



Economic Impacts of the Port of Hood River

December 2013

Prepared for:

Port of Hood River

ECONorthwest

ECONOMICS • FINANCE • PLANNING

The KOIN Tower
222 SW Columbia Street
Suite 1600
Portland OR 97201
503-222-6060

www.econw.com

Contact Information

Terry Moore and Carsten Jensen prepared this report for ECONorthwest. ECONorthwest is solely responsible for its content.

For more information about ECONorthwest, please visit: www.econw.com.

For more information about this report, contact:

Michael McElwee
Executive Director, Port of Hood River
mmcelwee@portofhoodriver.com
(541) 386-1138

The Commissioners of the Port of Hood River are:

Richard E. McBride, President
Brian Shortt, Vice President
Hoby Streich, Secretary
Jon Davies, Treasurer
Fred Duckwall

Acknowledgements

Alison Danko, an intern with the Port of Hood River, contributed substantially to the data collection, analysis, and writing for this report. In turn, staff at the Port of Hood River helped her find historical data that ECONorthwest requested for its analysis.

Several people in the Hood River region offered information about various aspects of the local economy through interviews or email:

Jaime Athos; Operations Manager, Turtle Island Foods

Irene Firmat; CEO, Full Sail Brewing

Steve Gates; Owner, Big Winds

Chuck Hinman; General Manager, Hood River Inn

Romeo Robichaud; Owner, RBS Battens

Jeff Pickhardt; Owner, Key Development

Brian Prigel; Owner, Prigel Machine

Bill Pullum; Electronic Assemblers

Bill Vawter; Quality Manager, Cloud Cap Technology Inc.

Ken Whiteman; Co-Founder, Pfriem Family Brewers / President, Hitchsource

Cover photo by David Herrera. Retrieved from <http://www.flickr.com/photos/dph1110/7633933722/>

Table of Contents

Summary	1
Background	1
Framework and Methods	1
Results of the Analysis	2
Implications.....	7
1 Introduction	9
1.1 Background and Purpose	9
1.2 Organization of the Report	10
2 Framework and Methods	11
2.1 Framework.....	11
2.2 Methods.....	14
3 Context of the Hood River Economy	19
3.1 Hood River Economy.....	19
3.2 History of Activity at the Port of Hood River	21
4 Port Economic Impacts by Class	23
4.1 Port Operations	23
4.2 Activities at the Port by Others	25
4.3 Summary of Economic Impacts	37
5 Conclusions and Implications	39
Appendix A: Annotated Bibliography	1
Appendix B: Context of the Hood River Economy	1
Hood River Economy.....	1
Employment	2
Population and Demographics	4
Land Availability	6

Summary

Background

The Port of Hood River (Port) is updating its strategic plan. To support that effort, the Port asked ECONorthwest to conduct an *economic impact analysis* of the Port's activities. That analysis describes how the Port directly contributes to the economy of the Hood River region. It provides information to help the Port evaluate its performance and consider its future prospects.

Framework and Methods

The fundamental question the analysis addresses is, "How have Port actions—now or in the last 20 years, directly or indirectly—created or contributed to beneficial economic impacts on the regional economy of the Hood River area?" The appropriate framework for that type of analysis is an *economic impact analysis*, which measures economic activity in terms of output, income, and jobs. Activities and facilities of the Port of Hood River that create economic impacts are:

- Port Operations
- Light Industrial Development
- Columbia River Bridge
- Hood River Airport
- Marina
- Recreational Properties

The analysis looked at *primary effects*, which result from what the Port does itself, and *secondary effects*, which result from the use of the Port's commercial and industrial assets by non-Port entities (primarily businesses). It starts by measuring direct expenditures and employment by the Port and by businesses whose operations depend in some significant way on Port assets or activities. These *direct impacts* lead to two further categories of impacts: *indirect impacts*, which are supply chain impacts resulting from business-to-business spending; and *induced impacts*, which are consumption driven impacts resulting from household spending.

ECONorthwest based its evaluation on the following information:

- Previous studies of the Port of Hood River, the Hood River economy, and other Oregon ports. These studies established the historical context of the Port's operations in Hood River.

- Current and historical records of economic activity at the Port from the Port’s historical annual budgets.
- Port operations; transportation including water, land, and air; Port leases; recreation; and other contributions to quality of life of visitors and residents of the area.
- Port spending, employee compensation, and employment from its annual budget records; selected bridge traffic data; waterfront parking pass data; and information about of tenants leasing Port properties.
- Interviews with several businesses and organizations identified by Port staff as key users of Port facilities. The interviews supplemented quantitative data and provided important insights into the Port’s users and their activities.

Results of the Analysis

Table 1 shows the direct impacts and total impacts (direct plus secondary) of the Port and the 35 businesses that now use its current assets or those assets that were conveyed to the private sector sometime in the last 20 years. In fiscal year (FY) 2013, together, the Port and these businesses were directly responsible for about \$200 million in annual output (which includes about \$37 million in wages and benefits in the region) and nearly 600 jobs (almost 7% of the non-farm jobs in Hood River County in 2011).¹

Table 1: Direct and Secondary Impacts of the Port and Businesses on Current and Former Port Properties, 2013

Activity	Output	Wages & Benefits	Jobs
Direct Impacts			
Business on Port Properties	\$187,029,000	\$35,969,000	571
Port of Hood River	12,478,619	1,514,435	24
Total Direct Impacts	\$199,507,619	\$37,483,435	595
Total Impacts (direct + secondary, mid-range)			
Business on Port Properties	\$261,840,600	\$53,953,500	913
Port of Hood River	18,093,998	2,195,931	45
Total Direct and Secondary Impacts	\$279,934,598	\$56,149,431	985

Source: ECONorthwest with data from IMPLAN and the Port of Hood River.

¹ Jobs are full year equivalents (FYE), and include both full- and part-time workers.

ECONorthwest used economic *multipliers* to estimate the secondary impacts of the Port and its related businesses.² The bottom section of Table 1 shows the mid-range estimate for total impacts (direct plus secondary): \$280 million in output, \$56 million in wages and benefits, and 985 jobs.

Table 2 puts the total impacts in Table 1 in context by comparing them to total economic activity in the Hood River region.³ The Port and its related businesses account for about 18% of output, 12% of wages and benefits, and 7% of jobs in Hood River.

Table 2: Share of Economic Activity in Hood River Region Attributable to the Port and Related Businesses

Activity	Output	Wages & Benefits	Jobs
Hood River County, Nonfarm Activity (2011)	\$1,567,643,498	\$471,263,886	13,711
Port and Related Businesses (2013)	279,934,598	56,149,431	985
Estimated contribution of Port and Related Businesses to regional economic activity	18%	12%	7%

Source: ECONorthwest.

Notes: 1. These estimates are approximate. This analysis compares IMPLAN data for Hood River County in 2011, the most recent year of data available, to IMPLAN data for the Port and its related businesses for 2013. Capital expenditures by the Port in 2013 are about 50% greater than the average annual capital expenditures over the last 10 years (and those of 2011). Thus, the estimated shares of activity attributable to the Port may be relatively high.

2. The number of jobs in Hood River County reported in this analysis is higher than the number reported in the Port's strategy document due to differences in the data sources used. ECONorthwest used jobs figures from IMPLAN, while the Port used jobs figures from the Oregon Employment Department (OED). There are two key differences between these data sources: (1) IMPLAN counts self-employed jobs and OED does not; and (2) IMPLAN bases its counts on the number of filled jobs in a given quarter, regardless of if that worker was in that position the previous quarter, whereas OED only counts the number of workers employed by the same employer in both the reference and previous quarters.

The remainder of this section describes Port and related business operations within the six major categories listed previously.

Port Operations

For FY 2013, the Port budgeted total capital and operating expenses of \$12.5 million. The Port employs 24 FYE workers with average wages and benefits of \$63,101. The Port's revenues principally come from bridge tolls, grants, debt financing, and lease income.

² For example, new jobs in manufacturing indirectly support other jobs that provide goods and services to manufacturers and to their employees. Thus, the direct jobs are *multiplied*. The multipliers for output, wages and benefits, and jobs for the Port and businesses on Port properties vary from 1.3 to 2.1, meaning, that they create indirect economic impacts that are on the order of 30% to 110% of their direct impacts.

³ For this comparison, ECO used Hood River County as a proxy for the region.

Operating expenses have grown consistently over the last ten years. The Port's spending on personnel services, materials and supplies, and debt service has grown steadily from about \$2.2 million in 2004 to \$4.2 million in 2013.

Capital expenses vary considerably from year to year. These expenditures fund periodic upgrades, repairs, maintenance, and some construction projects. Between FY 2004 and FY 2013, annual capital investments varied from a low of \$470,493 (FY 2009) to a high of \$7.7 million (FY 2013).

Light Industrial and Commercial Properties

Most Port income-producing property is zoned for light industrial development. Some is zoned for commercial development. Businesses operating on these properties are in a variety of industries (*e.g.*, acupuncture, food services, electronic components manufacturing) and vary in size (employing between 1 and 100 employees).

Overall, businesses on industrial or commercial property now or formerly owned by the Port generated about \$187 million in output, \$36 million in wages and benefits, and 553 jobs. Businesses in the manufacturing sector were the largest contributors. Table 3 summarizes economic activity by business type.

Table 3: Economic Activity of Businesses on Current and Former Port Properties, 2013

Industry Category	Output	Wages & Benefits	Jobs	No. of Entities
Manufacturing	\$148,679,000	\$22,975,000	386	17
Services	33,474,000	11,561,000	149	12
Trade	2,394,000	659,000	18	2
Government and other	651,000	214,000	3	2
Total	\$187,029,000	\$35,969,000	553	33

Source: Port businesses, ECONorthwest estimates. Excludes airport.

New light industrial development will be constrained by the supply of land. A recent analysis of economic opportunities in the Hood River area found there were 545 acres of industrial land area available in the Columbia Gorge in 2011,⁴ enough to meet existing and near-term demand. The report concludes that the majority of new businesses in Hood River are likely to be small businesses that can settle in existing commercial or industrial buildings.

⁴ FCS Group. *Hood River Economic Opportunities Analysis*. Prepared for the City of Hood River. June 2011.

Hood River Bridge

The Hood River Bridge is a narrow, two-lane, vertical lift, toll bridge across the Columbia River. The 4,418-foot-long bridge is a critical piece of transportation infrastructure. It connects Hood River with the Washington communities of White Salmon and Bingen, and is the only vehicle crossing along the Columbia for 20 miles in either direction.

About 3.6 million vehicles crossed the bridge in FY 2012. Most trips are for personal business or pleasure (67 percent),⁵ and occur during the peak period from May to October, which corresponds with demand from the fruit growing and tourism industries.

The Bridge benefits both the Port and the community at large. It is the greatest source of revenue for the Port; it generated over one-fourth the Port's total revenue in FY 2013 (about \$3.3 million). Prior analysis estimates that the value of the Bridge to its users is on the order of 10 times greater than the tolls they pay, about \$33 million per year.⁶

Hood River Airport

The Hood River Airport, located about 3.5 miles south of the City of Hood River, is open to both commercial and recreational users. In 2010 (the most recent usage data) there were 9,751 itinerant operations, 4,199 local operations, 200 air taxi operations, and 60 military operations at the airport. Operating income to the Port was \$175,034 in FY 2013.

Marina

The Marina Basin (22 acres) has 152 boat slips and 11 boathouses as of July 2013. It receives 10,500 visitors each year and it is at full capacity with a 56-boat waiting list.

The marina provides benefits to both the Port and the community. Boats pay moorage fees to dock at the marina and, in FY 2013, these fees generated operating income to the Port of \$171,325. In addition to paying to use marina facilities, visitors also spend money at businesses in Hood River.

⁵ The Gilmore Research Group. *SR-35 Bridge Motorist Intercept and Telephone Survey: Narrative Report of Research Findings*. December 2001.

⁶ ECONorthwest. *SR-35 Hood River Bridge: Economic Effects*. Prepared for The Southwest Washington Regional Transportation Council. October 2010.

Of the various recreationists at the Port, marina visitors probably generate the largest spending impacts. A study of recreationists at 36 marinas in Oregon found that overnight marina slip users spend 3 to 8 times more than day visitors.⁷

Recreational Properties

Tourism is a big part of the Hood River economy: businesses in tourism-related sectors account for almost twice as much of the output in Hood River County as they do for output in Oregon overall (8.2% compared to 4.3%). According to a Mid-Columbia Economic Development District report, recreation visitors to Hood River County spent over \$75 million, which earned \$20 million and supported 950 jobs in 2011.⁸

The Port's recreational amenities contribute significantly to tourism and the quality of life in Hood River. The Port operates several recreational facilities along the waterfront, which cover about 64 acres. These facilities offer a multitude of recreation opportunities, including various watersports, classes, boating activities, and sports fields. In FY 2013, the Port estimates that these facilities received about 75,000 total visits. ECONorthwest estimates tourist spending attributable to Port facilities to be on the order of \$1 to \$5 million per year.

A 2009 study by Tetra Tech found that waterfront recreation demand is likely to grow at the Port in the future. The study projected recreation usage and economic impacts over a 20-year period. Under a medium-growth scenario for 2009 through 2029, it estimated that windsports on Port properties would generate \$66.4 million in spending (net present value 2009 dollars) and support 6 new jobs each year (over 100 jobs over 20 years).⁹

⁷ Chang, Wen-Huei and R. Scott Jackson. *Economic Impacts of Recreation Activities at Oregon Coastal and River Ports*. U.S. Army Engineer Research and Development Center. Prepared for U.S. Army Corps of Engineers. Sponsored by U.S. Army Engineer District, Portland. August 2003.

⁸ Mid Columbia Economic Development District (MCEDD). *Mid-Columbia Comprehensive Economic Development Strategy*. March 2013.

