top of market rental rates
<i>less</i> Vacancy	7% overall project	<u>\$(8,000)</u>	<u>\$(4,095)</u>	
Gross Operating Income		\$105,600	\$54,405	
<i>less</i> Expenses	20% of AGI	<u>\$(22,400)</u>	<u>\$(5,850)</u>	Assuming full property tax payment
<i>Net Operating Income</i>		<b>\$83,200</b>	<b>\$48,555</b>	
<b>Sales Revenue (Owner Components)</b>				
Unit Sales	\$150 per nsف condos	\$1,147,500	-	Top of market for Whitman County
<i>less</i> Sales Expense	5% expense ratio	<u>\$(57,400)</u>	-	
<i>Net Sales Revenue</i>		<b>\$1,090,100</b>	-	
<b>Value @ Completion</b>				
Rental Income Portion	7.00% capitalization rate	\$1,188,600	\$693,600	Based on NOI capitalization
Sales Portion		\$1,090,100	-	Reflecting sales of condo portions
Contributed Funding	from public & donor sources	\$1,170,400	\$785,850	See contributed sheet detail
<i>Completed Value</i>		<b>\$3,449,100</b>	<b>\$1,479,450</b>	
<b>Value less Cost (with Funding Gap)</b>				
<i>Value less Cost (Funding Gap)</i>		<b>\$(128,700)</b>	<b>\$(56,450)</b>	With contributed funding
% of Project Cost Supported by Value on Completion		96%	96%	With contributed funding
% of Project Cost Supported without Contributed Funding		64%	45%	Without public or donor funding

Source: E. D. Hovee & Company, LLC. This example is intended for illustrative purposes only

## CLOSING THE GAP

As noted, redevelopment of the Old Palouse Producers site to an economic development use is not expected to be financially feasible based on rental or sales income generated directly from the property on its own. In addition to reduced income potential typically available in rural communities, financially feasible reuse is even more challenging for this site due to the costs associated with environmental remediation and flood protection.

Consequently, financial feasibility can be expected to rely on some form of contributed or non-revenue funding support – as an economic and community development investment pivotal for continued economic revitalization of downtown Palouse. Contributed funding can come from sources including public funds (as from grants, local government investment and/or donations from private or non-profit entities).

***Sources of Contributed Funding.*** With the Old Palouse Producers site, the following have been identified as potential sources of outside contributed funding to support financially sustainable site reuse:

- *Site acquisition* – as necessary to facilitate cleanup and flood protection. In cases with extraordinary site costs as with the Palouse Producers site, these costs can exceed the value of land making the property non-marketable pending an offsetting source of funds. This could come through some form of public funding for site acquisition and/or donation of the property in exchange for a cap on cleanup costs.
- *Site development* – for costs that a purchaser would not likely experience with development ready properties at other locations. All site development costs could be considered as potentially suitable for public (or other contributed) funding support – including environmental cleanup, the premium for flood protection, demolition and related site preparation, on-site parking and open space landscaping.<sup>18</sup>
- *Indirect (or soft) costs* – covering such items as design and engineering, permits/fees and interim financing associated with site development.
- *Developer profit* – as an item for negotiation involving the developer of a commercial and/or mixed use building on the site, especially in the event that the City takes ownership of the subject site (whether the City sells/leases the property or ends up as the developer of the property).

In exchange for public funds and/or risk mitigation, there is ample precedent for private developers agreeing to reduce their fee or defer a return pending availability of future cash flow. In the event that the City acts as its own developer, it could similarly opt to defer any fees pending longer term generation of surplus project revenues.

As is indicated with the prior pro forma worksheet and more explicitly detailed by the chart below, the amount of potentially contributed funding that could be considered is preliminarily estimated at \$1.235 million with the full three-level mixed use project and at more than \$810,000 with the one-level retail only project. The importance of these sources is indicated by the observation that contributed funding accounts for more than one-third (34%) of the cost of the full mixed use project and more than one-half (53%) of the retail only project.

Figure 15. Gap Funding – Old Palouse Producers Site Redevelopment

STATE & LOCAL EXPENDITURE ITEM	Rate Unit of Applied Measure (U/M)	Full Project	Retail Only	Comments
<b>Contributed Funding</b>				
Site Acquisition	100.0% of site area	\$70,000	\$70,000	Site purchase or donation
Site Development	100.0% of site area	\$576,800	\$529,700	For cleanup + site costs (whole site)
Building Construction	0.0% of const cost	-	-	Assumed paid by project users
Soft (Indirect) Costs	25% of site per note	\$58,325	\$46,550	On site development costs exc cleanup
Property Tax Abatement	8 yrs abatement	\$139,800	-	On residential (8 year capitalized value)
Deferred Developer Profit	12% of project cost	\$390,600	\$167,600	Paid from excess proceeds (as available)
<b>Total Contributed Funds</b>		<b>\$1,235,525</b>	<b>\$813,850</b>	From public & donor sources

Source: E. D. Hovee & Company, LLC. This example is intended for illustrative purposes only.

A key challenge with any gap funding mechanism lies in identifying, securing and coordinating funds that may become available from public and other donor sources. Typically, these projects can be expected to involve multiple funding sources – such as state DOE and CTED, federal grant, City funding, and private donations (whether in cash or contributed services). A more detailed list of potential funding or incentive sources is provided by Appendix A to this report.

Undoubtedly, other approaches including combination (or hybrid) strategies might be evaluated as means to close the gap – as a collaborative public/private exercise. *Getting to yes* is the objective – especially for development concepts that are only 4% away from project feasibility.

***Mechanisms for Closing the Remaining Gap.*** Even with the contributed sources noted above, the Palouse Producers project remains about 4% away from feasibility – with a remaining gap preliminarily estimated at between \$56,000 - \$129,000 (depending on which project is constructed). Finding funds to close any remaining gap may require continued persistence and creativity – especially if the gap changes for reasons such as unforeseeable cost contingencies.

The intent of the gap analysis is to identify and then evaluate reasonable alternatives for resolution of the funding gap – generating a project that *gets to YES!* From an analytical standpoint, any or some combination of three techniques may be used to offset a remaining gap:

- *Increase project income* – especially useful if this can occur with the most profitable for sale or rental components of the project (for example, by increasing rents or square footage allocation in the development program). This is not as readily possible with the Palouse project because estimated rents and sales values are already top of the market. More likely is the potential to increase revenue through added contributed funding.
- *Reduce project cost* – through techniques such as value engineering (without unduly sacrificing project quality) or by shifting an added portion of funding responsibility from the developer to a public/non-profit entity (as for other public use portions of the site). Due to the current economic recession, a much more favorable construction bidding environment is now in place – often resulting in bids below construction estimates.
- *Restructure project financing* – with particular focus on assuring positive cash flow during construction and the early years after project completion. This may involve restructuring of public or private debt or equity financing (often with deferred or reduced repayment), or providing credit enhancement as with financing guarantees reducing risk to project lenders.

## IV. RETURN ON PUBLIC INVESTMENT

If project feasibility represents the first leg of the *triple play* for brownfields redevelopment, return on public investment is the second leg. This concept of return on investment is also known by the shorthand term ROI.

While not the only objective, state and local government often expect a positive revenue return from the public reuse of former brownfields. This is especially the case in the current economic environment of constrained public revenue sources. The need for public ROI is even greater if public funding is necessary to make the brownfield reuse occur – as through participation in needed public infrastructure and/or some portion of remediation expense.

Key elements of this discussion include defining the public ROI perspective, identification of one-time and ongoing tax revenue benefits, and comparison with public service cost. These concepts are applied with the Palouse Producers site with this economic and fiscal impact modeling report.

### THE PUBLIC ROI PERSPECTIVE

A property owner or developer wants to assure that a real estate investment will be worth as least much as what the project costs to build. In an era of scarce budget resources, the public sector increasingly shares a similar view with its private business counterparts but on behalf of a different set of shareholders or constituents – local residents, businesses, property owners, and taxpayers.

***Sources & Uses of Public Funds.*** In any evaluation of public sector funding, it is important to distinguish between:

- *Sources of funds* – as revenues from tax or non-tax (e.g. fee or grant) sources.
- *Uses of funds* – as expenditures directed to or directly caused by a brownfields development project.

Both sources and uses have one-time *capital* and ongoing *operating* funding components. Funding needs may be met through a local jurisdiction's general fund or through other dedicated funds – such as capital improvement (including transportation and water/sewer) or enterprise funds.

On the *revenue* side of the equation, primary attention is given to sources of revenue that represent a *net gain* to a public jurisdiction. These include tax sources but not impact fees (which are dedicated to paying costs directly attributable to a project).

On the *expense* side of the ledger, primary attention is given to costs directly attributable to a redevelopment project rather than indirect costs, unless these can be directly and readily substantiated. For example, funding of a sewer line extension or construction of a street to serve redevelopment of a brownfield would represent a direct cost of service. The added police calls to serve a mixed use development may not be as readily included in the equation unless the

jurisdiction has documentation of actual costs to serve various types of industrial, commercial and residential development.

***Tax Generation Model.*** On the next several pages is provided the outline of a tax generation model focused on quantifying the one-time and ongoing tax benefits of brownfields redevelopment to state and local jurisdictions. This model is illustrated for the Palouse Producer site as was evaluated for project feasibility.