⁹ Tetra Tech, Inc. *Economic Effects of Water Related Recreation at the Port of Hood River*. Prepared for the US Army Corps of Engineers, Portland District. May 2009.

Implications

The evidence is clear that the Port has an impact on the regional economy. The Port provides direct impact through its spending on internal operations, and those expenditures have multiplier effects: the Port employees and suppliers spend the money they receive from the Port for other goods and services in the local economy. That “downstream” spending adds another 50 to 70% to the direct effects.

The greater leverage, however, comes from the businesses that use Port assets (current and former) and are supported by Port operations. ECONorthwest found around 35 businesses operating on current or former Port properties, providing jobs to around 550 people, wages around \$36 million per year, and output close to \$190 million per year. When multiplier effects get added, the numbers increase by on the order of 50%.

The Port cannot claim exclusive credit for that economic activity; the businesses themselves deserve almost all the credit for what they produce. But, interviews of businesses by ECONorthwest support the statement that historical efforts of the Port over the last 20 years have contributed to the situation today. Businesses reported that Port assets and programs are important to their location and expansion decisions. Therefore, the Port is an integral part of the activity by businesses on current or former Port properties. Including multiplier effects, this activity accounts for about 7% of the jobs and about 18% of the output in Hood River County.

That information, supplemented by case studies of specific businesses on Port properties, supports the conclusion that the Port has made progress on one of its key missions: stimulating economic development in the Hood River region.

Going beyond the numbers, ECONorthwest offers two observations about issues that a strategic plan might address.

Building out the waterfront. With its land at the waterfront, downtown, the Wasco Business Park, and the Odell Business Park, the Port owns or has facilitated development of a large proportion of the industrial property in the City of Hood River. The waterfront area is a critical portion of the remaining industrial land supply.

But the limit on industrial land is not absolute. There is vacant land near Hood River (*e.g.*, Pine Grove and Odell) where, at least in theory, industrial property is available and industrial development could be encouraged.¹⁰

In that context, what is the best use of remaining Port property at the waterfront? Many cities provide evidence of a transition from industrial uses to other uses as property values rise. The Port has already accommodated a shift from traditional industrial and warehousing toward light industrial and commercial. The Port should consider furthering this transition, focusing on the kinds of businesses that are most compatible with waterfront recreational amenities and the increasing scarcity of readily-developable industrial properties in Hood River County.

The value of Port amenities. Most Port recreation facilities (*e.g.*, Marina Park, recreational trails, etc.) historically have operated at a net loss. But the evidence supports the conclusion that these facilities provide both economic and social benefits to people in the region. Park facilities—and the quality, maintenance, and cleanliness of those facilities—can create an additional attraction not only for visitors, but also for businesses and their employees.

¹⁰ Whether such land could obtain land use entitlements and infrastructure at a reasonable cost, and how well it the location would serve for certain businesses would have to be evaluated.

1 Introduction

1.1 Background and Purpose

The Port of Hood River (Port) is one of 23 public ports in the state of Oregon. Created in 1933 for the purpose of developing industrial land in the Columbia River Basin, the Port has acquired and improved properties since its founding. The Port's assets include the Hood River Bridge, the Hood River Airport, the Hood River Marina and waterfront, and light-industrial land in Hood River and Odell.

The Port is now (Fall 2013) updating its strategic plan, and would like information that helps it evaluate its performance and consider its prospects. Some of that information will be provided in a study begun in June 2013 by the State of Oregon (through the Infrastructure Authority of Business Oregon and the Oregon Public Ports Association). That study will look at the economic impacts of all 23 ports in Oregon.

There are several reasons that the Port requested an additional impact study. First, the Port is scheduled to complete its strategic plan in the fall of 2013; the State study will not be completed until at least six months later. Moreover, the State study, in evaluating 23 ports, cannot evaluate each in detail; its methods will rely heavily on information provided by the ports about their economic impacts.

Thus, the Port of Hood River concluded that it wanted more detailed information about its economic impacts soon enough to provide a fact base for its strategic planning. To that end, it contracted with ECONorthwest to conduct this study: an *economic impact analysis* of the Port of Hood River.

This report describes the Port's direct contributions to economic activity in the Hood River Area and provides the Port with updated information for its strategic plan. This report is, in effect, a technical appendix to what will become the Port of Hood River's strategic plan. ECONorthwest designed the methods and content of this study to both contribute to and benefit from the statewide study of port economic impacts.

Economic impact studies are often done to make the case that a business or organization being studied makes significant contributions to a local or state economy. Claims about economic impacts may sometimes go beyond what the data and methods support. ECONorthwest has taken care in this study to be clear about its assumptions and its opinions about how a proper analysis should be conducted and interpreted. We encourage readers to interpret the findings and conclusions in Chapters 4 and 5 in the context of methods and background information described in Chapters 2 and 3.

1.2 Organization of the Report

This report contains the following chapters:

- **Chapter 2, Framework and Methods.** A basic understanding of definitions, assumptions, data, and methods is essential for interpreting and evaluating the results we present.
- **Chapter 3, Context.** Port activities occur in a larger regional economy, and their relative importance depends on the size and structure of that economy. This chapter provides context for interpreting the results reported in Chapter 4.
- **Chapter 4, Economic Effects of the Port of Hood River.** This chapter discusses a description of the direct economic effects from Port activities on the Hood River area.
- **Chapter 5, Conclusions and Implications.** This chapter lists the findings of the analysis of the direct economics from Port activities on Hood River area and interprets them in the context of the Port's strategic thinking.

2 Framework and Methods

By *Framework* we mean broad concepts and principles for thinking about economic impacts. By *Methods* we mean the data and analytical techniques consistent with that framework that we will use to estimate the economic impacts of the Port in this study. In other words, a proper framework provides a foundation and justification for the methods used.

2.1 Framework

The Port wishes to better understand its role in the economy of the Hood River area. There are different ways to think about the relative importance of the Port's activities to the economy.

One could ask the question, "If the Port had not taken the actions that it has, how would the economy be different?" Answering that question properly requires comparing the economic activity that one observes now to hypothesized economic activity that would exist in the absence of the Port and its actions. It is a question about whether the Port *caused* that activity to happen in whole or in part, whether that activity would exist in whole or in part without the Port, or whether that activity is net beneficial (*i.e.*, Do the economic and other benefits the activity delivers have a value to the citizens of the region that exceeds their costs?). In the jargon of economics, this kind of evaluation is called *benefit-cost analysis*.

A fundamental problem in answering that question is, "What would have happened without the Port?" A simple answer assumes that whatever the Port did would not have happened, if the Port had not done it. But that answer is almost certainly wrong, at least in part. The Port operates the Hood River Bridge, but the Bridge existed before the Port took responsibility for its operation. Would the Bridge have collapsed or been closed if the Port had not been selected to operate it? Not likely. Similarly, if the Port had not facilitated development in the Hood River waterfront, would none of that development have occurred? Again, not likely.

Given the growth of the Hood River economy in general, and the tourism / recreation component of that economy in particular, a better assumption is that some public entity or business would have done something along the waterfront. But what does seem likely is that, given the Port essentially created the waterfront through fill projects, the waterfront today would look different and be less developed, if the Port had not existed.

Alternatively, one could ask, “What things does the Port contribute to now that have an economic impact?” That question is less about the Port’s unique contribution to an economic effect and more about demonstrating that, logically, the Port’s activities *contributed* to economic activity, and that the impact of its activity on the economy is of some estimated magnitude. That simpler question is the one addressed by an *economic impact analysis*. Such studies typically measure economic activity as output, income, and jobs, and describe an organization’s economic connections and its supply chain linkages.

This study is an economic impact analysis. So is the statewide study of the economic impact of Ports in Oregon. Though an economic impact analysis could compare current conditions (in this case, with the presence of the Port and its activities) to a hypothetical scenario (without the Port), neither study attempts to isolate what the economy would be like without the ports. In other words, neither study attempts to estimate *net* impacts.

An economic impact analysis typically starts by identifying and estimating *direct impacts*. In this study, those are the impacts that occur at the Port of Hood River. The Port has a budget and spends money on employees (wages), supplies, construction, and services in the local economy. Those expenditures have a direct impact on the local economy. For the purpose of this study, we call those expenditures by the Port *primary effects*.¹¹

Moreover, the Port has assets (*e.g.*, facilities like the bridge, airport, and marina) that have value to their users. The access that the bridge provides, for example, is critical to many businesses (both for freight and labor), and they in turn spend on local employees, supplies, construction, and services. For the purposes of this study we call those *secondary effects*.

But those direct expenditures (by the Port and by businesses whose operations depend in some significant way on Port assets or activities) in turn have subsequent effects on the regional economy. In the context of economic impact analysis, these are often called *multiplier effects*, and are usually estimated in two categories: (1) *indirect effects*, which are supply-chain impacts resulting from business-to-business spending; and (2) *induced effects*, which are consumption-driven impacts resulting from household spending.

¹¹ As an example of why isolating *net* impacts can get very difficult analytically and controversial politically, consider some of the key direct and primary impacts of the Port of Hood River on the local economy. The Port pays wages to Port employees and buys supplies from local businesses. One can argue that, if the Port did not operate, the regional economy would be smaller. But, to address *net* impacts, one needs to consider where the money comes from that the Port uses to pay employees and suppliers. If it all were to come from federal grants then, “but for the Port,” the money would not be circulating in the economy and all of it would be a net benefit to the local economy. But, if it instead all comes from taxing local households and businesses, then Port spending is not 100% a net benefit: if those households and businesses had not been taxed, they would have more disposable income, and they would spend some share of it in the Hood River region. In this and similar examples, *perspective* matters greatly: from which point of view (*e.g.*, national, state, local) is one estimating net benefits?

The *timing* of effects is critical. A typical economic impact analysis is a static snapshot: what are the activities of some entity contributing to an economy at some specific point in time? But the Port of Hood River, and the State study of Oregon ports, wants to take a broader view. The Port has made improvements to the waterfront, for example, over the course of several decades: it has filled land; provided infrastructure; and developed, acquired, and sold property. It has sold many of its former properties to successful businesses that contribute to the economy. The question for this study and the State study is, “What counts now?” A narrow view would be to count just assets currently owned and managed by the Port. A broad view is to credit the Port’s contributions with the impacts of all businesses that use current or former Port assets.

The State study is adopting the protocol that ports can consider activities as far back as 20 years. To maintain consistency, this study adopts the same protocol.

The paragraphs above describe effects according to where in the chain of effects they were created: primary, secondary, and multiplier effects. Another way to categorize the same effects is by the units used to measure them. Economic impact analysis typically uses three units of measurement. Activities are deemed beneficial to the economy being studied if they can be demonstrated to increase (1) employment, (2) wages paid to employees, or (3) the total output or the value added of businesses in the economy.

Note that these measurements of economic effects (1) cross-cut where in the chain the effects occur, as they can be direct, secondary, or multiplier effects; and (2) are different ways of measuring how economic activity increases, as they are not additive. We pay attention to that second point in Chapters 4 and 5.

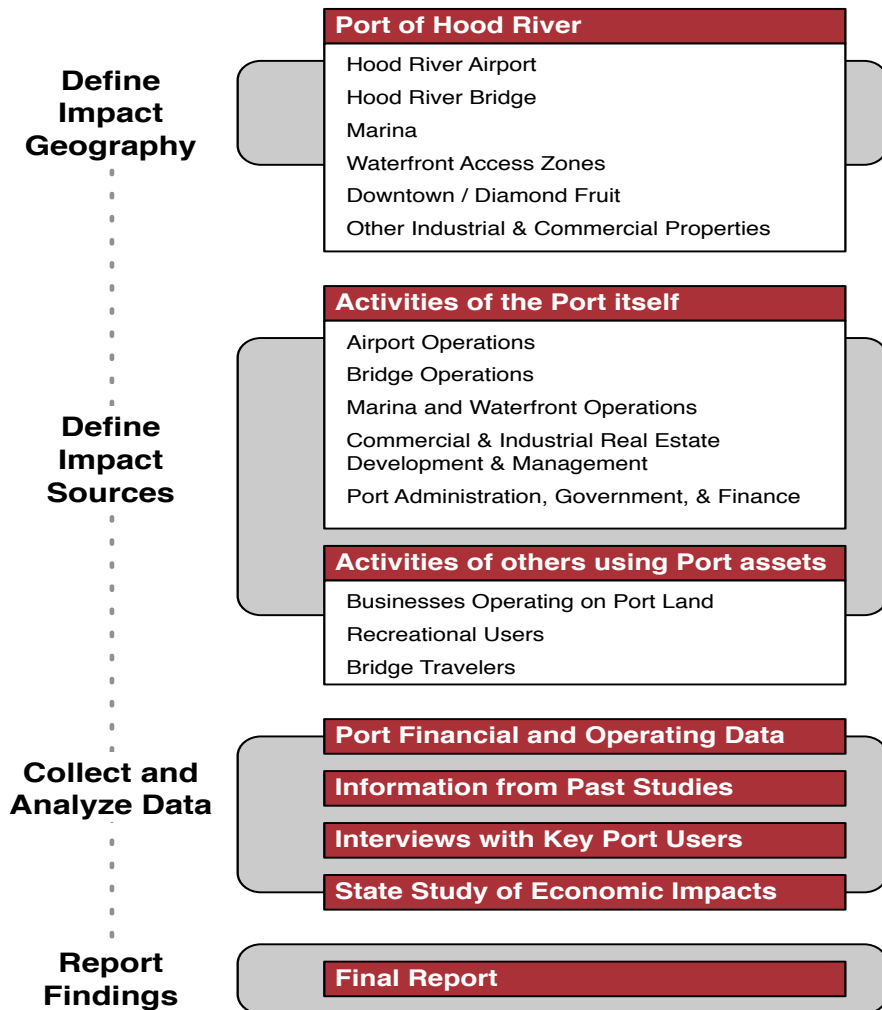
This study takes a regional perspective on the economy of the Hood River region. It focuses on describing the direct economic activity linked to the Port in some way. The Port supports a wide variety of activities, some of which are important, but do not have substantial economic impacts. For those activities whose effects are not suitably measured by the economic impact analysis, this report suggests alternative ways the Port might address them.

2.2 Methods

This analysis seeks to identify the many ways in which the Port of Hood River affects the economy. It defines a broad range of impacts linked to the Port. These consist of (1) direct impacts of the Port’s operations, including its waterfront facilities and marina, the airport, and Hood River Bridge; and (2) other, non-Port activities made possible by Port facilities and activities of the Port (e.g., private businesses developments resulting from Port land and economic development initiatives). The goal of the analysis is to address the question, “In what ways and to what extent does (and has) the existence of the Port of Hood River contributed to economic activity in the Hood River region?”

Figure 1 provides an overview of our methods. In **Step 1**, we defined the area of impact based on the Port’s facilities and activities. We define the economic impacts in this report not based on state, county, or city boundaries, but on the specific places where the Port operates, and on the kind of activities it engages in.

Figure 1: Overview of Methods for Estimating Economic Impacts of the Port



Source: ECONorthwest.

As part of Step 1, we gathered information from 11 previous studies relevant to the Port (see Appendix A). These studies analyzed a broad range of topics, including recreational activities, dredging, the Port real estate market, and economic development strategies. These studies established the historical context for the Port's operations in the Hood River economy and provided a list of the Port's activities and the locations of its operations.

To evaluate the Port's direct contributions to economic activity, it was necessary to evaluate many categories of Port information: Port operations; transportation including water, land (bridge), and air (airport); Port leases; recreation; and other contributions to quality of life of visitors and residents of the area. In **Step 2**, we compiled current and historical records of economic activity at the Port.

Audited financial statements for the Port were instrumental to our analysis. These statements are a consistent source of Port expenditures by type of activity, so we made an effort to define our categories of activities in the previous step using categories reported in these statements.

As part of Step 2, we collected data on activities / operations for both the Port (primary direct impacts) and others that use Port facilities or benefit from Port activities (secondary direct impacts). The data came from several sources:

- Operating and financial data for Port operations. The Port provided information about its spending, employee compensation, and employment from its annual budget records. This information formed the basis of the Port's primary impacts.
- Traffic volume and revenue data for bridge users with business accounts.
- Parking pass sales data for the Port's waterfront event site.
- A list of tenants leasing Port properties, their industry sector classification, and information about their lease agreements.
- Employee counts and total annual payroll expenses for Port tenants.

In **Step 3**, we supplemented our quantitative data with qualitative data about Port assets and activities and their users. We interviewed several businesses and organizations identified by Port staff as key users of Port facilities. These users included tenants of the Port's commercial and industrial properties as well as waterfront users. The interviews provided important qualitative insights into the Port's users and their activities.

In **Step 4**, we evaluated the information we acquired and synthesized the results. We summarized our estimates of direct economic impacts of the Port and transmitted them to FCS Group, the contractor undertaking the statewide analysis of the economic impacts of Oregon ports. The statewide study will calculate the subsequent indirect and induced impacts of the Port on the (region / state), but they were not available by the time our final report was due. Thus, we made broad estimates of multiplier effects based on our prior experience with IMPLAN. Those estimates are placeholders that will be superseded by the estimates in the statewide study, when they become available.

Some key issues related to methods:

- **Study area.** As noted above, this study measures impacts that occur at Port facilities or on Port-owned land.
- **Base year.** Our analysis estimates the *annual* contribution of the Port to the economy of the Hood River region. The data available to us come from different years, but we focused on fiscal year (FY) 2012-13 because it was the most recent year for which complete data was available.
- **Tourism.** ECONorthwest estimated the number of annual visitors to the Port and how long they stayed. The scope of this analysis did not accommodate comprehensive tourism research, so we relied on the findings of prior studies on Port tourism and recreational visitors. We supplemented these studies with information gathered from our data requests and stakeholder interviews.
- **Statewide study of the economic impact of ports.** We did several things to integrate with that study. At the beginning of our study, we had conversations with the FCS Group about purposes, definitions, data, assumptions, and methods. Some key agreements on methods:
 - **Use of IMPLAN.** The State's economic impact study places heavy emphasis on the use of IMPLAN, an input-output model that calculates economic impacts using well-known data sources. Since FCS will run IMPLAN to estimate indirect and induced impacts as part of the state study, ECONorthwest focused its efforts on estimating direct impacts that could then serve as inputs to the IMPLAN calculations of indirect and induced effects. We also focused on clearly describing the connections between those activities and the existence of the Port.

- **Expanded definition of direct impacts.** In an economic impact analysis for a business, direct impacts are typically limited to business output, employment, and payroll; a business is not generally credited for the impacts of other businesses that use their products. The State study of ports, however, has adopted the convention of crediting ports for what we are calling *secondary* direct impacts. The idea is that some businesses and organizations that themselves have many employees might not be able to operate at that scale (or, perhaps, at all) without the facilities or activities that the Port provides now or provided at some time in the past.
- **Expanded time period for direct impacts.** In an economic impact analysis for a business, direct impacts are typically be calculated for a single base year (either the most recent year for which adequate data are available, or for some future forecast year). The State study of ports, however, has adopted the convention of giving ports credit for activities that occurred up to 10 (or, perhaps, 20) years ago. For example, if the Port invested in developing industrial land for the purposes of attracting industry to the region, and then sold that land to a business 5 years ago that now employees 100 people, we enumerate that employment as part of the Port’s contribution to the regional economy, even though that land is no longer a Port asset and the Port has no activities related specifically to that land.
- **Data sources.** We used prior studies of the Hood River regional economy, studies of Port assets or activities, Port budgets and financial statements, economic impact studies done for other ports in Oregon, and interviews with local business and agency representatives.

3 Context of the Hood River Economy

The Port's activities should be evaluated in the context of the overall Hood River economy. This chapter provides that context, which is discussed in greater detail in Appendix B. It then provides a timeline to provide context for Port activities in the region.

3.1 Hood River Economy

Hood River County includes the cities of Hood River and Cascade Locks, and the Upper Hood River Valley (the areas of Parkdale and Odell). The City of Hood River is the business and administrative center of Hood River County.

The City of Hood River and Hood River County economies mainly consist of forestry, agriculture, wine, technology, outdoor gear and active-wear companies, and tourism from recreation opportunities. The area is an internationally known destination for outdoor recreation—windsurfing, kiteboarding, sailing, hiking, biking, kayaking, and snowsports—and attracts visitors from around the country and world.

The region's location (on Interstate 84 and an hour from the Portland metro region and the Interstate 5 corridor access to superb winter and summer recreation sites), climate (moderate), and existing business clusters (agriculture, timber, and tourism) provide favorable conditions for businesses and operations. Its major disadvantages are shipping costs, a limited supply of skilled labor, and limited economies of concentration, all a result of its relatively small size and distance from the Portland metropolitan area. For a small urban area in a rural setting, it has a relatively high cost of living (especially housing costs), a result of its desirability as a tourism and retirement destination.

From 2000 to 2010, the City of Hood River grew over twice as fast as Hood River County, and almost twice as fast as the population of the state of Oregon. By 2030, Hood River County's population is estimated to be 28,404, and the City of Hood River's population is expected to be between 9,667 and 11,841.¹²

¹² 2008 forecast by ECONorthwest. See Appendix B, page 5, for full citation.

Table 4: Oregon and Hood River Population 1990-2012

Time Period	Oregon	Hood River County	City of Hood River
1990	2,842,321	16,903	4,632
2000	3,421,399	20,411	5,831
2010	3,831,074	22,346	7,167
2012	3,899,353	22,584	7,292
Change 2000-2012	477,954	2,173	1,461

Source: See Appendix B.

Note: AAGR refers to "Average Annual Growth Rate." Change 2000-2012 and AAGRs calculated by ECONorthwest.

Nonfarm employment in Hood River County was about 8,500 in 2011. The State forecast for Region 9 (which includes Hood River county) for the next 10 years is for a growth rate of around 1.3%. Employment growth for the City is expected to average in the range of 1% to 2% over the next 20 years.

Healthcare and social services, government, leisure and hospitality, professional and business services, retail, natural resources, wholesale trade, and durable goods manufacturing sectors are expected to lead the growth. Established and emerging clusters include health services, advanced manufacturing, athletic/outdoor gear, clean technologies, food and beverage processing, creative services, and advanced education/training.¹³

As of 2011, there were 545 acres of industrial land available in the Columbia River Gorge region, but a "fairly limited supply of competitive vacant commercial and industrial building floor area."¹⁴ Vacant land in the Hood River urban growth boundary (UGB) was 111.7 acres. The supply of industrial land has been evaluated as adequate for mid-level growth forecasts; office land is undersupplied; retail land is oversupplied.¹⁵

¹³ Chase, Todd. "Hood River Economic Opportunities Analysis." FCS Group. Prepared for the City of Hood River. June 2011.

¹⁴ Chase, 2011, 5.

¹⁵ Chase, 2011, 12-14.

3.2 History of Activity at the Port of Hood River

The Port of Hood River operates mainly in the City of Hood River, and has one light-industrial property in Odell. Since its establishment in 1933, the Port has been consistently involved in many development, improvement, and acquisition projects in the Hood River Port District; this activity has increased recently. The history provides context for decisions about what impacts to count toward the Port's contributions to the economy. Major events in the Port of Hood River's history are listed below:

- 1933 Port of Hood River established
- 1945 Port helps establish airport at present location
- 1949 Port purchases bridge from the Oregon-Washington Bridge Company
- 1950's Port acquires land along the Columbia River to prepare for fill
- 1959-1971 Waterfront fill projects occur in phases, 200 acres of waterfront developed
- 1975 Waterfront planning occurs
- 1976 Hood River County deeds the Hood River Airport to the Port
- 1980 Marina Swim Beach opens
- 1980-2009 Segments of Riverfront Trail completed
- 1984 Port purchases and begins renovations on Diamond Fruit Growers 21-acre Cannery Complex in downtown Hood River
- 1985 Port builds the Pedestrian Bridge to connect the Marina area with downtown Hood River
- 1989 Waterfront Plan updated
- 1990 Port subdivides land for John Weber Business Park
- 1992 Event Site Opens
- 1995 Hood River Expo Center developed
- 1996 Third Waterfront Plan
- 1996-2013 Series of bridge improvement projects occur
- 2004 Wasco Business Park purchased
- 2005 Port gives Waterfront Lot 6 to the City of Hood River for the development of a park
- 2006 Flooding of the Hood River creates a sandbar, allowing more launch sites for kiteboarders
- 2007 BreezeBy, the Port's electronic tolling system, established
- 2007 Port approves Waterfront development strategy
- 2009-2013 Waterfront improvement projects occur
- 2009 Construction of the Halyard building begins
- 2009-2013 Airport Master Plan approval leads to runway relocation planning and implementation
- 2010 Port purchases the Jensen Building at the Waterfront Business Park
- 2010-2011 Port sells four Waterfront Business Park lots for development
- 2010-2013 Marina upgrades, including dock expansion and a new electrical system, occur
- 2011-2013 Conceptual planning of and public meetings regarding the Waterfront's Lot 1 begin
- 2012 Portway Avenue improvements completed

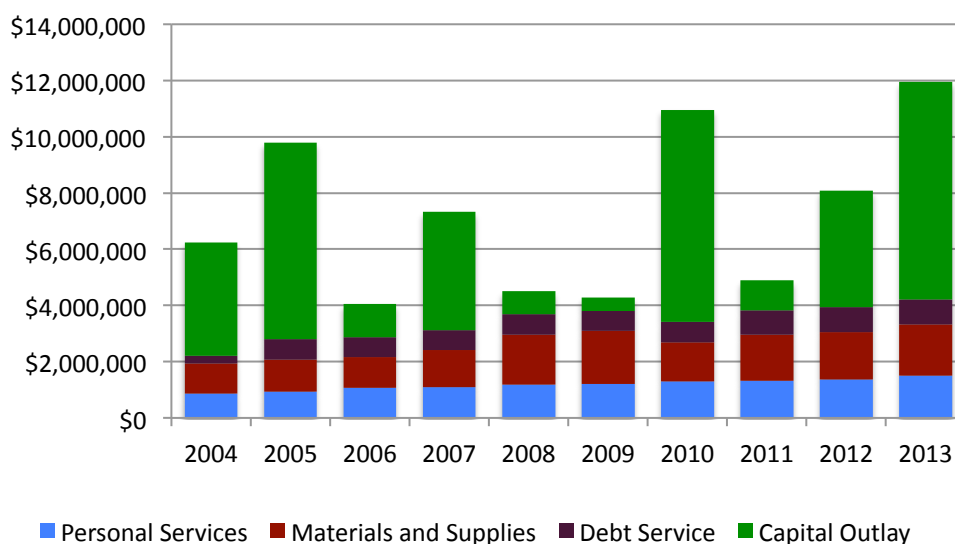
4 Port Economic Impacts by Class

The impacts of the Port of Hood River on the regional economy result from (1) the Port's operations, and (2) the activities of others that use current or former Port lands or facilities.

4.1 Port Operations

In FY 2013, the Port adopted an annual budget of \$15,160,108. Excluding transfers and reserves, \$11,941,319 was allocated to pay for personnel services, materials and services, capital outlays, and debt service. Between FY 2004 and FY 2012, this amount ranged from \$4,052,934 to \$10,949,869 per year. Over the past 10 years, the average was \$7,205,465. Table 5 shows these expenditures by the Port's object classification, as listed in the 2013 adopted budget.

Table 5: Port Expenditures by Object



Source: Port of Hood River budget actuals; 2013 data is from adopted budget. Excludes transfers and reserves.