The model is formulated in a way that allows evaluation specific to the interests of state government, general purpose local governments (such as cities and counties), and special purpose districts (such as EMS, Port and library districts).

Because out-year revenues are of less value today than the same revenues received next year, it is also useful to discount future revenues back to a net present value (NPV) reflecting the cost of money borrowed (or opportunity cost). These NPV calculations can be useful to assess how much funding a state or local governmental agency might reasonably consider investing in public infrastructure or remediation to support a private brownfields redevelopment.

## **ONE-TIME & ON-GOING TAX REVENUE BENEFITS**

Taxes received by state and local governments can be distinguished between one-time revenues associated with project construction and ongoing revenues accruing annually after development is completed.

***One-Time Tax Revenues.*** Two primary sources of revenue may be generated with redevelopment of the Palouse Producers brownfield site:

- *Sales tax on construction* – with a 6.5% share to the State of Washington and remaining to the City of Palouse and dedicated county-related uses – communications, criminal justice and juvenile detention. The City of Palouse share of the sales tax rate is 0.85% after deduction for administrative fee.
- *Real Estate Excise Tax (REET)* – with state and local jurisdiction shares of 1.53% based on a state 1.28% rate plus City first ¼% (or 0.25%) share implemented to date.

As REET is tied to real estate transactions, this tax will accrue with purchase of a brownfields site and with any subsequent property sales, whether in whole or part. One possible source of continuing revenues may occur, for example, with a project that involves condo units and every time the unit is re-sold over a period of years. With this economic model, the continuing portion of the REET is projected as a part of ongoing rather than one-time revenues.

Other revenues also may be generated to state and local government during the project development and construction process. Examples are permit, hookup and impact fees. These are not included with the revenue analysis because they typically represent fees to offset direct or indirect cost of service rather than a net addition to public agency revenues.

**Ongoing Tax Revenues.** Ongoing taxes are those which are generated on a reasonably reliable annual basis after completion of development. Primary sources of ongoing taxes to state and/or local jurisdictions that can be readily modeled include the following:

- *Business and occupation (B&O) taxes* – levied on the gross sales volume of business activities by the State of Washington and by some local jurisdictions (with tax rates also varying depending on the type of business conducted).
- *Property taxes* – including general and special levies of by state, city and county general purpose governments as well as special districts in Whitman County including schools, the Port, library district and emergency medical services.
- *Real estate excise tax (REET) from property resales* – with revenues accruing to state and general purpose local government entities.
- *Sales tax from on-site development* – allocated to the state and cities, counties, transit, criminal justice and public facility districts and covering not just retail uses but also some other on-site business activities (such as some personal services) based on typical ratios of taxable to total gross sales statewide.
- *Utility taxes* – which for municipal governments can include taxes on electricity, natural gas, telephone and cable services, sewer and water, drainage, solid waste and/or steam services (not considered with this evaluation as these taxes are not indicated as charged in Palouse).
- *Other taxes (as applicable)* – that could include sources such as transient lodging tax (of 2.0%) applied to overnight hotel or related visitor accommodations.

**Net Present Valuation.** Due to the number of tax sources, taxing jurisdictions and differential tax rates involved, the calculations of ongoing revenues can be fairly complex – with considerable variation between jurisdictions. However, this *one-point in time* approach to project valuation may be overly simplistic:<sup>19</sup>

- *One-time revenues* may accrue in varying amounts over multiple years – especially if the development is phased in over a number of years (though this is not anticipated for the Palouse Producers site).
- *Ongoing revenues* may be more stable – but may grow at varying rates in future years. For example, property tax amounts within a local jurisdiction are capped (by voter initiative) at a 1% per year rate of increase, while other taxes will increase more in line with consumer buying power and/or inflation.

Consequently, the Tax Revenue Generation chart provided with this analysis depicts how revenues and expenses may be programmed out to reflect both a) general annualized revenues upon completion of build-out and b) net present value (NPV) of resulting revenue streams over a multi-year period. NPV values are indicated over a 20-year time period – assuming a 5.5% discount rate as the annualized return on invested funds or related opportunity costs.

**Application to Old Palouse Producers Site.** Based on the full build-out of a three-level project with ground floor commercial and upper level residential uses, this project could be expected to generate an estimated \$211,000 in *one-time* sales tax and REET with construction.

Post-development, *ongoing* tax revenues are estimated to be in the range of \$135,000 per year (in 2009 dollars). These revenues generally can be expected to increase over time, albeit with property tax revenue growth subject to a state voter approved 1% per year increase:

- The revenues indicated reflect base case conditions with the property taxed at 100% of current rates.
- As an alternative, this evaluation also identifies the implications of limited property tax abatement over eight years for on-site residential (if authorized pursuant to state law). This would have the effect of reducing total annual tax revenues from \$135,000 to a range of approximately \$113,000 per year (for the first eight years after construction).

The cumulative *net present value* (NPV) of one time and ongoing taxes is estimated at \$1.9 million to state and local jurisdictions – calculated over a 20-year time period. As noted, this figure includes a reduction in property tax over the first eight years, assuming that residential units are provided with limited property tax abatement. An estimated 89% of this NPV is associated with ongoing revenue sources with 11% attributable to one-time taxes with initial project development.

While not shown with the Tax Revenue Generation chart on the following page, the tax revenue implications of a *one-level, commercial-only* project have also been calculated. If developed as a one-level structure, one time tax revenues would drop by more than half to about \$98,000. Ongoing tax revenues drop much less dramatically to about \$103,000 per year due to continuation of commercial uses subject to retail sales tax.

**Figure 16. Tax Revenue Generation Model – Old Palouse Producers Site (three-level Mixed Use Development)**

STATE & LOCAL TAX REVENUE ITEM	Rate Applied (U/M)	Unit of Measure	Calculated As	Annual Taxes @ Build-out		Cumulative NPV - 20 Years	Comments
				100% Taxes	w/Abatement		
<b>One Time Tax Revenues</b>							
Real Estate Excise Tax (REET)	1.53%	of transactions	\$1,217,500	-	-	\$17,700	Initial property purchase & condo sales
Sales Tax on Construction	7.8%	of construction	\$2,614,700	-	-	\$193,300	Estimated from construction budget
<i>Subtotal One Time Taxes</i>				-	-	<b>\$211,000</b>	
<b>On-Going Tax Revenues</b>							
Business & Occupation Tax	0.471%	of gross volume	\$1,350,000	\$6,360	\$6,360	\$90,900	Annual revenues estimated in 2009 May include state + local B&O tax
Incremental Property Tax*	\$14.0170	per \$1,000 TAV	\$2,208,700	\$30,960	\$9,100	\$234,000	Calculated on property value
Real Estate Excise Tax (REET)	1.53%	of transaction	\$272,100	\$4,160	\$4,160	\$59,500	From condo resales @ 5% per year
Sales Tax w/On-Site Business	7.8%	of taxable sales	\$1,200,000	\$93,600	\$93,600	\$1,337,700	On retail and other taxable businesses
Other Taxes (if applicable)	2.0%	added w/lodging	-	-	-	-	Not applied with options considered
<i>Subtotal Annual Tax Revenues</i>				<b>\$135,080</b>	<b>\$113,220</b>	<b>\$1,722,100</b>	
<b>Net Present Value (NPV)</b>						<b>\$1,933,100</b>	One-time + on-going over 20 years
Discount Rate Applied	5.5% assumed cost of public borrowing / opportunity cost						
Inflation Rate	3.0% assumed rate applied to market value & taxable retail sales						
Cap on Annual TAV Appreciation	1.0% on property tax increases						
Residential Turnover Rate	15.0% annual homeowner sales						
Commercial Turnover Rate	5.0% annual sales of on-site commercial property						

Source: E. D. Hovee & Company, LLC. This example is intended for illustrative purposes only.  
Tax rates uses are for Palouse and Whitman County based on information provided as of July 2009.

**Revenue Allocation by Jurisdiction.** While the prior chart shows revenues by taxing source, revenues can also be broken out by the type of jurisdiction benefited – as illustrated below. As with the earlier example, tax revenue generation is indicated for a project taxed at 100% of projected valuation versus deduction for the possibility of abatement over the first eight years as an incentive for residential development.

**Figure 17. Tax Revenues by Jurisdiction – Old Palouse Producers Site Reuse**

<b>TAX REVENUE ALLOCATIONS BY JURISDICTION</b>	<b>Annual Taxes @ Build-out</b>		<b>Cumulative</b>	<b>Comments</b>
	<b>100% Taxes</b>	<b>w/Abatement</b>	<b>NPV - 20 Years</b>	
<b>ESTIMATED ONE TIME TAXES</b>				
State of Washington			\$175,900	Sales tax & REET
City			\$27,680	Sales tax & REET
County			\$7,410	Admin share of City sales tax
<b>Total One Time Taxes</b>			<b>\$210,990</b>	Sales tax on construction + REET
<b>ESTIMATED ANNUAL REVENUES</b>				
State of Washington	\$92,590	\$89,240	\$1,292,410	Property, sales & B&O tax sources
City	\$22,080	\$15,440	\$254,430	Property & sales tax
County	\$7,130	\$4,640	\$78,940	Property & dedicated sales tax
Port	\$890	\$260	\$6,930	Property tax
Schools	\$10,410	\$3,060	\$81,060	Property tax
Regional Library	\$1,070	\$310	\$8,330	Property tax
Other Special Districts	\$910	\$270	\$7,090	Property tax - EMS
<b>Total On-Going Tax Revenues</b>	<b>\$135,080</b>	<b>\$113,220</b>	<b>\$1,722,100</b>	Property, sales & B&O tax sources
<b>TOTAL NET PRESENT VALUE (NPV)</b>			<b>\$1,933,090</b>	One-time + on-going revenues

Note: The estimates in this chart are calculated for the full three-level mixed use development.