The Port's assets require periodic investments in upgrades, repairs, and maintenance. These capital outlays fluctuate greatly from year to year. In FY 2013, for instance, the Port incurred substantial costs related to renovating an airport runway.

Table 6: Port Expenditures by Organizational Unit, 2013

Activity	Amount
Toll Bridge	\$2,798,279
Industrial Buildings	4,893,540
Commercial Buildings	134,800
Waterfront Recreation	828,065
Marina	661,450
Airport	2,625,325
Land	185,100
General Government	352,060
Total	\$12,478,619

Source: Port of Hood River 2013 adopted budget. Excludes transfers and reserves in order to avoid counting non-Port related expenses. Categories are as listed in budget.

The funds used to pay for the Port’s activities come from several sources, as shown in Table 7. The toll bridge is the greatest source of revenue, generating over \$3.3 million in FY 2013. Grants, debt financing, and lease income are also among the largest sources of income. The expenditure data does not accommodate reporting by both unit and source.

Table 7: Port Operating Income by Source, 2013

Source	Amount
Income	
Tolls	\$3,314,000
Lease Income	1,614,677
User Fees	102,700
Marina	171,325
Airport	175,034
Grant Income	2,567,126
Property Sales	190,000
Other Debt	3,033,000
Interest Income	28,100
Property Taxes	58,836
Other Resources	1,223,821
Total Resources	\$12,478,619

Source: Port of Hood River 2013 adopted budget. Excludes transfers and reserves in order to avoid counting non-Port related expenses. Categories are as listed in budget.

The Port’s employment has remained relatively stable in recent years. In FY 2013, the Port employed 24 full-time-equivalent (FTE) workers. Table 8 shows that, in FY 2013, the Port’s personnel services budget was \$1,514,435, an average of \$63,101 in wages and benefits per FTE.

Table 8: Port of Hood River Employees by Activity, 2013

Activity	FTEs
Toll Bridge	10
Industrial Buildings	3
Commercial Buildings	1
Waterfront Recreation	6
Marina	1
Airport	1
Land	1
General Government	1
Total	24

Source: Port of Hood River, 2013.

4.2 Activities at the Port by Others

The Port of Hood River also affects the regional economy through the activities of other businesses, organizations, and households that use current or former Port land or facilities. Section 4.2.1 has maps showing where the Port has played a role in property or business development. Section 4.2.2 describes those businesses that have made use of those properties over time.

4.2.1 Historical Business Development on Port Property

The maps that follow illustrate how the Port has developed properties along the Hood River waterfront and at its business parks since 1980. They illustrate all the different ways the Port can acquire, develop, and sell properties and buildings. The Port can:

- Create land. It did so at the waterfront in the 1960s. This analysis goes back only to 1980, so the maps do not illustrate the waterfront prior to the Port’s land creation initiative.
- Acquire land and buildings. For example, in 1984 the Port acquired and began renovations on Diamond Fruit Growers 21-acre Cannery Complex in downtown Hood River.
- Develop property and build buildings.
- Lease property and buildings.
- Sell property and buildings, which may subsequently be developed.

All of these activities contribute in some way to economic activity. As described in Section 2.1, Framework, the effects of these different activities may be direct or indirect, primary or secondary.

Take a little time to understand the maps. Collectively, they animate the history of the Port’s development activities, and illustrate that the Port’s current holdings are substantially less than the property and buildings it acquired, developed, and owned at one time, and then sold to the private sector.

Property	
	Currently owned Port property
	Newly acquired land
	Previously owned property (sold)
Buildings	
	Currently owned buildings
	Newly acquired buildings
	Previously owned buildings or on previously owned Port property (sold)
□	Building built by Port
△	Already-built building acquired by Port
○	Building built after Port sold property

Waterfront, 1980



Waterfront, 1990



The Port has played a major role in developing Hood River's waterfront, and has influenced the commercial and recreational activities that occur there. This area represents a large portion of Hood River's central business district

Waterfront, 2000



Property

- Currently owned Port property
- Newly acquired land
- Previously owned property (sold)

Buildings

- Currently owned buildings
- Newly acquired buildings
- Previously owned buildings or on previously owned Port property (sold)
- Building built by Port
- Already-built building acquired by Port
- Building built after Port sold property

Waterfront, 2013



Wasco Business Park, 2013



Property	
■	Currently owned Port property
■	Newly acquired land
■	Previously owned property (sold)
Buildings	
■	Currently owned buildings
■	Newly acquired buildings
■	Previously owned buildings or on previously owned Port property (sold)
	Building built by Port
	Already-built building acquired by Port
	Building built after Port sold property

John Weber Business Park, 2013¹⁶



Over the last 30 years, the Port has owned substantial property and buildings, which it has sold to the private sector. Private entities have constructed most of the buildings on those properties.

¹⁶ Base maps from Google Maps; Building and property information from Port of Hood River Policy of Title Insurance, 1984; Port of Hood River staff; "Port's Diamond Complex- By the Numbers," Hood River News, 1985; "History Highlights- The Port of Hood River," Port of Hood River Website; "Celebrating 65 Years- Port of Hood River," Hood River News, 1998.

4.2.2 Businesses on Current and Former Port Properties (in Section 4.2.1)

ECONorthwest asked the Port for information about the tenants of its properties. The Port responded by identifying 33 businesses that use many of the properties it once owned at the waterfront, Wasco Business Park, or John Weber Business Park (Odell) (businesses at the airport are treated separately in the next section). These businesses operate in a variety of industries (*e.g.*, acupuncture, food services, and electronic components manufacturing). They also vary in size, employing between 1 and 100 employees.

The Port asked these businesses to provide information about their operations in Hood River, including employment, payroll costs, and sales. All businesses provided their employment, but only three provided information about their payroll and sales. For those that did not provide complete information, ECONorthwest estimated the missing values based on their employment using industry average data for Hood River County.¹⁷

Overall, businesses at the Port generated about \$187.0 million in output, \$36.0 million in wages and benefits, and 571 jobs.¹⁸ Businesses in the manufacturing sector were the largest contributors. Table 9 describes the businesses in each industry category.

Table 9: Economic Activity of Businesses on Current and Former Port Properties, 2013

Industry Category	Output	Wages & Benefits	Jobs	No. of Entities
Manufacturing	\$148,679,000	\$22,975,000	386	17
Services	33,474,000	11,561,000	149	12
Trade	2,394,000	659,000	18	2
Government and other	2,482,000	774,000	18	2
Total	\$187,029,000	\$35,969,000	571	33

Source: Port businesses; ECONorthwest estimates. Excludes airport.

4.2.3 Airport Users

The Hood River Airport, located about 3.5 miles south of the City of Hood River, is open to both commercial and recreational users. It has an asphalt runway and alternate grass landing area. It does not have a manned control tower.

¹⁷ ECONorthwest used statistical data obtained from IMPLAN for 2011. It aggregated data at the industry category level to avoid disclosing information for any particular business.

¹⁸ Jobs are full-year-equivalents (FYE), and include both full- and part-time workers.

The Port rents out hangar space to a fixed base operator (FBO), which provides fuel, supplies, maintenance services, and other onsite services. The current FBO, Classic Wings Aero Services, employs seven FYEs and offers flight instruction and scenic tours. Two other companies, Northwest Sky Sports and Cascade Soaring, offer glider tours and instruction.

The airport facilitates the provision of essential business services, such as crop-dusting and charter cargo and passenger transportation. Commercial users of the airport include Hood River Helicopters, Insitu, and Cloud Cap Technologies. The latter two companies use the airport to conduct testing and perform product demonstrations. Several other aerospace companies from outside Hood River also contract with Classic Wings perform flight tests on their equipment. All these businesses rely on the airport, though they do not have employees specifically assigned to work at the airport.

The most recent usage data we found was for 2010 from the Aircraft Owners and Pilots Association. According to this source, there were 9,751 itinerant operations, 4,199 local operations, 200 air taxi operations, and 60 military operations at the airport for the 12-month period ending September 9, 2010.

The airport hosted the 2012 Western Antique Aeroplane and Automobile Museum's (WAAAM) Fly-In event. According to WAAAM officials, the event featured over 300 airplanes and brought about 6,000 visitors to Hood River.

4.2.4 Bridge Users

The Hood River Bridge is a narrow, two-lane, vertical lift, toll bridge that crosses the Columbia River. It was originally built in 1924, and rebuilt in 1938. The Port began operating the bridge in 1950. The center portion of the bridge can be raised to allow large vessels to pass along the river below.

The 4,418-foot-long bridge is a critical piece of transportation infrastructures. It connects Hood River with the Washington communities of White Salmon and Bingen. It is the only vehicle crossing along the Columbia for 20 miles in either direction.¹⁹

3.6 million vehicles crossed the bridge in FY 2012. The bridge accommodates all kinds motor vehicles, including trucks, motorcycles, RVs, and buses. Bicycles and pedestrians are not allowed. Users include businesses, emergency services providers, commuters, shoppers, and tourists. All contribute in various ways to the regional economy. Table 8 shows the share of trips by purpose.

¹⁹ ECONorthwest. "SR-35 Hood River Bridge: Economic Effects." Prepared for The Southwest Washington Regional Transportation Council. October 2010.

Table 10: Purpose of Visits to Hood River Area

Trip Purpose	Motorists
Shopping or personal business	37%
Recreation or leisure activities	20%
Commute to work or school	18%
Business travel as a part of job	13%
Visiting friends or relatives	10%
Other purposes	2%

Source: The Gilmore Research Group SR-35 Bridge Motorist Intercept and Telephone Survey: Narrative Report of Research Findings, December 2001.

The value of the Hood River Bridge could be measured several ways. The most straightforward method is to calculate revenues from tolls. Since 2012, the one-way toll for most vehicles has been \$1.00. An electronic tolling system enables frequent users to pass quickly at a discounted rate. In FY 2012, the toll generated more than \$3 million in revenues. Since the toll cost is lower than the value most users place on the bridge (if the toll were greater than the value of use, travelers would not use the bridge), the sum of bridge tolls represents a lower-bound estimate of its value.

Other options for valuing the economic impact of the bridge are problematic both theoretically and analytically. Clearly, the bridge facilitates substantial economic activity through the transportation of people and goods across the Columbia River. One way to think about the value of the bridge is to consider what would happen if the bridge were gone tomorrow. The short-run impacts would clearly be large: perhaps equal to as much as 1% to 5% of the value of the regional economy.

Another option would be to value the bridge based on the value of the things that cross it. Analyzing the value of the goods and services that the bridge affects would require a sophisticated and in-depth transportation study that is beyond the scope of this analysis.

Another, related method would be to hypothesize how much value is not captured by the \$1 toll. For some truck trips, the value could be 50 or even 100 times greater. For many discretionary auto trips, the value might be no more than two times greater. For job related trips, values on the order of \$4 to \$10 per crossing probably cover most the trips.²⁰ Using these values and the trip purpose data presented in Table 10, we estimate that the value of the bridge is about \$30 million per year. This analysis is consistent with a previous report produced by ECONorthwest.²¹

4.2.5 Waterfront Visitors and Events

The Port of Hood River operates several recreational facilities along the waterfront. These facilities cover 64 acres. Many have been upgraded in recent years. During the 2012 summer season, the Port hosted 35 events at its recreational facilities. Most recreational visitors to the waterfront come between March and October when the weather conditions are most favorable. We describe these facilities in greater detail below.

The Event Site (5.5 acres) is a multi-use recreational site, hosting kiteboarders, windsurfers, stand-up paddleboarders (SUP), bodysurfers, sunbathers, swimmers, photographers, and picnickers. Six school concessions operate from the event site, which provide instruction and rentals. There were nine events total at the Event Site, including Kiteboarding for Cancer (a benefit event) and Mai Tai Global (connecting business leaders and entrepreneurs a common interest of kiteboarding). The site includes 250 parking spaces, an improved beach, irrigated grass, and restrooms.

Nichol's Basin (4.6 acres) is usually tranquil, and is at its busiest on weekends and no-wind days. Visitors use it for SUP, kayaking, swimming, sailing, windsurfing, and dog-owner recreation. A kayak school is located on the west shore of the Basin and offers tours in the Columbia River and around Wells Island. Nichol's Basin is host to some events, notably the Big Winds Ladies SUP Night, where 25 to 125 people gathered each Tuesday in July to SUP. The site includes open space, water, and a cruise ship dock.

The Spit (4.7 acres) is a popular site for kiteboard launch access and dog-owner recreation. Two kiteboarding schools are located at the Spit. It also hosts a number of kiteboarding events each year. The site includes a gravel road, 2 portable toilets, and 85 parking spaces.

²⁰ Professional opinion of ECONorthwest based on its work in transportation economics and travel demand modeling.

²¹ ECONorthwest. *SR-35 Hood River Bridge: Economic Effects*. Prepared for The Southwest Washington Regional Transportation Council. October 2010.

The Hook (3.8 acres) is a sheltered area well suited to watersport beginners. The Hook includes two windsurfing schools and provides a base for kiteboarding lessons at Wells Island. Windsurfing rentals for children are also available. The site includes a gravel road, parking, and portable toilets.

The Marina Basin (22 acres) has a total of 152 boat slips and 11 boathouses. It is at full capacity with a 56-boat waitlist, as of July 2013. The Port recently completed some major repairs to the Marina, which included replacement of the gangway to the moorage slips, the installation of a transition plate on the guest dock, and an electrical upgrade.

The marina is home to the Hood River Yacht Club, which has 107 members and hosts major events, including the Wednesday Night Sunset Series and the Friday Night Family Fun Series. Gorge Junior Sailing had 16 adults and 150 kids participating in sailing lessons (over 300 hours of instruction time on the Columbia). The Oregon Model Yacht Club also hosts events at the marina, such as its well-attended, second annual, radio-controlled boat-regatta.