Source: E. D. Hovee & Company, LLC. This example is intended for illustrative purposes only.

In this example (and for most development projects), the State of Washington receives the majority (or 76%) of the combined NPV of added taxes resulting from site redevelopment over 20 years. Even with property tax abatement applied, the City of Palouse would receive an NPV estimated at over \$254,000 in one-time and ongoing tax revenues over 20 years.

Other benefitting jurisdictions include Whitman County (nearly \$79,000 over 20 years), and schools (\$81,000). The Port, regional library and EMS would each receive added tax revenues in the range of \$6,900 - \$8,000+ over a 20-year time period.

## **PUBLIC SERVICE COST**

Estimating public service cost often represents a more challenging exercise than for the revenue side of the equation. The data and methodologies used to allocate cost to one particular project or use versus another can vary widely by jurisdiction – depending on factors ranging from pre-planning of off-site infrastructure needs to internal accounting for cost of public services for residential, commercial or industrial development.

**Components of Public Service Expense.** As with the revenue side of the ledger, public service costs can be separated between one-time and ongoing expenses:

- One-time *capital expenditures* are those typically made for off-site infrastructure improvements or with brownfields sites – whether in conjunction with cleanup and

remediation or to facilitate site reuse. In a complex development or when near-term public funding is limited, these costs may be phased in over a multi-year time period.

- Ongoing *operating expenses* are those that reflect added (or incremental) costs of general purpose government as needed to serve the new development over time. These may include allocated costs of public safety (police, fire) as well as other general services ranging from parks to planning.

Attributing public service costs to a specific project can be challenging from philosophical and methodological perspectives. Cost attribution is generally more readily accomplished for capital projects, less so for ongoing expenses of state and local government.<sup>20</sup>

***Application to Reuse of Old Palouse Producers Site.*** Given the short time frame of this Phase II economic and fiscal impact modeling process, detailed analysis has focused primarily on what happens within the property lines of the Old Produce Producers site. Based on what has been identified with this project to date, the following assumptions have been made for purposes of this preliminary analysis:

- Off-site *capital improvements* that might be considered in support of subject site reuse could include paving and river turnaround of the right-of-way between this site and the Dodge dealership property to the east, other sidewalk and streetscape enhancements, and water/utility enhancements if needed for redevelopment (though this need has not been identified to date). Also of importance for this property together with continuing downtown and community revitalization could be creation of a Palouse River trail system. Cost estimates for these potential improvements have not been prepared to date.
- No significant issues that would create added ongoing *operating expense* to the City of Palouse or other area jurisdictions have been identified with this preliminary analysis. Questions or concerns that might emerge should be addressed as a more detailed plan concept is developed through the upcoming community planning process.

As part of the Integrated Planning Contract work now underway, these off-site and broader community questions are anticipated to be a major part of the consensus vision and community planning that will occur during the Fall 2009 time period. As reuse plans for the Palouse Producers site become more clearly defined, it will be important to evaluate needs or opportunities for other supportive off-site capital improvements and/or public services that might be of benefit not only for this property but for long-term downtown and community revitalization.

## V. COMMUNITY & ENVIRONMENTAL BENEFITS

The third and final leg of the *triple play* for brownfields redevelopment is represented by what may be described as community benefits. While perhaps not as easy to precisely define or measure, the ability to demonstrate a broad range of community benefit from development of any type (including brownfields reuse) is of increased importance for communities of varied size and circumstance across the state of Washington.

A project may show great profit potential for a developer, may offer a financial windfall for state and local government, and yet be rejected if the community-at-large cannot perceive other direct and indirect benefits. Consideration of community benefits as part of this economic model starts with discussion of the community perspective. This is followed by review of direct market benefits (jobs, payroll, business revenue), multiplier benefits (indirect and induced), and non-market benefits – specifically related to potential redevelopment and reuse of the Palouse Producers site.

### THE COMMUNITY PERSPECTIVE

In comparison with private and public sector perspectives, the broader community perspective is not always as easily determined:

- Both private and public sectors have economic objectives that are important – if not critical – to their decisions as to whether to participate in a brownfields redevelopment project. For the broader community, the benefits may be partially economic (or market related) but in many cases the benefits are as much or more about non-market objectives (not always as readily measured in economic terms).
- Defining who the community comprises is sometimes problematic. While it is often easiest to assume that the relevant “shareholders” are those who live within the boundaries of the jurisdiction granting approval to a project, others may think differently. Persons in neighboring jurisdictions may have strongly held views or feel directly affected (positively or negatively). Even persons who live hundreds or thousands of miles away may feel affected (such as those who place a high value on preservation of a natural environment even when not directly experienced).
- The relative importance of varied community values may shift from one project or community to another. For example, in one situation the creation of new family wage jobs may be of paramount importance; in another tax base; and yet another creation of park land or habitat restoration.

The approach taken with this economic model is to identify and quantify community values that can be readily measured while identifying and qualifying those which are not easily subject to measurement in numerical terms.

### DIRECT & ECONOMIC MULTIPLIER BENEFITS

Economic benefits that are most readily identified and quantified as attributable to an economic development project including reuse of a contaminated site cover:

- *Jobs* – including full and part-time employment, sometimes measured as head count and other cases converted to full-time equivalents (FTEs).
- *Payroll* – ideally covering both gross annual compensation and benefits.
- *Business Revenue* – representing the revenues to benefit business and related uses.

**Direct Benefits.** These direct economic benefits may be distinguished between those associated with project *construction* and *ongoing operations* after development is completed. With reuse of the Palouse Producers site for full mixed use development (with both ground floor retail and upper level residential), economic benefits attributed directly to the project include:

*Benefits During Construction:*

- Approximately 20 direct construction-related jobs.
- Total payroll of nearly \$1 million over the duration of construction.
- Added community-wide revenue of \$3.2 million resulting from on-site development (exclusive of site acquisition and developer profit).

*Benefits Of Ongoing Operations (Post-Construction):*

- An estimated 20 on-site jobs (primarily associated with ground floor commercial space).
- Total payroll of just over \$500,000 per year, averaging close to \$26,000 per worker.
- Added annual business revenue from on-site business activity of over \$1.5-\$1.6 million.

If a one-story commercial building were constructed (instead of the full three-story mixed use project), direct construction benefits to the community would be reduced to less than one-half (42%) of the economic impact associated with the larger project. Post-development, ongoing economic benefits would not change appreciably, as most of the ongoing employment is associated with ground floor commercial space use.

**Multiplier Benefits.** In addition to direct benefits can be added multiplier benefits including:

- *Indirect benefits* – resulting from spending purchases by on-site businesses from other businesses in the community and their subsequent business purchases.
- *Induced benefits* – attributable to the households of those employed on-site making consumer purchases and subsequent rounds of purchases by the employees of the businesses patronized by the households directly benefited.

Multiplier benefits equal the sum of direct, indirect and induced benefits. Multipliers can be calculated for jobs, payroll and business revenue – both for construction and ongoing operations from brownfields reuse. To illustrate, a jobs multiplier of 2.0 would mean that one additional job is created as the indirect and induced effects for every direct job created at a project site.<sup>21</sup>

With the economic model formulated for the State of Washington Department of Ecology, economic multipliers are calculated for distinct economic regions of the state. For Palouse, multipliers cover the eastern Washington area.

For the Palouse Producers site, the combination of direct and indirect plus induced (or multiplier) benefits are illustrated by the following chart.

**Figure 18. Multiplier Benefits – with Palouse Producers Redevelopment**

<b>Economic Indicator</b>	<b>Direct Impact</b>	<b>Economic Multiplier</b>	<b>Multiplier Impact*</b>
<b>Construction Impacts</b>			
On-Site Employment	20.2	1.88	38.0
Total Payroll	\$997,880	1.69	\$1,682,200
Average Annual Wage	\$49,400	-	\$44,300
Business Revenue	\$3,182,500	1.61	\$5,123,800
<b>On-Going Operations</b>			
On-Site Employment	19.6	1.38	27.0
Total Payroll	\$505,240	1.65	\$832,900
Average Annual Wage	\$25,800	-	\$30,800
Business Revenue	\$1,566,800	1.62	\$2,540,800

\* Note: Calculated as the sum of direct, indirect and induced effects.  
Multiplier effects cover the entire eastern Washington region in which Palouse is located.

Source: E. D. Hovee & Company, LLC and Cascade Planning Group, based on IMPLAN.  
This example is intended for illustrative purposes only.

As illustrated by the chart, the combination of direct plus indirect and induced economic benefits associated with redevelopment of the subject property can be summarized as follows.