The marina provides benefits to both the Port and the community. Boats pay moorage fees to dock at the marina and, in FY 2013, these fees generated operating income to the Port of \$171,325. In addition to paying to use marina facilities, visitors also spend money at businesses in Hood River.

Of the various recreationists at the Port, marina visitors probably generate the largest spending impacts. A study of recreationists at 36 marinas in Oregon found that overnight marina slip users spend 3 to 8 times more than day visitors.²²

The Marina Green (2.5 acres) has become a popular location for practices and games. Community Education's Youth Lacrosse uses the field weekly from March through May. Picnic shelters are also used, and 16 reservations occurred from May through September 2012.

²² Chang, Wen-Huei and R. Scott Jackson. *Economic Impacts of Recreation Activities at Oregon Coastal and River Ports*. U.S. Army Engineer Research and Development Center. Prepared for U.S. Army Corps of Engineers. Sponsored by U.S. Army Engineer District, Portland. August 2003.

Table 11: Waterfront Visitation by Venue, 2013

Venue	Annual Visits
The Hook	6,336
Waterfront Park	17,600
Event Site	16,350
The Spit	5,632
Nichol's Basin	5,280
Marina Park	14,080
Boat Marina	10,500
Subtotal Waterfront	75,778
History Museum	15,000
Covenant Church	4,680
Visitors Center	22,000
Subtotal Others	41,680
Total	117,458

Source: Port of Hood River 2013 estimates of daily visitors to Port waterfront venues for any length of time.

There are a few techniques for converting visits into economic impacts. There are, for example, estimates of average visitor spending per day. But, Table 9 shows visits by facility, not visitor days. Visitors might visit many places in one day, so figuring out the unique contribution of the Port facilities is more a judgment than a calculation using this method. As a ballpark estimate, we would estimate spending attributable to Port facilities to be on the order of \$1 to \$5 million per year.

We can also use an economic impact model like IMPLAN to calculate these impacts. The State study will include estimates of visitor contributions to the regional economy; it is not part of the scope of work for this report.

A 2009 study by Tetra Tech found that waterfront recreation demand is likely to grow at the Port in the future. The study projected recreation usage and economic impacts over a 20-year period. Under a medium-growth scenario for 2009 through 2029, it estimated that windsports on Port properties would generate \$66.4 million in spending (net present value 2009 dollars) and support 6 new jobs each year (over 100 jobs over 20 years).²³

²³ Tetra Tech, Inc. *Economic Effects of Water Related Recreation at the Port of Hood River*. Prepared for the US Army Corps of Engineers, Portland District. May 2009.

4.2.6 Case Studies

As part of this study, ECONorthwest interviewed ten businesses that are located on current or former Port properties. All had positive comments about their interactions with the Port. Several noted that the Port facilities influenced their location and expansion decisions, but did not play a critical role. These businesses located in the Hood River area because of the amenities it offers; if the Port property had not been available, they would have found an alternative in the area. A few businesses, however, believe that their relationship with the Port is integral to the success of their business. Three examples follow.

Full Sail Brewery Irene Firmat, Founder and CEO

Full Sail Brewery is a craft brewery that distributes its products throughout the United States. It currently has 100 employees and serves 225,000 people annually in its Hood River brewpub. About 12,000 people participate in an hour-long tour of the brewery each year.

Full Sail and the Port of Hood River have been working together since 1987, when Full Sail became the Port's first tenant in the Diamond Fruit cannery complex. According to Full Sail's founder and CEO Irene Firmat, the Port's warm welcome was among the deciding factors that led Full Sail to locate in Hood River. In addition, the Port location helped Full Sail qualify for FDA loans targeted at impoverished areas.

Since 1987, the Port has continued to assist Full Sail and was key to Full Sail's choice to stay in Hood River. The Port helped Full Sail buy the Port-owned space they were renting, and was a "life saver" when Full Sail was evicted from their previous office space, helping them move into the Port's Expo building in 2007.

Full Sail cited the Port's assistance as one reason it chooses to stay in Hood River as it grows. It negotiated with the Port to buy adjacent buildings and existing space that it was previously renting. Soon, the company will move completely off Port property, relocating to the Columbia Building (previously owned by the Port).

Firmat has "no complaints" about the Port. She indicated that the Port property and facilities have added value to the brewery's business and branding, and have contributed positively to the evolution of Hood River.

Prigel Machine Brian Prigel, Founder

Brian Prigel founded Prigel Machine, a custom manufacturing business, in 2002 in the Port-owned Timber Incubator Building in the John Weber Business Park. This building provided one of the few light-industrial spaces in the area that could accommodate the young business. Had the facility not been available, Prigel may have located in The Dalles or Dallesport.

In 2007, Prigel bought the parcel of land next door in the John Weber Business Park from the Port and built a new state-of-the-art facility. Because the adjacent property was available, he did not explore other expansion options. Prigel continues to rent space in the Timber Incubator building. Overall, the John Weber Business Park has been a great fit for Prigel Machines.

The business is a success. For several years, revenues grew at a rate of 50%, without advertising and without actively seeking work. Prigel's business now includes 13 employees, and they are looking to expand further. The company is considering adding an engineering department and its own product line.

Turtle Island Foods **Jaime Athos, Operations Manager**

Founded in 1980, Turtle Island Foods is a food company that provides vegan alternatives to meat. It grew from a small company to one of the largest tempeh producers in the United States. It is especially well known for the popular product Tofurkey.

In 1992, Turtle Island moved its operations to Hood River and developed a relationship with the Port of Hood River. Turtle Island Foods founder, Seth Tibbot, relocated Turtle Island to Hood River because he wanted to live in the area. The Port provided suitable space to make the move happen. Turtle Island first rented a portion of the then Port-owned Graf Building, located in the former Diamond Fruit Cannery Complex.

The Port also facilitated the expansion of the company. It sold the Graf Building to Turtle Islands. Later, it rented space in the Big 7 Building. This deal deterred the company from relocating outside of Hood River, for example to the nearby Port of Klickitat or Port of The Dalles. According to Jaime Athos, to stay in Hood River, "there really was no other option," aside from occupying additional Port buildings.

While it still occupies over 30,000 square feet in the Port-owned Jensen Building, Turtle Island is preparing to move most of their operations to a new Key Development building in the Waterfront Business Park. The Port previously owned this property. The new building will be the second LEED Platinum food manufacturing facility in the United States.

Athos stated his appreciation for both the waterfront development and the Port. He believes the developer transformed previously underutilized spaces into beautiful, useful buildings. This development exemplifies the Port's contribution to a year-round economy by providing industrial space and, therefore, year-round industrial jobs and paychecks, as opposed to seasonal tourism and agricultural sectors.

Turtle Island Foods ships 15 million pounds of product each year from Hood River and has around 100 employees. The company fulfills its civic mission through support of environmental and animal advocacy groups.

4.3 Summary of Economic Impacts

Section 2.1 described how an economic impact analysis typically measures a business’s impact on the economy: as change in employment, wages paid to employees, or regional output or value added. This section uses the information in Sections 4.1 and 4.2 to create a summary of economic impacts.

In summary, the Port and the businesses that use its assets contribute more than \$197 million in output to the Hood River Area economy. These impacts include \$26.7 million in wages and benefits that support 595 jobs. Table 12 disaggregates these impacts by source.

Table 12: Direct Impacts of the Port and Businesses on Current and Former Port Properties, 2013

Activity	Output	Wages & Benefits	Jobs
Business on Port Properties	\$187,029,000	\$35,969,000	571
Port of Hood River	12,478,619	1,514,435	24
Total	\$199,507,619	\$37,483,435	595

Source: ECONorthwest.

The multipliers for output, wages and benefits, and jobs for the Port and businesses on Port properties vary from 1.3 to 2.1. Table 11 does the multiplication: the total impacts are between \$256 and \$297 million in output, \$51 and \$59 million in wages and benefits, and 840 and 1,077 jobs.

Table 13: Total Impacts of the Port and Businesses on Port Properties, 2013

Activity	Range	Output	Wages & Benefits	Jobs
Business on Port Properties	Low	\$243,137,700	\$50,356,600	799
	High	280,543,500	57,550,400	1,027
Port of Hood River	Low	16,222,205	1,968,766	41
	High	19,965,790	2,423,096	50
Total	Low	\$259,359,905	\$52,325,366	840
	High	300,509,290	59,973,496	1,077

Source: ECONorthwest.

The impacts listed in Table 13 do not include spending by Port visitors outside of the Port. For instance, this analysis does not consider the impacts of a Port visitor’s hotel room rental. The State’s study will include this spending, which will increase impacts attributable to the Port.

Table 14 puts the total impacts in Table 13 in context by comparing them to total economic activity in the Hood River region.²⁴ The Port and its related businesses account for about 18% of output, 12% of wages and benefits, and 7% of jobs in Hood River.

Table 14: Share of Economic Activity in Hood River Region Attributable to the Port and Related Businesses

Activity	Output	Wages & Benefits	Jobs
Hood River County, Nonfarm Activity (2011)	\$1,567,643,498	\$471,263,886	13,711
Port and Related Businesses (2013)	279,934,598	56,149,431	985
Estimated contribution of Port and Related Businesses to regional economic activity	18%	12%	7%

Source: ECONorthwest.

Notes: 1. These estimates are approximate. This analysis compares IMPLAN data for Hood River County in 2011, the most recent year of data available, to IMPLAN data for the Port and its related businesses for 2013. Capital expenditures by the Port in 2013 are about 50% greater than the average annual capital expenditures over the last 10 years (and those of 2011). Thus, the estimated shares of activity attributable to the Port may be relatively high.

2. The number of jobs in Hood River County reported in this analysis is higher than the number reported in the Port's strategy document due to differences in the data sources used. ECONorthwest used jobs figures from IMPLAN, while the Port used jobs figures from the Oregon Employment Department (OED). There are two key differences between these data sources: (1) IMPLAN counts self-employed jobs and OED does not; and (2) IMPLAN bases its counts on the number of filled jobs in a given quarter, regardless of if that worker was in that position the previous quarter, whereas OED only counts the number of workers employed by the same employer in both the reference and previous quarters.

²⁴ For this comparison, ECO used Hood River County as a proxy for the region.

5 Conclusions and Implications

The previous sections address the primary purpose of this study: to provide some evidence about the impacts of the Port of Hood River on the regional economy. But numbers always require interpretation, and interpretation is influenced by perspective and purpose. In this short section, ECONorthwest goes beyond the data to offer some suggestions on what they might mean for the Port and its strategic planning.

The evidence is clear that the Port has an impact on the economy. The Port provides direct impact through its internal operations: jobs and wages to 24 employees at the Port, and base operational expenditures (net of debt service) of over \$3 million. In any given year its capital expenditures vary: over the last 10 years they have averaged nearly \$4 million per year; in 2013 they were about \$8 million. Added together, Port expenditures directly support, on average, about 50 jobs, most of which are in the region.

Those expenditures have multiplier effects: the Port employees and suppliers in turn spend the money they receive from the Port for other goods and services in the local economy. That “downstream” spending adds another 50% to 70% to the direct effects.

The greater leverage, however, comes from the businesses that use Port assets (current and former) and are supported by Port operations. ECONorthwest found around 35 businesses operating on current or former Port properties. Annually, these businesses provide 571 jobs, \$36 million in wages and benefits, and \$187 million in output. When multiplier effects get added (Table 11), the numbers increase by on the order of 50%.

The Port cannot claim exclusive credit for that economic activity; the businesses themselves deserve almost all the credit for what they produce. But, interviews of businesses by ECONorthwest support the statement that historical efforts of the Port over the last 20 years have contributed to the situation today. Businesses reported that Port assets and programs are important to their location and expansion decisions. Therefore, the Port is an integral part of the activity by businesses on current or former Port properties. Including multiplier effects, this activity accounts for about 7% of the jobs and about 18% of the output in Hood River County.

That information, supplemented by the case studies in Section 4.2.6, supports the conclusion that the Port has made progress on one of its key missions: stimulating economic development in the Hood River region.

That evidence has implications for the strategic plan. If, contrary to the evidence, the evidence were to have shown little development of Port-owned property, and limited contributions to the regional economy, those crafting the strategic plan would have to pay more attention to whether the mission of economic development was one worth pursuing. At a minimum, the information about the extent to which Port development is now the home for private-sector businesses gives support to the idea that it is worth having a port authority and, by implication, a strategic plan to guide that authority's actions.

Going beyond the numbers, ECONorthwest offers two observations about issues that a strategic plan might address.

Building out the waterfront. With its land at the waterfront, downtown, the Wasco Business Park, and the Odell Business Park, the Port owns or has facilitated development of a large proportion of the industrial property in the City of Hood River. The waterfront area is a critical portion of the remaining industrial land supply.

But the limit on industrial land is not absolute. There is vacant land near Hood River (*e.g.*, Pine Grove and Odell) where, at least in theory, industrial property is available and industrial development could be encouraged.²⁵

In that context, what is the best use of remaining Port property at the waterfront? Many cities provide evidence of a transition from industrial uses to other uses as property values rise. The Port has already accommodated a shift from traditional industrial and warehousing toward light industrial and commercial. The Port should consider furthering this transition, focusing on the kinds of businesses that are most compatible with waterfront recreational amenities and the increasing scarcity of readily-developable industrial properties in Hood River County.

The value of Port amenities. Most Port recreation facilities (*e.g.*, Marina Park, recreational trails, etc.) historically have operated at a net loss. But the evidence supports the conclusion that these facilities provide both economic and social benefits to people in the region. Park facilities—and the quality, maintenance, and cleanliness of those facilities—can create an additional attraction not only for visitors, but also for businesses and their employees.

²⁵ Whether such land could obtain land use entitlements and infrastructure at a reasonable cost, and how well it the location would serve for certain businesses would have to be evaluated.