*Benefits During Construction:*

- Approximately 38 jobs locally and throughout the region lasting for the approximate duration of construction.
- Total direct plus indirect/induced payroll locally and regionally of nearly \$1.7 million.
- Local and regional added business revenue impact of \$5.1 million.

*Benefits Of Ongoing Operations (Post-Construction):*

- An estimated 27 jobs locally and regionally (primarily associated with ground floor commercial space).
- Total payroll of just over \$830,000 per year, averaging close to \$31,000 per worker.
- Added annual business revenue from on-site business activity of over \$2.5 million.

As noted, if a one-story commercial building were constructed (instead of the full three-story mixed use project), direct construction benefits to the community would be reduced to less than one-half (42%) of the economic impact associated with the larger project. Post-development ongoing economic benefits would not change by more than 5%, as most of the ongoing employment and associated economic impact is related to ground floor commercial space use.

## NON-MARKET BENEFITS

While detailed quantification of non-market values attributable to brownfields cleanup is beyond the scope of this economic modeling process, discussion of non-market attributes is important to broaden the strategic assessment – informing decision-makers of the significant benefits associated with brownfields cleanup that often may not otherwise appear within a more conventional economic profile.

***Defining Non-Market Attributes.*** One of the first challenges affecting any discussion of non-market attributes is to define and, where possible, classify the non-market values being considered. A broad range of benefits has been identified and grouped around eight overall non-market functions:

- *Human health* – by remediating a site that will be more safe for renewed activity by Palouse residents and with less risk for further contamination of the Palouse River.
- *Ecosystem services* – as one step toward an integrated approach to river habitat and riparian restoration.
- *Recreation* – with opportunities for river access on-site, enhanced with future opportunities for community-wide improvements as for a river trail system.
- *Amenities* – including options ranging from on-site viewing to public art, including access from the adjoining street right-of-way.
- *Proximate land values* – expected to be improved for adjoining properties with abatement of existing on-site contamination and site reuse.
- *Containment of urban sprawl* – by encouraging in-town residential and business growth.
- *Social & community values* – as a next step in the Palouse downtown and community revitalization process.
- *Passive (non-use) values* – even for persons who never actually visit but hear the Palouse success story as an example for other rural communities in Washington State.

While intended to cover the diversity of values that have been identified by varied non-market researchers, this analysis does not necessarily cover all potentially identifiable non-market values that may be pertinent to a particular reuse site. These values also are not necessarily mutually exclusive, but often overlap.

***Detailed Discussion.*** The chart on the next page is intended to briefly describe and characterize each of the non-market functions considered, as well as to identify potential opportunities for application to Palouse with redevelopment of the subject site.



The Hayton Green City Park and gazebo also adjoins the Palouse River @ the west end of the downtown area



Taxable valuation supports park amenities as an example of non-market community-wide benefit

**Figure 19. Non-Market Brownfield Reuse Services & Valuation Methodologies**

<b>Non-Market Function</b>	<b>Typical Benefits of Brownfields Reuse</b>	<b>Potential Application to Palouse</b>
<b>Human Health</b>	Mitigating acute & long-term health impacts by reducing the magnitude of exposure to contaminants, the number of exposure pathways, length of exposure &/or providing information enabling affected persons to reduce their exposure or seek medical services.	Reduced risk of human health effects from remaining contamination both on-site (with reuse) and in terms of reduced future degradation of the Palouse River.
<b>Ecosystem Services</b>	Restoration & maintenance of natural resources including land, groundwater & habitat, as may occur with cleanup of groundwater & soil contamination, contributions to water & air quality provision of fish & wildlife habitat, soil & sediment stabilization. Values are both direct (as with stream or groundwater remediation) & indirect (resulting improved habitat for organisms upon which fish feed).	Represents one step toward an integrated long-term approach to improvement of Palouse River system, including planned protection and/or enhancement of riparian edge with sustainable site redevelopment.
<b>Recreation</b>	Hiking, camping, sightseeing, skiing, hunting, fishing, rock climbing. Indirect values are also noted, such as watching wildlife programs on television. Includes option value (such as the value of assuring potential future recreation).	Potential to combine with retail/dining overlook or with direct river access from site. In-town opportunities are greatest if a trail could be provided along the river extending thru Palouse.
<b>Amenities</b>	Improvement of site attractiveness & user satisfaction. May include the removal of unsightly structures, creation of open space & park land, other reuse of abandoned property, & avoidance of stigma associated with contamination & perceive health risks.	Opportunity for on-site viewing and sitting areas, launch point and/or inclusion of public art (including access via on-site walkways or adjoining public right-of-way).
<b>Proximate Land Values</b>	Increased land values for industrial, commercial, residential & tourism/recreation communities situated adjacent & near reclaimed brownfield sites. Land values may be integrally linked to other non-market functions.	One local estimate is that values of neighboring properties could be increased by about \$2.50 per square foot, due to increased desirability of the downtown area.
<b>Containment of Urban Sprawl</b>	Reduced pressure for greenfield development and urban growth area (UGA) expansion by prioritizing development of previously used sites – in both urban & rural areas. In Washington State, facilitates achievement of Growth Management Act (GMA) objectives.	By accommodating new business and/or residents, reuse of Palouse Producers site can serve growth in the UGA with existing, in-place infrastructure – both on-site and by stimulating further growth in-town.
<b>Social &amp; Community Values</b>	Public facilities, social & lifestyle values, community cohesion, environmental justice for disadvantaged persons. May include secondary and longer term cumulative effects.	Creates opportunities for continued downtown revitalization consistent with the existing fabric of the Palouse community and region.
<b>Passive (Non-Use) Values</b>	Existence value, bequest value – often across a larger population well removed from the redeveloped brownfield property.	The Palouse success story already has drawn substantial interest statewide – due to public interest maintaining the economic and social vitality of small towns in Washington State.

Source: E.D. Hovee & Company, LLC.

## VI. CASE STUDY FINDINGS

This Phase II brownfields reuse economic and fiscal impact modeling process is intended to provide observations useful for a case study community, followed by application for other similar projects in communities both large and small throughout the state of Washington.

Five key findings emerge from this modeling process as applied to this Palouse case study:

1. *There are a wide range of alternatives that could be considered for reuse of the Palouse Producers site – including commercial/institutional, residential and/or park/open space.* Not considered is the possibility of leaving the property *as is* – due to the risk of ongoing contamination and deterrent to other downtown and community investment. Also not viewed as a viable long-term strategy is redevelopment for industrial or distribution – as this does not represent a highest and best use other than as perhaps an interim use of existing structures prior to redevelopment.
2. *Any reuse is dependent on remediation of remaining contamination; any use involving new enclosed building structures also is dependent on flood protection.* These represent extraordinary costs that make reuse and redevelopment more challenging financially than with development of a greenfield site not constrained by these issues. These costs exceed the land value of the site and may be more easily justified if spread over a larger development (unless open space proves to be the preferred community choice).
3. *The reuse that does emerge should be a concept that facilitates the community’s vision while also proving to achieve market and financial feasibility.* Due to the cost of cleanup and flood protection together with a rural community market environment for which new construction may prove financially challenging, some form of public investment can be expected – potentially involving a mix of local public and outside funding sources. Unless the property is redeveloped as open space or for a purely civic/institutional use, some form of public-private development partnership also can be expected.
4. *Commercial/institutional and/or residential reuse is most viable if configured to serve both local community and regional market demand.* Rents and/or sales values will need to reflect top of market conditions in the larger Palouse region. Based on experience of downtown revitalization to date, Palouse has demonstrated potential to draw from Pullman and Moscow as a specialty retail and dining experience and, possibly, as an attractive small town option for quality residential living.
5. *The opportunity for reuse of the Palouse Producers site and continuing community revitalization is greatly strengthened by an ongoing track record of partnerships regionally and statewide.* The community’s history of working well with county and state agencies has proven instrumental with projects ranging from utility upgrades to downtown streetscape to securing DOE funding with the current Integrated Planning Grant. The form of the partnership required for Palouse Producers site reuse will undoubtedly be tailored to the distinctive opportunities and needs for outside support required for successful remediation and redevelopment. This opportunity will be enhanced by continued involvement from the City Council, business and property owners, and citizen volunteers.

## VII. STATEWIDE APPLICATION

The objective of both Phase I and Phase II reporting has been to outline and then test a framework for an economic and fiscal impact model applied to the evaluation of brownfields property reuse in the state of Washington. This Phase II report concludes with a brief review of Phase I findings followed by additional findings with Phase II model application and potential next steps.

### PHASE I FINDINGS

Principal findings from the Phase I framework modeling process completed in July 2007 are summarized as follows:

- There does yet appear to be a consistent, widely accepted set of *national metrics* for measuring success with brownfield revitalization. In part, this is because the science and the art of brownfields redevelopment is continuing to evolve – with many states and local jurisdictions now moving toward a *third generation* involving community-led redevelopment, leveraging resources from multiple public and private sources.
- At the state and local level, what has been outlined is an economic and fiscal modeling process involving *triple play* of reuse feasibility, return on public investment, and community plus environmental benefits (both market and non-market).
- Preliminary work with Phase I illustrated that it is possible to create a *modeling process* of potential value for state agencies, local governments and owners/developers as a common framework for the evaluation of costs and benefits associated with site-specific brownfield redevelopment projects.
- Compared to other forms of real estate development, the financial feasibility of brownfields redevelopment can be especially challenging due to *requirements of remediation* including added costs of development, responsibility for cleanup, and risk associated with the uncertainties of cleanup. Public sector leadership and incentives can make a difference to address these risks in ways that improve project feasibility and also provide return on investment for participating public agencies and the community-at-large.
- A modeling challenge is to address widely varying project details and public agency impacts while remaining *user-friendly*. These dual objectives have now been further tested with Phase II development of a software tool and application to real world projects (as exemplified by the Palouse case study).

### PHASE II RESULTS

Building from the earlier Phase I work, Phase II has had the primary purposes of testing the modeling process with a case study community and developing a software tool that could be used on a wider variety of redevelopment projects by the State of Washington Department of Ecology (DOE) and Department of Commerce (DOC) with brownfields clients.

***Palouse Case Study.*** Selection of Palouse, a community of just over 1,000 residents, has proven to be a useful and instructive test of this economic and fiscal impact modeling process:

- As first prepared in 2007, the model framework has been applied to fit the Palouse situation remarkably well. This test case illustrates the opportunity to use this modeling approach in smaller communities and with smaller sites as well as in larger project applications.
- This analysis clearly demonstrates the significance of the market and financial challenge faced by brownfields reuse versus the alternative of greenfield development – a challenge that is even greater with the national economic downturn and for smaller communities where market economics are less conducive for sustainable brownfields re-investment than in larger urban areas of the state.
- While initially intended to serve as a means of evaluating brownfields reuse after project objectives and uses have been well defined, this analysis indicates that there is value in economic modeling analysis early in the shaping of potentially viable reuse alternatives, as well.
- Economic and fiscal impact modeling can serve as a useful resource with the newly emerging generation of community-led redevelopment partnerships, including coordination with the Integrated Planning Grant (IPG) program of DOE as is currently being used in Palouse.
- Some parts of the economic and fiscal impact modeling process have proven to be more readily applicable than others. For example, it is not yet as feasible to ascertain needed or desired off-site improvements and associated public investment as this can most readily occur after the community planning process proceeds further with local priorities more fully defined.
- In part due to the growing importance of collaborative public-private partnerships with a strong public and community sector role from early-on, there is opportunity to incorporate information from economic and fiscal analysis both in the beginning to help shape viable reuse alternatives and then later to refine the analysis as community-preferred options are more clearly identified.

***Software Tool.*** In conjunction with the Palouse case study, a software tool has been developed and is being separately transmitted to the State of Washington. Documentation of the software tool is provided with Appendix B to this Phase II report.

Key features of the software tool are identified as comprising:

- A spreadsheet based model (in Excel) that can be adapted to a wide range of urban and smaller community brownfields reuse economic and fiscal assessments.
- A menu-driven approach providing opportunity for users to quickly enter key project parameters – ranging from building uses to applicable local tax rates – without compromising internal calculation integrity of the model.
- Ability to accommodate a wide range of reuse options – from open space/habitat to commercial/industrial to residential/mixed use and with options for project phasing – customized to the needs of the user and the project application(s) being considered.

- Built-in incorporation of data parameters not as readily secured without specialized knowledge or added expense to local jurisdictions or practitioners – as with data for regional multipliers by area of state and type of building reuse anticipated.
- Capacity to upgrade the software tool over time – based on experience as it occurs with multiple users and resulting refinements aimed to improve user utility.

## NEXT STEPS

This report together with the separate software tool spreadsheet file template and associated documentation comprises the key deliverables with Phase II of this economic and fiscal impact model for brownfields property reuse. Recognizing that this is an ongoing process, next steps recommended for consideration with DOE and its DOC counterparts could include:

- Review of this report with a Steering Committee (as occurred in Phase I) – with resulting documentation refinements made to address comments received.
- Opportunity to refine this Palouse case study (later in 2009) – in conjunction with the Intergrated Planning Grant (IPG) process based on a community-defined consensus vision for redevelopment of the Palouse Producers property and the continued revitalization of the City.
- Further testing of the software model with other communities and brownfields project applications both urban and non-urban – with subsequent software template refinements as appropriate.
- Creation of a library of documented case studies and resulting findings – with opportunity to shape new or revised policy mechanisms and incentive tools for more effective brownfields redevelopment in the years immediately ahead.

E. D. Hovee & Company, LLC in cooperation with Cascade Planning Group appreciates the opportunity to prepare this Phase II case study and software template on behalf of DOE. We welcome questions and suggestions regarding any aspect of this economic and fiscal impact modeling process and associated products.

## APPENDIX A. NATIONAL / STATE CLEANUP INCENTIVES

This appendix is intended to provide a brief overview of federal legislation and incentives for brownfields site reuse, followed by similar descriptions of programs specific to the State of Washington. This listing has been updated and revised from what was provided with the earlier July 2007 Phase I report.<sup>22</sup>

Please note that this is intended as a summary overview only and is subject to change. Further information for programs of interest should be obtained from the funding agency or source as indicated.

### FEDERAL PROGRAMS

Federal incentives available are organized by responsible agency as listed below. Incentives most applicable to private owners and investors (beyond infrastructure funding) are indicated by *underlining*. Other incentives and funding programs are typically oriented primarily to public agencies (including local jurisdictions) and, in some cases, to non-profit organizations.

*U.S. Environmental Protection Agency (EPA):*

- *Direct Assessment Grants* – available on a community-wide or site specific basis for the assessment and planning in conjunction with hazardous material and petroleum related cleanup.
- *EPA Direct Cleanup Grants* – issued at a maximum of \$200,000 per site (with 20% local cost share) and for sites containing hazardous material and/or petroleum, with performance to be completed within a three-year period.
- *Asset Conservation, Lender Liability, and Deposit Insurance Protection Act (1996)* – provides protection for lenders and certain other parties from the risks associated with participation in brownfield projects.
- *Brownfields Cleanup Revolving Loan Funds* – each capitalized with up to \$1 million allowing below market rate or no interest loans to governmental, non-profit and for-profit entities (with subgrant awards limited to no more than \$200,000 for cleanup costs to any individual entity plus 20% local cost share).
- *Job Training Grants* – intended to provide job training for brownfields redevelopment, assessment and cleanup for entities that are utilizing EPA revolving loan funds, assessment grants and cleanup grants.
- *Small Business Liability Relief and Brownfields Revitalization Act (2002)* – offering both expanded funding for EPA programs and liability relief to expand availability of capital and reduce costs of funding for brownfield developers.
- *EPA Tax Incentives* – available with assistance from the State of Washington DOC allowing private owners and developers to apply for a deduction of cleanup costs associated with brownfields directly from their “before tax” gross income.

*U.S. Department of Housing and Urban Development (HUD):*

- Community Development Block Grant (CDBG) – covering both entitlement grants (larger communities) and state competitive allocations (smaller communities) for projects that benefit low- and moderate-income persons.
- Section 108 Loan Guarantee – allowing for a loan advance to eligible local governments against future CDBG allocations.
- Brownfields Economic Development Initiative (BEDI) – providing funding of up to \$1 million per project in conjunction with Section 108 loan guarantees to augment local efforts for brownfields reuse, for communities designated as in need of economic development due to distress caused by disinvestment.

*U.S. Economic Development Administration (EDA):*

- Public Works Grants – available for brownfields redevelopment as an eligible activity since 2002.
- Planning Program – providing funding that may be used to integrate brownfields redevelopment as part of a broader community-wide or regional Comprehensive Economic Development Strategy (CEDS).
- Economic Adjustment Program – targeted at communities suffering long-term distress or shorter term challenges as with plant closures and natural disasters.

*Other Federal Programs & Resources:*

- Community Reinvestment Act (CRA) – includes credits that may be claimed by banks (since 1995) for brownfield projects in low- and moderate-income neighborhoods.
- Brownfields Tax Incentive – allowing accelerated depreciation with ability to expense total site mitigation costs on federal income taxes in the year incurred rather than depreciate them over time.
- Federal Investment Tax Credits – including historic preservation, low income housing investment tax credits (LIHTC), and New Market tax credit programs.
- Federal Historic Preservation Tax Credit – providing federal tax credits of 20% for rehabilitation of certified historic commercial and rental residential structures and 10% credit for rehabilitation of non-historic, non-residential structures built before 1936.
- New Markets Tax Credits (NMTC) – permitting taxpayers to receive tax credits over seven years for up to 39% or typically about 20% of the cost of qualified equity investments through a Certified Development Entity (CDE) in low-income communities or for low-income persons.
- Small Business Administration (SBA) Loans – including SBA Pollution Control Loans to businesses providing environmental services to their communities (rather than direct brownfields assessments or cleanups), but with SBA 7(a) loans potentially applicable for brownfields related development subject to determination of eligibility.
- U.S.D.A. Rural Development – including sources such as Rural Development Business Loans, Housing and Community Facilities, Rural Utilities Programs, Technical

Assistance and Training Grants, Emergency Community Water Assistance, Water and Waste Disposal Loans, and Community Facilities Programs.