Appendix A: Annotated Bibliography

Barney & Worth, Inc. "Economic Development Action Plan." Prepared for Hood River County, Oregon. Effective 18 December 2000. Revised 2 February 2002.

BST Associates. "Port of Astoria 2009 Economic Impact Study." Prepared for the Port of Astoria. 15 April 2011.

Chang, Wen-Huei and R. Scott Jackson. "Economic Impacts of Recreation Activities at Oregon Coastal and River Ports." U.S. Army Engineer Research and Development Center. Prepared for U.S. Army Corps of Engineers. Sponsored by U.S. Army Engineer District, Portland. August 2003.

Chase, Todd. "Hood River Economic Opportunities Analysis." FCS Group. Prepared for the City of Hood River. June 2011.

Chase, Todd. Memorandum: "Supplemental Economic Analysis of Dredging." FCS Group. March 28, 2013.

ECONorthwest. "SR-35 Hood River Bridge: Economic Effects." Prepared for The Southwest Washington Regional Transportation Council. October 2010.

E.D. Hovee & Company, LLC. "Port of Hood River Waterfront Industrial Market Assessment." Prepared for the Port of Hood River. July 2006.

E.D. Hovee & Company. "Waterfront Lot 1 Market Research." Prepared for the Port of Hood River. March 2012.

Martin Associates. "The Local and Regional Economic Impacts of the Port of Portland, 2011." Prepared for the Port of Portland. 15 March 2012.

Mid Columbia Economic Development District (MCEDD). "Mid-Columbia Comprehensive Economic Development Strategy." March 2013.

Tetra Tech, Inc. "Economic Effects of Water Related Recreation at the Port of Hood River." Prepared for the US Army Corps of Engineers, Portland District. May 2009.

Barney & Worth, Inc. "Economic Development Action Plan." Prepared for Hood River County, Oregon. Effective 18 December 2000. Revised 2 February 2002.

Bottom Line: Growth potential was cited in many sectors, but interviewers expressed concerns that small businesses did not have room to grow. The preferred growth strategy was diversification that would result in increased employment with wage growth potential. Land was available, but policies were needed to support the growth, including bettering the education system, increasing training, and updating community economic development strategies.

Background

- Unemployment notably higher than the statewide average (cyclical unemployment in the agriculture industry)

Methods

- Used augmented shift-share analysis to identify "emerging," "strong and growing," "weak and declining," and "mature" industries based on location quotients
- Stakeholder interviews: cross section of Hood River business and community leaders
-

Stakeholder Interview Response

- Diverse base of business leads to a healthy economy
- Agriculture is a foundation of the economy
- Technology, restaurants, destination tourism, apparel, and recreation product manufacturing have growth potential
- Small businesses don't have room to grow
- Consensus and cooperation as an obstacle to develop economy, coordination may be difficult
- Regional approach to economic development
- Uncertainty makes it difficult
- Business climate may need to be addressed

Goals and Strategies

- Retain and expand existing Hood River County Businesses, diversify Hood River's economic base, and provide high quality education and training opportunities for residents and workers

- Four strategies: retention and enhancement, diversification, internet village, family wage jobs, Preferred strategy: Diversification. Most aligns with visions and goals
- Capturing growth industries that have a competitive advantage, increased employment with wage growth potential, retaining existing industries
- Software, biotechnology, graphic communications, metals, machinery, transportation equipment, business and health services; value added agriculture, forest products, tourism, outdoor developed recreation
- Surveys supported more family wage jobs
- Strategy will need to be carefully targeted for significant job and real wage growth to occur

Community Evaluations

- Community plans generally support diversification
- Linkages to higher education improvement, business retention, and recruitment programs are primary focuses in Cascade Locks and Odell, but not in Hood River and Parkdale
- Community readiness assessed: further improvements and economic development strategies needed, but land available (but limited ready-to-build land); Cascade Locks can support more types of industry, Odell and Parkdale have sufficient land to accommodate new or expanded industry; opportunity for development for tourism

Implementation Plan

- Projects to improve readiness: enough inventory of ready-to-build sites, support for high quality K-12 education, availability of higher education opportunities, training programs, initiative to close service gaps, update community plans to be compatible with planned diversification and economic growth
- Policies to Support the Action Plan: update current plans and policies, commitment of staff support to implement and coordinate the plan
- Benchmarks to measure progress: monitor progress in economic growth and diversification- employment concentration, ready to build industrial and commercial acreage, average wage in the county vs. statewide

BST Associates. "Port of Astoria 2009 Economic Impact Study." Prepared for the Port of Astoria. 15 April 2011.

Bottom Line: The Port of Astoria significantly benefits the Clatsop County economy (and also benefits the Oregon economy) through employment, income, and business revenue at their airport, marinas, piers, and other properties. Two thirds of commercial fish landings in Oregon are in Clatsop County (a significant increase since the 1980's), and log exports have been reintroduced. South County residents also benefit from Port activities. Information was obtained through secondary data sources and interviews/surveys.

Background

- Port of Astoria in Clatsop County, Oregon
- Port of Astoria includes Astoria-Warrenton Regional Airport, two marinas, deep-water piers, and industrial properties
- Two thirds of commercial fish landings in Oregon are in Clatsop County, a large increase from one-third in the 1980's
- Airport: hangars, flight instruction, aviation fuels, aircraft maintenance, terminal facilities, industrial space, aviation related firms; serves both private and commercial aircraft
- Marinas: recreation and commercial, boat launch for fishing
- Three deepwater piers and some adjacent upland property: job-creating enterprises (fish processing plants, boatyard, marine supply wholesale, etc.)

Methodology

- Survey/interview process: Surveys were mailed to all identified port tenants with a follow-up second mailing and telephone interviews
- Surveys also asked to provide information on how many employees lived in the south county area, to attempt to quantify the impact of the Port and its tenants there
- Secondary data to identify direct impacts
- Direct impacts measured: employment, employee income, business revenue, and taxes
- Indirect (expenditures by the user/tenant on outside goods and services) and induced (purchases based on the employment earnings from direct and indirect economic activities) impacts measured using IMPLAN

Airport

- Direct impacts: 340 jobs, \$20.6 million in income, \$29.8 million in business revenue

- Total impacts in Clatsop County: 540 jobs, \$27.4 million in business revenue
- Total impacts in Oregon: 710 jobs, \$33.2 million in income

Marinas

- Direct impacts: 185 jobs, \$7.5 million in income, \$15.9 million in business revenue
- Total impacts in Clatsop County: 234 jobs, \$9.0 million in income
- Total impacts in Oregon: 240 jobs, \$11.1 million in income

Piers

- Direct impacts: 410 jobs, \$16.4 million in income, \$157.3 million in business revenue
- Total impacts in Clatsop County: 611 jobs, \$22.2 million in income
- Total impacts in Oregon: 810 jobs, \$32.9 million in income

Capital Projects and Administration

- Direct Impacts: 17 jobs, \$0.8 million in income
- Total Impacts in Clatsop County: 23 jobs, \$1.1 million

Taxes

- Port and tenants generated \$4.1 million of state and local taxes in 2009
- Port collected \$1.01 million in property taxes
- For every \$1,062 collected by the Port, one “full time equivalent job in Clatsop County was retained or created by the Port and its private industry partners” (4)

Other Port Initiatives

- Re-entry into log exports- 25 jobs supported from 2 log ships/month
- Acquisition of North Tongue Point- 25 full time jobs
- Renewal of Skipanon Peninsula lease
- South County Impacts: 22 jobs, \$985,000 in direct income, \$135,000 in cruise passenger spending, \$135,000 in Port expenditures
- South county residents benefit from the airport, piers, and marinas as well

Chang, Wen-Huei and R. Scott Jackson. "Economic Impacts of Recreation Activities at Oregon Coastal and River Ports." U.S. Army Engineer Research and Development Center. Prepared for U.S. Army Corps of Engineers. Sponsored by U.S. Army Engineer District, Portland. August 2003.

Bottom Line: Fishing was the most common recreation activity at Oregon Coastal and River Ports. The study found that marina slip users spent more than boat-slip users, and that overnight visitors spent 3-8 times more than day visitors.

Background

- 36 marinas and boat launch sites at 18 Oregon ports

Methods

- Types of impacts: visitor spending, regional sales, income, and jobs associated with visitor spending
- Direct effects, indirect effects, induced effects
- Segmented spending profiles developed for two sets of visitor segments: type of port facilities used and day use vs. overnight visitors
- Sales, income, and employment effects were estimated by applying total visitor spending to regional economic multipliers
- Mailback surveys and onsite surveys
- Total party day visits per year by segment for each port estimated using information gathered from survey, inputs from port staff, and other secondary data sources (Triennial Boating Surveys and Marina Guide)

Calculations

- Boating days for marina slip renters=number of slips*occupancy rate*average trips per year*days boat was used per trip
- Visitation for non-boating segment data collected through records, onsite survey, and applying adjusted average boater to non-boater ratio across all ports
- Visitor spending by segment: included spending on goods and services consumed during a trip and expenditures for durable goods
- Economic effects= number of visits*average spending per visit*capture rate*regional economic multiplier

Results and Recommendations

- 460,000 total boating days, fishing as most common activity, 94% total trip spending spent in Oregon, overnight visitors spent 3-8 times more than day only visitors, marina slip renters spent more than boat ramp users,

trip spending and annual/fixed boating expenses supported a total of 1,700 jobs and generated personal income of \$42 million

- Future study recommendations: developing guidelines for measuring and monitoring use and spending, institutionalizing economic impact analysis, refinements of sampling procedures

Chase, Todd. "Hood River Economic Opportunities Analysis." FCS Group. Prepared for the City of Hood River. June 2011.

Bottom Line: There has been a positive growth trend in all industry sectors in Region 9 (a portion of the Gorge region) except information and construction. Three employment growth scenarios suggest 2010-2031 employment increases to range from 1,502 to 2,959 in the Hood River Urban Growth Boundary, currently at 5,739. While there are 545 acres of industrial land area currently available in the Columbia Gorge, there is a more limited supply of competitive vacant commercial and industrial building floor area, and office demand may not be met in the future.

Purpose: "... [to] serve as a basis for the City of Hood River to document and adopt local policies and actions that help make Hood River a 'more economically viable' community while maintaining a good quality of life for residents, businesses, and workers" (1)

Hood River Economic Background

- Hood River Economic Opportunities Analysis (EOA) Technical Advisory Committee (TAC) was created from community members.
- Hood River is a favorable area for food processing, technology and recreation-oriented business, and commuters due to its proximity to the Portland Metro area, agricultural commodities, and wind energy farms
- Population and job growth in Portland metro region will have spillover effects in Hood River and Hood River County
- 5,753 covered workers listed as employed by local business within UGB in 2008
- New job growth mostly occurred among self-employed and Stage 1 business entities between 2003 and 2008

Growth forecasts

- Positive growth trend forecast for all industry sectors except construction and information
- 2010 jobs in UGB: 5,739; Employment growth with three growth scenarios:
- Scenario A- Low- OED Annual Average Growth Rate Forecast, low potential in employment growth: 1,502
- Scenario B- Medium- Upper end of UGB Capture of County Growth, medium growth potential: 1,786 (Scenario B most consistent with local and regional growth policies, buildable land inventory characteristics, current market trends)
- Scenario C- High- Modified version of B, planned employment centers consistent with city/county coordinated growth forecast: 2,959

- 20 year forecast for Hood River UGB vacant land needs for each scenario:
A- 50 acres, B- 60 acres, C- 109 acres

Land Availability

- Vacant land: 95 tax lots, 111.9 buildable acres (69 0.2-1 acre small lots, 22 1-5 acre medium lots, 3 5-10 acre large lots, 1 10.5 acre lot)
- All land supply within Hood River UGB, except tax lots located in the east end area, are considered to be short-term supply
- 545 acres of industrial land area currently available in the Columbia Gorge region, but “fairly limited supply of competitive vacant commercial and industrial building floor area” (less than 10,000 square feet excluding Wind River nursery) (5)

Conclusions

- Office demand may not be met in future
- Majority of targeted business that consider expanding and/or relocating to Hood River will be small business operations, can locate within existing professional office or industrial buildings
- Small/medium businesses prefer their location initially lease space in office or industrial buildings, could also locate in redevelopment sites downtown, waterfront area, larger site requirement cannot easily be met in Hood River

**Chase, Todd. Memorandum: "Supplemental Economic Analysis of Dredging."
FCS Group. March 28, 2013.**

Bottom Line: Dredging is important to the local economy in the Coquille Bay. Without maintaining proper dredging depths in the Coquille Bay channel, there will be negative impacts on business and workers. 619 jobs and \$49.95 million in annual economic output are dependent on dredging.

Purpose: "...an update of current economic trends, assumptions, and findings to be considered in support of federal appropriations for operations and maintenance funding for ongoing Coquille Bay (Coquille River) dredging, as part of the Port of Bandon Strategic Business Plan" (1).

Background

- High unemployment rates (February 2013)- Coos County: 10.6%, Curry County: 11.3%, with underemployed workers twice this
- IMPLAN used to measure annual economic benefits of local business

Affects of Dredging in the Local Economy

- Maintaining proper dredging depths in the Coquille Bay channel is important to business retention and growth in the area
- 54 businesses employ 441 local workers, direct labor income includes \$11.8 million annually and additional secondary benefits (indirect and induced economic impacts)
- Without dredging, negative impact on businesses and workers
- Direct/indirect total impact from business dependent on dredging: 619 jobs, \$27.4 million value added, \$49.95 million in annual economic output; \$4.1 million annual state and local tax payments, \$3.7 million federal tax payments

ECONorthwest. "SR-35 Hood River Bridge: Economic Effects." Prepared for The Southwest Washington Regional Transportation Council. October 2010.