- *Other Targeted Federal Programs with Brownfields Funding Eligibility* – including programs of the National Oceanic and Atmospheric Administration (NOAA) Coastal Zone Management and Revolving Loan Fund Programs, Department of Health and Human Services (DHHS) social services block grants, Department of Transportation, and U.S. Army Corps of Engineers.

## STATE OF WASHINGTON PROGRAMS

State-level and local incentives available are listed by lead agency responsible to cover the following programs. As with federal programs, those most available for use by private owners and developers are underlined. Programs not underlined are available primarily to public agencies, but with opportunity to incent brownfields reuse with provision of funding for purposes ranging from planning to infrastructure investment.

Program coordination for the State of Washington involves the departments of Ecology and Commerce through a brownfields staffing arrangement reorganized in 2008 as the Cleanup Enhancement and Revitalization (CLEAR) team. *Note:* as of July 2009, programs that were formerly administered through the State of Washington Department of Community, Trade & Economic Development are provided through what is now the Department of Commerce (DOC). This change reflects a heightened job focus for what is now the DOC.

### *Department of Ecology (DOE):*

- *Remedial Action Grants and Loans* – a major source of funding for cleanup of toxic sites, recently amended to move towards a more integrated cleanup and redevelopment approach, with initial funding for integrative project planning (as is currently occurring in Palouse) and increased subsidies for site redevelopment including economic development and habitat restoration.<sup>23</sup>
- *Safe Drinking Water Action Grant* – for local jurisdiction infrastructure to ensure that safe drinking water standards are met including hazardous site cleanup if related to safety of the drinking water system (administered by DOE together with the state Department of Health).
- *Area Wide Groundwater Remediation* – allowing for loans to support area-wide rather than site specific groundwater cleanup, with loan repayment tied to clean up of areas where adjacent property owners benefit from remedial action.
- *Independent Remedial Action Grant* – as reimbursement for a portion of the expense involved in an independent cleanup when a local government enters into the DOE Voluntary Cleanup Program.
- *Other specific programs* – as with methamphetamine lab site assessment and cleanup grants and derelict vessel remedial action grants. Also noted is that, while DOE does not have a loan program under the Remedial Action Grant project, loans may be considered on a site-by-site basis.

*Department of Commerce (DOC formerly CTED):*

- *Brownfields Revolving Loan Fund* – to facilitate public and private sector cleanup and redevelopment of commercial or industrial brownfield properties that are idle, underutilized, or abandoned due to contamination, capitalized with \$5 million in funding through EPA and managed by the Brownfields Coalition together with a staff member who collaborates with the Brownfields Program at DOE.
- *Community Economic Revitalization Board (CERB)* – providing infrastructure grants and loans for economically distressed communities, job development funding, and also the CERB/Local Infrastructure Financing Tool (LIFT) program taking advantage of tax revenue generated by private investment in a revenue development area (RDA) to help finance costs of public improvements needed to encourage redevelopment.
- *Community Development Block Grant (CDBG)* – administration of federal funding for affordable housing and job development to benefit low- and moderate-income households (including Section 108 loan guarantees) for non-entitlement communities.
- *Public Works Board* – providing financial and technical assistance to communities statewide for critical public health, safety, and environmental infrastructure (including loan programs of the Public Works Trust Fund (PWTF), the Infrastructure Assistance Coordinating Council (IACC), and targeted technical assistance for communities of 5,000 or less).
- *Rural Washington Loan Fund* – providing loans of up to \$700,000 and one-third of total project costs as gap financing for businesses creating new or maintaining existing jobs, including brownfield redevelopment that serves a jobs related economic enterprise.
- *Other grants and loans* – including Rural Opportunity Fund and Small Communities Initiative.

*Department of Revenue (DOR):*

- *Washington State Tax Incentives* – including tax deferrals for investment projects in rural counties, rural area business and occupation (B&O) tax credits for job creation, software programming/manufacturing, “help desk” activities, and employee job training. Also includes housing tax abatement for up to 8/12 years.

*Department of Transportation:*

- *Transportation Improvement Board (TIB)* – for projects including bridge replacement, highway rehabilitation, urban and small city sidewalks, urban corridors, urban arterial program, small city arterials, safe routes to schools, and small city preservation.
- *Transportation Enhancement Grants* – federal funding distributed through WSDOT for projects that enhance surface transportation, with potential opportunities for brownfields redevelopment including street improvements and mitigation of pollution from transportation related causes.
- *Other transportation grants* – with specific funding programs covering regional mobility, congestion mitigation and air quality, highway safety improvement program, and pedestrian and bicycle safety.

*Washington Interagency Committee for Outdoor Recreation:*

- *Infrastructure Grants* – with funding through boating infrastructure grant, boating facilities, and firearms and archery range recreation programs.
- *Environment Grant* – for aquatic lands acquisition, restoration, and/or public access as part of an Enhancement Account.
- *Parks & Recreation Grants* – for wildlife recreation, ORV, trails, land/water conservation, and youth athletic facilities.

*Other State Agencies:*

- *Aquatic Lands Enhancement Account (ALEA)* – providing grants funded through the Washington State Department of Natural Resources for the purchase, improvement, or protection of public purpose projects located on a “navigable” waterway.
- *Public Works Board* – offering construction and pre-construction loans for local government public works financing and emergency loans for public works repairs.
- *Washington State Historical Society* – operating the Heritage Capital Projects Fund (HCPF) as a competitive grant program for interpretation and preservation.

*Tools Available to Local Jurisdictions in Washington State:*

- *Assessment districts* – including local improvement districts (LIDs) for property owners benefiting from proposed public improvements.
- *Parking and Business Improvement Area (PBIA)* – similar to LID funding except that businesses rather than property owners are assessed and with potential use for promotion and area management as well as capital improvement funding.
- *Local Historic Property Tax Abatement* – effectively freezing the value of a locally or nationally listed historic property with rehabilitation improvements for 10 years.
- *Urban Center Residential Property Tax Abatement* – offering an 8-year property tax freeze for new multi-family construction, conversion or rehabilitation and a 12-year freeze for properties with 20%+ of units affordable to low- and moderate-income households.
- *Electric Utility Rural Economic Development Revolving Funds* – as available in some counties.
- *Local jurisdiction funding* – from sources as available to support economic development covering general revenues, and voted and non-voted bonding, including possible pledging of added tax revenues from the project back to pay for some portion or all of local jurisdiction funding needs.
- *Public development authorities & community redevelopment agencies (PDA/CRA)s* – including as a recipient of grant funds, for tax exempt financing, and for undertaking public-private partnerships.
- *Special taxing districts* – as allowed by Washington State statute including Port Districts and Public Facility District (PFDs).

- Community Renewal – adopted by the 2002 Legislature as a replacement for the state’s urban renewal laws and allowing purchase of property, public improvements and public-private development pursuant to a community renewal plan within an area declared as blighted.
- Tax increment financing – available in limited form now as a means to pay for public improvements from added property and/or sales tax revenues from new investment of a revenue development or revitalization area pursuant to separate authorizations for Community Revitalization Financing (Chapter 39.89 RCW), Local Infrastructure Financing Tool or LIFT (39.102 RCW) and Local Revitalization Financing (approved by the 2009 Legislature as SSSB 5045).

*Other Public / Non-Profit Organizations:*

- CDFI Loan Fund – through the Rural Community Assistance Corporation (with offices in Washington State).
- Environmental Infrastructure Loans – also through RCAC for safe drinking water and water disposal systems/facilities.
- Foundation grants – particularly for demonstration programs of community improvement projects.
- Tax Exempt Industrial Revenue Bonding (IRBs) – through the Washington Economic Development Finance Authority (WEDFA) or local industrial development authorities.

## APPENDIX B. SOFTWARE MODEL DESCRIPTION

E. D. Hovee & Company was retained by Washington State Department of Ecology to develop a computer model that would assist in assessing the financial and economic qualities of brownfield redevelopment. The purpose of the model is to provide a tool that can aid in making planning decisions with regards to a proposed brownfield redevelopment site. The model is not intended to replace or be substituted for typically required financial work for development financing.<sup>24</sup>

The computer model is spreadsheet based, compatible with MS Excel 97/2003. The model is arranged into five (5) areas of assessment that include:

- Development Programming – specifies the proposed category of use(s) for the subject site including the phasing (or timing) of each use.
- Construction Budget – provides a cost estimate of developing the subject site with the proposed uses.
- Financial Pro Forma – summarizes the potential financial benefits of the proposed development project from a private sector perspective.
- Governmental Fiscal Assessment – evaluates the public sector financial rewards versus expense obligations from construction as well as ongoing servicing of the subject site.
- Economic Effects – estimates the potential direct and indirect benefits to the local/regional economy in terms of business revenues, job creation (or retention), and household income.

### INPUT SCREENS

The user of the computer model is required to enter project information about the proposed development on a series of five (5) spreadsheet tabs that are organized around the five (5) assessment areas. Each input screen is discussed in turn.

#### *Site Input Screen*

The *site* input screen allows the user to provide information on how the site will be redeveloped. This tab is organized into three categories. The first grouping requires the site size in gross acres and gross square footage (gsf) of any proposed building demolition.

SITE DEVELOPMENT	Quantity	U/M
Site Area		acres
Building Demolition		gsf

The second category is information relating to site usage. A site is developed with a series of features that can include buildings, landscaping, at-grade parking and loading areas, public right-of-ways, open space (or buffers), or other. The user is required to provide a percentage estimate of how the site will be used between the pre-specified categories.

Site Usage	% of Site
Building Footprint	
At Grade Parking	
At Grade Loading	
Rights-of-Way	
Site Landscaping	
Open Space/Buffers	
Other (_____)	
Total Site Area	100%

At the onset of development, a site must be readied to accept the proposed uses. This can include acquisition, building demolition, environmental remediation, surface parking, infrastructure, etc. Each *program element* has an associated cost. The user is asked to standardize the costs in terms of dollar per gross square foot of land area. For example, if a site were 20 acres (or 871,200 gross square feet) in size and environmental remediation was estimated at \$5.0 million, then the user would input \$5.75 (\$5.0 million ÷ 871,200 gsf) within the appropriate cell.

The user is also asked to provide a percentage (of direct construction cost) estimate of soft (or indirect) costs (excluding sales tax on construction) such as engineering fees and permitting, as well as anticipated developer profit and average annual construction cost escalation.

PROGRAM ELEMENT	Cost /GSF (%)	Comments
Site Acquisition		
Building Demolition		
Site Preparation		
At Grade Parking		
At Grade Loading		
Right-of-Way/Infrastructure		
Landscaping		
Open Space/Buffers		
Environmental Remediation	\$5.75	Averaged across entire site
Soft (Indirect) Costs	25%	
Developer Profit	12%	
Construction Inflation Factor	3.0%	

### *Use Input Screen*

The computer model recognizes that a proposed development may comprise new construction, building rehabilitation, or a mix of both. The model is also setup to allow for development phasing (up to ten years), as large sites may not completely redevelop within one year.

The user is required to enter the corresponding number (1-10) that best describes the type of building use. The table below provides the number as well as corresponding general use description. The next step is to provide an estimate of the gross building square footage for each proposed use under the year the use will begin construction. The user is required to provide a *current year* construction cost estimate per gross square foot of building space under the “Const. Value \$/SF” field. If a proposed building will have common areas (i.e. lobby, hallways, etc.), the

user is asked to provide a percent of the building area that will be utilized by tenants under the “% Net Square Footage” field. The number of dwelling units for residential uses and number of rooms for lodging facilities is entered under the “# of Units” field. The final input item is the estimated number of parking spaces (per 1,000 square feet or per unit) that will be provided on-site for each use. With the exception of “structured parking,” all parking spaces are assumed to be at-grade.

Land Use Phasing Plan		Building Area Constructed or Rehabed (Gross Square Feet)								Const.	% Net	# of	Unit of			
#	Description	1	2	3	4	5	6	7	8	9	10	Value \$/SF	Square Footage	Units	Parking	Measure
<b>Building Rehabilitation:</b>																
Use 1:	1 Industrial/Warehouse															per 1,000 nsf
Use 2:	2 Industrial/Flex															per 1,000 nsf
Use 3:	3 Commercial Office															per 1,000 nsf
Use 4:	4 Commercial Retail															per 1,000 nsf
Use 5:	5 Lodging															per Unit
Use 6:	6 Residential Rental															per Unit
Use 7:	7 Residential Owner															per Unit
Use 8:	8 Civic															per 1,000 nsf
Use 9:	9 Other															per 1,000 nsf
Use 10:	10 Structured Parking															per 1,000 nsf
<b>New Construction:</b>																
Use 1:	1 Industrial/Warehouse															per 1,000 nsf
Use 2:	2 Industrial/Flex															per 1,000 nsf
Use 3:	3 Commercial Office															per 1,000 nsf
Use 4:	4 Commercial Retail															per 1,000 nsf
Use 5:	5 Lodging															per Unit
Use 6:	6 Residential Rental															per Unit
Use 7:	7 Residential Owner															per Unit
Use 8:	8 Civic															per 1,000 nsf
Use 9:	9 Other															per 1,000 nsf
Use 10:	10 Structured Parking															per 1,000 nsf

### Pro Forma Input Screen

Each use will generate a financial return that is either positive or negative. To see if the proposed development will be perceived as financially feasible by the private sector, the user is required to provide some local/regional real estate market information. Projected revenue is based upon information such as annual lease rate (dollar per net square foot of building space – \$/nsf), common area and maintenance charge (CAM – \$/nsf), average daily room rate (for lodging facilities), and monthly lease rate per residential rental unit and parking space. The model also allows for additional income to be estimated for each used based upon a percentage of annual gross income for that specific use.

Annual gross income is adjusted for vacancy rate and building maintenance/ repair and other expenses. The user is required to provide an estimate of occupancy and expenses. Expenses are expressed as a percent of annual gross income, except for parking, which is estimated per parking space.

The user is also asked to provide a capitalization rate. A capitalization rate is stabilized net operating income (at normal occupancy) divided by project valuation and is a term typically used with the “income approach” to property appraisal. Cap rates can change over time based on market conditions, both the cost of debt financing and investor desired return on equity. Projects seen as more risky are likely to be accompanied by higher cap rates.

Rental Assumptions	Industrial/ Warehouse	Industrial/ Flex	Commercial Office	Commercial Retail	Commercial Lodging	Residential Rental	Civic	Other	Structured Parking	At-Grade Parking
<b>Rental Rates:</b>										
Annual Lease Rate (\$/nsf)	\$6.00	\$10.20	\$18.00	\$19.80			\$18.00	\$6.00		
CAM Charges (\$/nsf)	–	–	–	–			–	–		
Avg. Daily Room Rate					\$175.00					
Monthly Rate						\$960.00			\$70.00	\$35.00
Other Income as % of AGI					15%					
<b>Absorption:</b>										
Stabilized Occupancy Rate	93%	93%	93%	93%	65%	93%	100%	90%	90%	80%
<b>Expenses:</b>										
% of Annual Gross Income	10%	10%	10%	10%	60%	20%	10%	10%		
Per Space									\$200.00	\$50.00
Capitalization Rate	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%

Anticipated income from the sale of residential owner-occupied housing units is determined by two factors: a) sales price per square foot of unit, and b) sales commission as a percent of sales price.

Sales Assumptions	Residential Owner
Sales Price (per nsf)	\$325.00
Sales Expense	5%

### Fiscal Input Screen

The information provided on this screen aids in the estimation of the potential fiscal revenues as well as projected financial expenses (obligations). Fiscal revenues include business and occupations tax, sales tax on construction and annual goods/services sold as a result of the proposed project, real estate excise tax (REET), property taxes, and utility taxes. The user is required to provide all tax rates.

Expenses are financial obligations the public sector will meet in order to ensure the site develops as proposed. Expenses can include capital items such as infrastructure and remediation, as well as annual cost of public services (e.g. public safety versus other general fund services) encumbered as a result of the proposed development project. In cases where added (or incremental) public service expenses have not been clearly identified or are not expected to be substantially affected (as with a small project), this input field may be skipped.

Use	Prop Tax Abate Ends in Year	Annual Turnover Sales Rate	Annual Utility Costs (per nsf)										B&O Tax Rates			
			Electric	Nat'l Gas	Telephone	Cable	Water	Sewer	Drainage	Solid Waste	Steam	Other	State	Local		
Industrial/Warehouse	–	5.0%													0.484%	–
Industrial/Flex	–	5.0%													0.992%	–
Commercial Office	–	5.0%													1.500%	–
Commercial Retail	–	5.0%													0.471%	–
Lodging	–	5.0%													0.471%	–
Residential Rental	10	5.0%													–	–
Residential Owner	12	15.0%													–	–
Civic	–	–													–	–
Other	–	–													–	–
Structured Parking	–	5.0%													0.471%	–
Utility Tax Rates:																
Industrial			6.0%	6.0%	6.0%	–	15.0%	15.0%	–	–	–	–				
Commercial			6.0%	6.0%	6.0%	–	15.0%	15.0%	–	–	–	–				
Residential			6.0%	6.0%	6.0%	–	15.0%	15.0%	–	–	–	–				

Type of Tax	Tax Rate								
		Other Governmental Costs			Value	U/M			
Average Annual Property Tax Increase	1.0%			<i>Off-Site Capital Expense</i>					
Property Tax Rate:	\$10.14180			Utility Infrastructure	\$1,000,000	lump sum			
State of Washington (Schools)	\$2.17899			Road Infrastructure	\$500,000	lump sum			
City	\$2.44687			Other Infrastructure	-	lump sum			
County	\$1.22492			Off-Site Environmental Remediation	\$250,000	lump sum			
Local School District	\$3.93355			Other Off-Site Cost	\$200,000	lump sum			
Fire District	\$0.00000			<i>Operating Expense</i>					
EMS District	\$0.00000			Public Safety (Police & Fire)	\$300	per capita			
Hospital District	\$0.00000			Other General Fund Services	\$1,320	per capita			
Library District	\$0.00000			Special/Enterprise Fund Services	\$0	per capita			
Port District	\$0.35747								
Park District	\$0.00000								
All Other	\$0.00000								
Sales Tax Rate	8.2%								
- State	6.5%								
- Local	1.7%								
Real Estate Excise Tax (REET) Rate	1.78%								
- State REET Rate	1.28%								
- Local REET Rate	0.50%								
Annual Average Real Estate Market Value Escalation	3.0%								
Annual Utility Inflation Factor	3.0%								
Net Present Value (NPV) Discount Rate	5.5%								
Lodging Tax Credit Back to Local Area	2.0%								