Bottom Line: The Hood River Bridge is used for a variety of reasons, most commonly personal business and shopping, recreation, and commuting. There were 3.5 million crossings in the FY 2009-2010, and the bridge serves an important link for tourists, emergency services, educational transportation, winter travel, commuters, manufacturers, and more. Currently, safety issues, weight limits, and commuting constraints affect bridge usage. A replacement bridge would increase economic development, the bridge's reliability, the scope of usage, provide environmental benefits, and increase the safety and comfort of drivers and barge operators.

Background

- Hood River Bridge one of three highway bridges crossing the Columbia River in the Columbia Gorge National Scenic Area
- Port of Hood River purchased the bridge in 1950

Methods

- Evaluation framework: clearly defines the purpose to focus on the "potential economic benefits of a replacement bridge, not on its full impacts", not a cost-benefit analysis (10)
- Assumptions: Average wage for bridge crossers is \$16/hour; without the current HR bridge, 40 minutes added to travel time per crossing; motor vehicle operation cost ranges from 50¢ to 75¢ per mile including insurance and taxes (15¢ per mile only including fuel costs)
- Review of existing studies
- Set the economic context
- Stakeholder focus groups: Four 90-minute small-group discussions, 27 participants from a range of interests (public agencies, private companies, freight-dependent businesses, and recreational and environmental interests)

Benefits of the Hood River Bridge

- Transportation benefits from transportation investments: access, speed, travel-time reliability, safety, convenience, comfort, cost (effectiveness, Fiscal constraint), distribution of impacts (equity)
- Non-transportation benefits from transportation investments: economic development, environment, land use, other

Usage

- Bridge users averaged 9.1 one-way trips across the bridge per week (2001)
- Households that used the bridge in the week preceding the survey made 8.5 one-way trips across the bridge per week (2001)
- Washington residents use bridge more frequently; Hood River as most common destination
- 3.5 million crossings in FY 2009-2010 (25% increase over nine year period); average daily traffic increased from 8,000 to 10,000 over nine year period (25% increase)
- Most vehicles 2-Axle vehicles (9,819/month from 7/2009-6-2010); few 3+ axle (164/month) and motorcycles (45/month)

Reasons for Usage

- Purpose ranking highest to lowest: Shopping/personal business, recreation, commute to work/school, business travel as part of a job, visiting friends or relatives, other (according to households, visiting friends or relatives was ranked third above commute and business travel)
- Bridge traffic is seasonal (largest amount May-October, highs June-August): corresponds with fruit growing industry and summer tourism
- 10-15% of average daily traffic are commuters; Bridge congestion: 7-9 AM, noon, 4-6 PM
- 90% of all retail sales in incorporated cities (Hood River, White Salmon, Bingen) were in the city of Hood River
- Most freight in the region passes through Hood River on Interstate 84 and does not cross the bridge. However, freight that crosses bridge is from local lumber and wood product manufacturers, fruit growers and processors, and businesses with suppliers on the other side of the river
- The bridge is an important link for tourists to visit both sides of the river, and an important connection for emergency services, educational field trips and transportation, and winter travel

Current Conditions Affecting Bridge Usage

- Weight limitations affects efficient freight movement
- Commuting constraints during peak usage
- Safety issues: narrowness, grating is hard for motorcyclists to maneuver, strong cross winds and narrow span challenging for barge operators

Benefits of a Replacement Bridge

- Access to the bridge for automobile travel and shipping over a longer period of time
- Speed of travel and travel-time reliability
- Increased safety for drivers and barge operators
- Increased comfort for drivers

- Increased scope of usage: public transit, pedestrian, and bicycle usage
- Economic development: reliability, regional landmark, bicycle tourism, river traffic
- Land use is based on the assumption that crossing the river will always be possible
- Environmental Benefits: prevent runoff into the Columbia River
- Natural hazard preparedness

E.D. Hovee & Company, LLC. "Port of Hood River Waterfront Industrial Market Assessment." Prepared for the Port of Hood River. July 2006.

Bottom Line: According to interviews, business was extraordinarily good in 2006, and there were high prospects for the next 3-5 years. Interviewees expressed that there was a lack of industrial and office space in Hood River County. Thus, the study concluded that the Port's Waterfront property was a window of opportunity for development, and the Port should facilitate its development.

Purpose: "...to provide a preliminary assessment of the real estate market for light industrial, business park, and other employment intensive uses that have and could occur on properties currently owned by the Port of Hood River on the Columbia River"(1)

General Conclusions

- Need to plan for more industrial employment and (perhaps) for less commercial growth
- There is an opportunity to increase wage levels higher than what was previously viewed as attainable: this would help knowledge based industries grow
- The Port needs to facilitate the opportunity by providing needed suitable land for employment intensive business and industry in Hood River County

Methods

- Interviews with representatives from 20 industrial and related firms in Hood River County and the Gorge: confidential interviews in separate sessions with consultant
- Purpose was to gain better understanding of current needs and expansion opportunities
- Business survey distributed to over 350 firms in Hood River County and the Gorge
- Purpose: to understand needs/opportunities for job generating business activity in Hood River County; 11% response rate

Interview Questions and Responses: General

- Business/organization description and current business state: services/products, employment, history, plant, equipment, recent investments: Many are leading edge in their industry, nationally and in some cases, internationally; business activity was extraordinarily strong,

extraordinary amount of business interest and need in facility expansion (most in the next 5 years)

- Requirements associated with location or investment decision: Industrial land known to be limited, increasing need of individual offices with common entry/reception, mixed space (5,000-10,000 square feet that accommodates office and design, prototype testing and production space: Existing buildings not suited for current manufacturing needs, preference to own rather than lease the property; Need for shovel ready sites, but siting process was fast and supportive; competition for parking is a major concern, sewage odors is an issue; Positive review of labor force, and supplier and customer relationships
- Customer base: End-use customers are mainly outside Gorge region except those that have on-site retail
- Mid-Columbia Gorge region economy:
- Strengths: Transport access, positive lifestyle, waterfront as the ‘heart of the community
- Weaknesses: Lack of industrial sites and higher cost of land acquisition creates competition from other locations in the Gorge region

Interview Responses: Waterfront Specific

- Appropriate mix of industrial and related employment intensive uses on the Port waterfront property: Some answers included keep the current mix, clean industry, compatibility, more than industrial, some want open space and recreation use, business driven, smaller firms, “unique piece of property, the only place to have a waterfront opportunity”
- Quality of life and community branding is very important to businesses and residents: good technology, tourism, scenery, stories, natural and environmental image, made in Hood River, housing costs
- Most important steps for development of Waterfront property: Focus on small, independent businesses, lifestyle package, livability incentive, start with long-term vision, vision/master plan for the Port, more technology firms, small specialty product firms, dedicate ground to a park, what’s best for community

Business Survey

- Products and services included construction, manufacturing, and creative services; generally positive prospects for the next five years
- Diverse geographic distribution of customers and suppliers; 55% go to trade shows to meet customers and suppliers
- Top benefit of doing business in Hood River: quality of life; disadvantages: accessibility, lack of skilled labor force, higher cost of doing business

- Shortage of industrial lands in Hood River County
- 41% considering relocation or expansion in the next five years; less than half would plan to relocate in Hood River or the county
- Interest in relocating at the port: majority said no due to costs
- Wide range of industrial and job-intensive businesses could be a good fit for the waterfront property

Conclusions

- Industrial land need: 94% of all vacant, industrially zoned property in Hood River is owned by the Port; 99% of all vacant industrial land in the county is faced with constraints; Port's waterfront property as only viable property
- Options for waterfront property: employment or mixed use, rapid or phased build-out, lease or sell, master plan or development criteria negotiated RFP/RFI, End User or Developer transactions, high/low market pricing

Recommendations

- Waterfront as a "window of opportunity"
- "Set clear policy priority for employment intensive business and flex industrial build out with supporting recreation, retail and office mixed use"
- Make interior parcels available for lease or sale
- Focus on development criteria
- Conduct a first-round RFP/RFI
- Prioritize sites available for sale to end users
- Adopt a mid-high pricing schedule

E.D. Hovee & Company. "Waterfront Lot 1 Market Research." Prepared for the Port of Hood River. March 2012.

Bottom Line: While the local network of support and the Hood River "brand" are advantages of doing business in Hood River, a major disadvantage is the cost of doing business. Despite the recession, business in Hood River over the past 3-5 years has been strong, and is expected to continue to be strong in the next 3-5 years. Job growth is expected to come from existing businesses in Hood River. The development of Lot 1 is an important employment opportunity for the Port of Hood River, and can be developed for mixed use slowly and organically.

Background

- Lot 1: 9-acre property part of the waterfront business park owned by the Port of Hood River
- Job growth strong since 2007 despite the recession; resilience credited to strength of "homegrown, natural resource based, and increasing entrepreneurial economy" and the quality of life in the area that attracts talent and capital (14)
- Employment countywide increased by nearly 2% between 2001 and 2010, average wage increased by almost 27%
- Natural resources and mining (including agriculture) sector was largest source of employment
- Average wage significantly below statewide average (68% of statewide average)
- Firm sizes in Hood River County averaged 11 employees per establishment

Conducting Business in Hood River

- Hood River may be an exception to the not promising real estate outlook for rural communities:
 - Development and "growth of technologically sophisticated, market-savvy, and generally locally owned niche industries" (16)
 - High quality of life in the area (recreation): recreation and other lifestyle reasons will continue to attract entrepreneurs
 - Close proximity to a metro area (Portland)
 - "Access to critical transportation infrastructure" (16)
- Due to Portland's relatively high vacancy, little spillover demand from Portland to Hood River; Hood River companies have alternative options in Portland metro area if needed
- Rental rates of industrial space in Hood River higher than in Portland metro area, which is not typical- could be feasible as long as firms willing to pay for quality space

- Economic growth due to building space demand at Port's waterfront property would be driven by firms currently in Hood River, rather than from other metro areas

Interviews with Hood River Business Representatives

- Despite the recession, business has been strong over last 3-5 years, positive outlook over the next 3-5 years; concerns about effects of external events (gas prices, terrorism, Europe's financial crisis, slowing of Asian economic growth)
- Main advantage of doing business locally was the Hood River "brand," and the network of support and loyalty throughout the community
- Main disadvantage: cost of doing business (difficulty attracting qualified labor, limited availability, high cost of industrial costs, added time and cost due to distance from I-5 corridor, limited availability/high costs of Gorge housing)
- Some customers and suppliers currently "missing but supportable" (26)
- Job growth will best come from existing Hood River businesses
- Favor developing Lot 1 for mixed use, improving recreation opportunities and the business park
- Port should have an active role in planning, marketing, and development of Lot 1

Conclusions and Recommendations

- Lot 1 as an important employment community opportunity, potential to be the "signature development" of waterfront business park
- Recommendation: take time to achieve broad public vision, create a site specific master plan that is consistent with these goals; keep focus local and give priority consideration to the needs and interests of current local businesses; keep and enhance Hood River "brand"
- Lot 1 can develop slowly and organically through the Port

Martin Associates. "The Local and Regional Economic Impacts of the Port of Portland, 2011." Prepared for the Port of Portland. 15 March 2012.

Bottom Line: Despite the economic contraction of Portland International Airport from 2005-2011, the Port of Portland, including the airports, harbors, and industrial and business parks are a major source of employment and revenue in their areas, directly and indirectly, supporting 71,818 jobs. The impacts included direct and indirect jobs created, business revenue, local purchases, state and local taxes, and Federal government aviation-specific taxes.

Background

- Portland Harbor, Portland International Airport (PDX), general aviation airports at Troutdale and Hillsboro, real estate tenants of the Port of Portland's (Port's) Industrial and Business Parks
- Portland Harbor includes private marine terminals and Port-owned terminals

Methods

- Four separate and impacts: employment impact, personal earnings impact, business revenue impact, tax impact
- Airport impact analysis: quantification of economic impacts generated by passenger, freight, military, and general aviation activity at PDX; general aviation activity at Troutdale and Hillsboro
- Direct and indirect jobs
- Direct, induced, and indirect personal income and consumption expenditures
- Business sales generated by airport activities
- Airport-specific taxes
- Tax revenues from airport activity
- Real Estate tenants of Port's Business and Industrial Parks: measured in terms of jobs, personal income, business revenue, and taxes generated by economic activity

Conclusions

- Economic contraction of PDX: decline in total passengers, decline in visitor usage by 0.3 million from 2005-2011; still, airport activity is a major source of employment in the Portland area
- Economic Impacts of Portland Harbor and Aviation System (includes private facilities located within Portland harbor, and Aviation system visitor industry impacts)
- Jobs created: Total: 71,818
- Personal Income: Total: \$3,478,000,000

- Business Revenue: Total: \$7,078,080,000
- Local purchases: Total: \$879,912,000
- State and local taxes: Total: \$315,595,000
- Federal Government Aviation-Specific Taxes: Total: \$246,203,000

Mid Columbia Economic Development District (MCEDD). “Mid-Columbia Comprehensive Economic Development Strategy.” March 2013.

Bottom Line: Economic advantages in the Mid-Columbia Region include collaboration, transportation and location advantages, natural and cultural resources, and support for development. Disadvantages include high housing costs, skilled workforce shortages, environmental regulations, and communication between the five areas in the Mid-Columbia. Outdoor tourism is a large part of Hood River’s economy, due to year-round recreation opportunities. Visitors to Hood River County spent over \$75 million in 2011 and supported 950 jobs.