### Economic Input Screen

The final input screen allows the user to specify economic measures that aid in the estimation of the potential economic benefits of the development proposal such as business revenues, number of jobs, and household income supported in the local/regional economy. The model will estimate not only the direct on-site benefits but also the benefits that could be expected to ripple through the rest of the economy. For ongoing annual benefits, the user **MUST** at least provide the number of on-site jobs. If the other cells (fields) are left vacant, the model will utilize pre-specified ratios derived for each region of the state from Minnesota IMPLAN Group's (MIG's) input-output model. The user also must type in the corresponding region code (1-6) for the model to estimate potential economic benefits of the proposed development project. Region codes are:

1. Central Washington: Chelan, Douglas, Grant, Kittitas, Okanogan, & Yakima
2. Central Puget Sound: King, Kitsap, Pierce, Snohomish, Thurston
3. Eastern Washington: Adams, Asotin, Benton, Columbia, Ferry, Franklin, Garfield, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, & Whitman
4. North Puget Sound: Island, San Juan, Skagit, & Whatcom
5. Northwest Washington: Clallam, Grays Harbor, Jefferson, Klickitat, & Mason
6. Southwest Washington: Clark, Cowlitz, Lewis, Pacific, & Wahkiakum

[Insert Picture of Input Screen]

## OUTPUT SCREENS

The model provides a series of output screens (or tabs) that can either be viewed on the computer screen or printed. It should be noted that these output screens CAN NOT be edited in any manner to avoid accidental model corruption. A sample of each output screen is provided on the subsequent pages utilizing the case study information provided in the main report.

[Insert Picture of Each Output Screen]

## ENDNOTES

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- <sup>1</sup> Information is from the State of Washington DOE, as of January 21, 2009.
- <sup>2</sup> Source is the EPA web site [www.epa.gov/brownfields/glossary.htm](http://www.epa.gov/brownfields/glossary.htm).
- <sup>3</sup> In 1993, EPA also provided the first federal definition of brownfields as “abandoned, idled, or under-used industrial and commercial facilities where expansion and redevelopment is complicated by real or perceived environmental contamination.” This definition has been subsequently expanded to cover other contaminated sites in addition to industrial and commercial facilities.
- <sup>4</sup> Statutory provisions for the State of Washington Model Toxics Control Act are found at RCW 70.105D.
- <sup>5</sup> Generally, Prospective Purchaser/Consent Decrees has not been widely used with smaller contaminated sites; however, usage is becoming more common.
- <sup>6</sup> These risks are identified, for example, by the EPA Region 4/University of Louisville publication *Public Strategies for Cost-Effective Community Brownfield Redevelopment*, Practice Guide #1, Summer 2002. Authors are H. Wade VanLandingham, The Stormstown Group, and Peter B. Meyer.
- The article points out that key legal issues involve definitions of a) “strict liability” – not requiring the demonstration of wrong-doing and retroactive to acts causing pollution even prior to the 1980 passage of CERCLA; b) “joint and several” liability covering generators of hazardous substances, owners and operators of the site where contamination is found, and transporters with the authority to decide on disposal of contaminants. Joint and several language means that any one of the potentially responsible parties (PRPs) may be held responsible for the entire cost of cleanup, no matter how much or how little pollution they caused.
- <sup>7</sup> Information for this Phase II economic and fiscal modeling report has been drawn from sources generally deemed to be reliable. However, the accuracy of information obtained from third-party sources is not guaranteed. The findings and conclusions contained in this report are those of the authors. They should not be viewed as representing the opinion of any other party prior to their express approval of the contents, whether in whole or in part.
- <sup>8</sup> Source of current population estimates is the State of Washington Office of Financial Management (OFM).
- <sup>9</sup> The City of Palouse has teamed with the U.S. Environmental Protection Agency (EPA) as well as DOE and the environmental consultant firm Maul Foster Alongi to conduct the integrated planning assessment.
- <sup>10</sup> Condo values equal sales prices less selling expense. To arrive at a valuation for rental components, rental income less expense is converted to project valuation by use of a market capitalization (or cap) rate. This is recognized as the “income approach” to valuation by real estate appraisal firms.
- <sup>11</sup> The complete document is *Linking Toxics Cleanup and Redevelopment Across the States: Lessons for Washington State* (Final Report), prepared for the State of Washington Department of Ecology Toxics Cleanup Program by the University of Washington, February 2009.
- <sup>12</sup> Environmental conditions post-reclamation may influence site suitability. For example, use of a cap to seal in contaminated ground in an area with poor load bearing soils could mean that a multi-story building which required piling or other foundation support penetrating the cap will be less readily achievable and/or more expensive.
- Some uses also may not be allowed with an existing remediation plan. For example, remediation conducted to an industrial or open space standard may not allow for single family development unless additional remediation/cleanup occurs.
- <sup>13</sup> In situations where the developer and contractor are separate parties, each will be looking for a reasonable profit. Developer profit usually includes a gross profit figure covering for sale property (such as condos), since there is no ongoing income stream once the project is sold. Developer profit calculations may be less straightforward with rental portions of the property. If the developer is looking to hold the property long-term,

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there may be less need for up-front development profit. However, this perspective changes if the developer is looking to sell the project upon completion or after achieving a target level of building occupancy.

- 14 The current economic environment is unusual in that construction costs are not escalating as is typically the case. Due to the severity of the economic downturn, construction bid prices are often coming in well below costs of 2-3 years ago. This favorable bidding environment can be expected to continue until there is a strong rebound in construction activity regionally and nationally.
- 15 The capitalized value is determined by dividing net operating income (revenues less expenses) by a capitalization (or cap) rate based on current market transactions. This is essentially the *income approach* to property valuation used by real estate appraisal firms.
- 16 A specific cash flow projection is not included with this economic model, but can be important to determine ability to meet month by month expenses until normalized occupancy. After that, an annualized cash flow analysis is helpful to ascertain ability to cover both operating expenses and debt service payments (with an added cushion also known as a debt coverage ratio). Detailed cash flow projections are prepared after the initial pro forma (at stabilized utilization) is completed – as planning proceeds from concept to final project design
- 17 Assumed for purposes of this pro forma are Palouse area commercial space rental rates of \$0.65 and residential rental of \$0.90 per square foot monthly. This is above current market rates of as low as \$0.25 to just over \$0.40 per square foot for existing retail/dining space in Palouse and residential rental rates ranging up to just over \$0.70 per square foot, well below rates required to support new construction. Sales values for condominium space are projected at \$150 per square foot based primarily on comparisons with the Pullman area market.
- Experience in and outside the Pacific Northwest is that new construction can attract tenants and buyers willing to pay more than for older existing space, for a higher quality development product – especially if the development offers an amenity value not duplicated elsewhere in the Pullman/Moscow area. Further market testing (including possible pre-leasing and/or pre-sales expressions of interest) likely should be expected before proceeding to finance and construct a Palouse project.
- 18 Flood protection costs will be associated with fill or floodproofing to at least one foot above the 100 year flood elevation for enclosed building structures. These costs are highly variable and dependent on more detailed site planning. Preliminary estimates reflect experience with floodproofing as a percentage of total building cost.
- 19 With this analysis, all revenues have been put in terms of inflated amounts as of project build-out. In other words, one-time revenues reflect cumulative amounts that may be received over a multi-year period (if the project is built in phases). Ongoing revenues are in current year dollars at the time of build-out and when the project has achieved normalized occupancy (i.e. the end of sales or lease-up period).
- 20 With operating expenses, jurisdictions often estimate public service costs on a *per capita* basis, as for comprehensive planning purposes. Few jurisdictions have the sophisticated data bases needed to distinguish costs of serving various types of development on an ongoing basis. The approach suggested by this model applies costs that have been identified by a particular local jurisdiction as attributable to specific project uses.
- 21 Economic multipliers will vary by type of business activity. For example, traded sector activities (that sell goods and services outside the local community) will generally have higher multipliers than for service businesses (with primarily local clientele).
- 22 Much of the material for this 2009 updated listing of financial resources is from the report *Linking Toxics Cleanup and Redevelopment Across the States: Lessons for Washington State*, prepared for the Department of Ecology (DOE) by the University of Washington, February 2009.
- 23 Between 2003 and 2005, DOE allocated \$25 million for Remedial Action Grants (RAGs). While not targeting brownfields by name, the 1761 amendments to the RAGs program highlight redevelopment as a key objective of the grants. Through a pilot Integrated Planning Grants program of up to \$200,000 with no match required, DOE encourages local governments to prepare plans that integrate property use into their cleanup of contaminated sites.

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<sup>24</sup> Development is a business inherent with risk. There are many factors that determine the ultimate success of a development, such as economic conditions, local demographics, marketing efforts, price points, and so forth. The purpose of conducting financial feasibility assessments is to hedge the inherent market risks with a well thought out development plan. The computer model developed for Washington State Department of Ecology is not intended to replace these normal business practices but rather provide a tool that can aid decision-makers in developing public policy related to brownfield redevelopment.