Economic Profile: Hood River County (Hood River, Cascade Locks, Odell, Parkdale)

- Major industries: Agriculture (major crops bring in \$60/year plus value added), wineries, forestry, technology, outdoor gear, activewear, product design, green design, sustainability
- Outdoor tourism: recreation opportunities (windsports, sailing, hiking, cycling, winter sports) make tourism one of the largest economic sectors; Visitors to Hood River County spent over \$75 million, which earned \$20 million and supported 950 jobs in 2011 (10)
- Enterprise Zone and Long-term Rural Enterprise Facilities Program offered on Port industrial property sites (“exempt businesses from local property taxes to new locating businesses and the Rural Enterprise Facilities allows property tax abatement as long as 15 years on new facility improvements and installations” [11])
- 2012 Port of Hood River began construction on two new Waterfront Business Park buildings, prepared Halyard building for new tenant, new Turtle island food processing plant; Nichols Landing (hotel and office/retail development) planned for south end of Nichols Basin

Economic Advantages in the Mid-Columbia Region

- Collaboration- networks, importance of relationships, strong sense of community
- Transportation and location advantages- Central in Pacific NW; close proximity to Portland/Vancouver, Tri-Cities, Yakima, Bend, Boise, Boardman/Hermiston leads to distribution options; accessible, access to markets, time zone allows for communication to East Coast and Asia during a regular work day
- Natural and culture resources- timber, agriculture (130,000 acres of farm land), year-round recreation, tourism, scenery, renewable energy assets, diverse climate, rural values/characteristics, strong culture/history
- Diverse businesses provide a buffer through economic cycles

- Columbia Gorge Community College, OSU and WSU Extension
- Support for industrial and commercial development: affordable and reliable power, available industrial sites, telecommunication and broadband capacity, water/sewer/community facilities

Economic Challenges in the Mid-Columbia Region (21-26)

- Skilled workforce- Needed: More support for CGCC, 4 year university Research Institution, Graduate Degrees, skills training, bi-state workforce, preschool support
- Affordable housing- Needed: provide workforce and affordable housing, energy efficiency, housing stock age utilizing downtown space
- Shortage of capital- Needed: Business funding, infrastructure funds, small business support
- Environmental regulations: Needed- achieve balance, urban area process, interagency communication
- Communication between the five areas in the region- Needed: image and regional brand, state and federal leadership, telecommunication
- Trade leakages, brain drain, lack of expansion space, incubators and mentorship programs, cultural isolation, public transportation, access to health and mental care

Mid-Columbia Economic Development Goals and Project Priorities

- Business retention/expansion, business attraction, maintenance and improvement of public infrastructure, increase economic resources, create entrepreneurial environment, assess workforce requirements, engage elected officials in both Oregon and Washington (27)
- Port of Hood River received site certification for Lot 1 (April 2012): shovel-ready, infrastructure construction (water, sewer, public streets) necessary to prepare site for development; water main must be installed across State Street Bridge to provide adequate water pressure (69-70)
- Upgrades needed to Hood River Interstate Bridge- Priority projects: re-paving north approach ramp, re-welding portions of steel decking (73)

Tetra Tech, Inc. "Economic Effects of Water Related Recreation at the Port of Hood River." Prepared for the US Army Corps of Engineers, Portland District. May 2009.

Bottom Line: Windsurfing and kiteboarding bring many visitors to Hood River, and Port facilities are popular for river access. Visitation growth was projected through 2029 with four different growth rates ranging from zero to ten percent, to support 70-179 jobs. Recommendations included developing a better database on recreation and visitation at Port facilities.

Background

- Watersport recreation: windsurfing and kiteboarding
- 3 main Port facilities for watersport recreation: the Event Site (windsurfers), the Spit (kiteboarders), the Hook (beginning windsurfers and kiteboarders)
- Port facilities especially attractive to recreationists due to ease of launch site access

Methods

- Money Generation Model 2 (MGM2) used to estimate economic effects from windsurf recreation with three primary inputs: visits, average spending, multipliers
- Visitation estimated using Port parking data from 1995-2008
- Visitor spending estimated by comparing existing spending profile information in previous reports and the national average spending data (MGM2 offered three spending profiles, the middle profile was selected)
- Visitation forecast through 2029 at each rate, capped at 155,000/season
- Visitor spending: dollars spent per person per day
- Medium spending profile selected from MGM2
- Visitors separated by sport and type of recreation-users: local day, non-local day hotel/motel, and camper
- Total economic effects: sales, personal income, jobs, value added; then disaggregated into direct and total effects, using four different growth rates
- Base year: 2010, Interest rate for discounting future effects to their present value: 4 5/8%

Results

- Zero growth rate in visitation
 - Total net present value (NPV) of spending estimate for combined windsports 2010-2029: \$33.9 million (amortized over 20 years: \$3.1 million annually)

- Total NPV of personal income generated by combined windsports 2010-2029: \$14.2 million, (amortized over 20 years: \$1.1 million annually)
 - 70 jobs supported, 0.0 additional jobs created annually
- Low visitation growth rate (1.9%): based on Hood River County's population forecasts
 - NPV of spending estimate for combined windsports 2010-2029: \$47.3 million (amortized over 20 years: \$3.7 million annually)
 - Total NPV of personal income generated by combined windsports 2010-2029: \$16.2 million, (amortized over 20 years: \$1.3 million annually)
 - 88 jobs supported, 1.6 additional jobs created annually over 20 years
- Medium visitation growth rate (5%): half of high growth rate
 - NPV of spending estimate for combined windsports 2010-2029: \$66.4 million (amortized over 20 years: \$5.2 million annually)
 - Total NPV of personal income generated by combined windsports 2010-2029: \$22.5 million, (amortized over 20 years: \$1.8 million annually)
 - 129 jobs supported, 6.0 additional jobs created annually over 20 years
- Maximum (high) visitation growth rate (10%): upper bound, based on existing reports of windsport activity and with available period of record for Port parking growth
 - NPV of spending estimate for combined windsports 2010-2029: \$92.4 million (amortized over 20 years: \$7.2 million annually)
 - Total NPV of personal income generated by combined windsports 2010-2029: \$31.4 million, (amortized over 20 years: \$2.4 million annually)
 - 179 jobs supported, 6.7 additional jobs created annually over 20 years

Recommendations

- Develop a better database on recreation use at Port facilities (focus directly on recreationists)
- Refine visitation estimation data and visitor spending segmentation
- Collection of primary data would create a more refined economic analysis

Barney & Worth, Inc. "Economic Development Action Plan." Prepared for Hood River County, Oregon. Effective 18 December 2000. Revised 2 February 2002.

Appendix B: Context of the Hood River Economy

Hood River Economy

Hood River County includes the cities of Hood River and Cascade Locks, and the Upper Hood River Valley (the areas of Parkdale and Odell). The Port of Hood River operates mainly in the City of Hood River, and has one light-industrial property in Odell.

The City of Hood River is the business and administrative center of Hood River County. The city and the larger Columbia River Gorge are internationally known destinations for outdoor recreation—windsurfing, kiteboarding, sailing, hiking, biking, kayaking, and snowsports—and attract visitors from around the country and world.²⁶

The City of Hood River and Hood River County economies mainly consist of forestry, agriculture, wine, technology, outdoor gear and active-wear companies, and tourism from recreation opportunities. In 2011, visitors to Hood River County spent over \$75 million, which supported 950 jobs and \$20 million in earnings.²⁷

Hood River's location and climate provide favorable conditions for businesses and operations. The City is on Interstate 84 and an hour from the Portland metro region and the Interstate 5 corridor. Natural resources in the area provide timber and recreation opportunities for locals and tourists. Agriculture, including fruit, wineries, and lavender, also thrives in the area. Wind energy in the Columbia River Gorge in Oregon and Washington is also an asset.²⁸

²⁶ Chase, 2011, 6.

²⁷ MCEEDD, 2013, 10.

²⁸ Chase, 2011, 10.

Not all conditions, however, are conducive to business growth and land development. In one study local business representatives cited the cost of doing business in Hood River as the main disadvantage of doing business in Hood River. Contributing to those costs are limited availability of a skilled and qualified labor pool, added costs of materials and time because of distance from the Interstate 5 corridor, and high housing costs relative to other areas of the Northwest and to local incomes.²⁹ The median value of owner-occupied housing units from 2007-2011 was around \$327,000, 30% greater than \$253,000 median value for all of Oregon.³⁰

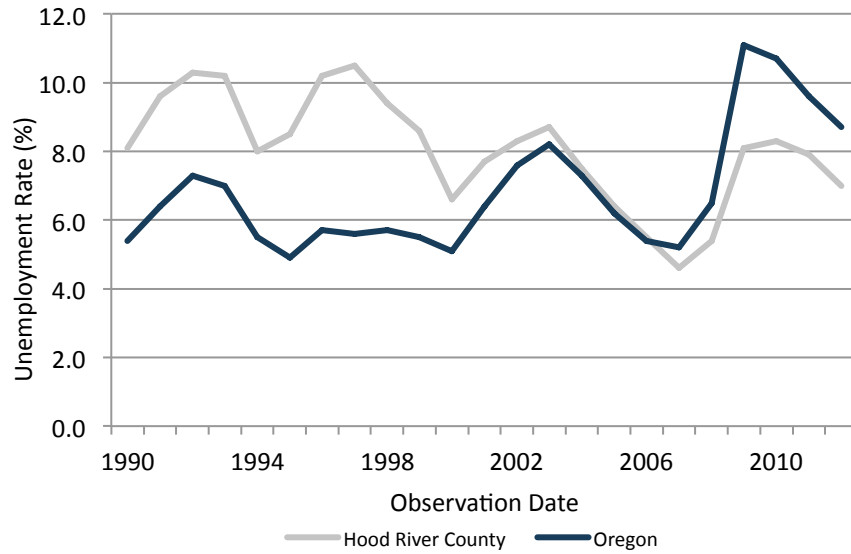
Employment

Figure 2 shows that Hood River County and the State of Oregon had similar cycles of unemployment over the last ten years, but that the County's average annual rate has been uniformly below that of the state in the last five years. In the last 10 years the annual average unemployment rate of Hood River County has ranged from a low of 4.6% (2007) to a high of 8.7% (2003); it was 7.0% in 2012. Statewide, Oregon's average annual unemployment rate has ranged from 5.2% in 2007 to 11.1% in 2009, and Oregon's 2012 unemployment rate was 8.7%.

²⁹ E.D. Hovee & Company, 2012, 25.

³⁰ US Census, Hood River County Quickfacts, 2013. According to the US Census website, value is the estimate of how much a property would sell for (only specified owner-occupied housing units less than 10 acres without a business on the property. The median divides the value into two equal parts (below and above the median), and median values are rounded to the nearest hundred dollars.

Figure 2: Hood River County and Oregon Unemployment Trends



Source: Data acquired from FRED, Federal Reserve Bank of St. Louis, accessed 12 June 2013
https://research.stlouisfed.org/fred2/graph/?graph_id=124746&category_id=0.
Graph created by ECONorthwest.

Hood River’s job growth is often described in respect to the Hood River UGB, which includes the City of Hood River (city limits) and the city’s urbanizing area.³¹ The Hood River EOA reported that self-employed business entities and entities with two to nine workers per establishment (Stage 1 Business Entities) are the sources of the fastest job growth both in the UGB and the County. The UGB alone added 307 net new entities total between 2003 and 2008, 90% of which had less than 10 employees. Of the remaining added entities, 24 had between 10 and 99 employees, and 1 entity had over 500 workers.³²

The City of Hood River made three different estimates of net new job growth in the Hood River UGB from 2010 (5,753 jobs) to 2031, ranging from 1,502 net new jobs to 2,959 net new jobs, an average annual growth rate ranging from 1.1% to 2.0%.³³ Retail & Commercial Trades and Services sectors lead in growth. Established and emerging clusters include health services, advanced manufacturing, athletic/outdoor gear, clean technologies, food and beverage processing, creative services, and advanced education/training.³⁴

³¹ ECONorthwest, 2008, 5.

³² Chase, 2011, 7.

³³ Chase, 2011, 9. AAGR calculated by ECONorthwest.

³⁴ Chase, 2011, 11.

According to the Hood River EOA, the fastest growth is expected to occur in the healthcare and social services, government, leisure and hospitality, professional and business services, retail, natural resources, wholesale trade, and durable goods manufacturing sectors. The information and construction sectors are expected to decrease between 2008 and 2018.³⁵

The Oregon Employment Department (OED) completes employment forecasts for regions in the state of Oregon, and Region 9 best approximates the Hood River region. Region 9 is located in the north-central portion of Oregon and includes Gilliam, Hood River, Sherman, Wasco, and Wheeler counties (State of Oregon, 2013). OED forecasts that in the 10 years from 2008 to 2018, employment in Region 9 will grow a total of 9.5% (from 25,740 jobs to 28,190 jobs), an average annual growth rate of 0.9% per year.³⁶

Population and Demographics

Table 14 shows estimates and forecasts of population since 1990 in Oregon, Hood River County, and the City of Hood River. While Hood River County’s population grew at a slower rate than the state of Oregon from 2000 to 2010, the City of Hood River grew over twice as fast as Hood River County, and almost twice as fast as the population of the state of Oregon.

Table 15: Oregon and Hood River Population 1990-2012

Time Period	Oregon	Hood River County	City of Hood River
1990	2,842,321	16,903	4,632
2000	3,421,399	20,411	5,831
2010	3,831,074	22,346	7,167
2012	3,899,353	22,584	7,292
Change			
2000-2012	477,954	2,173	1,461
AAGR:			
1990-2000	1.9%	1.9%	2.3%
AAGR:			
2000-2010	1.1%	0.9%	2.1%
AAGR:			
2010-2012	0.9%	0.5%	0.9%

Source: Data was obtained from multiple sources, including US Census Hood River County QuickFacts (<http://quickfacts.census.gov/qfd/states/41/41027.html>); Hood River (city) QuickFacts (<http://quickfacts.census.gov/qfd/states/41/4134900.html>); 1990 Census of Population and Housing (<http://censtats.census.gov/pl94/pl94.shtml>); City of Hood River 1990 Census population from ECONorthwest; “Hood River County Coordinated Population Forecast, 2008-2028,” October 2008.

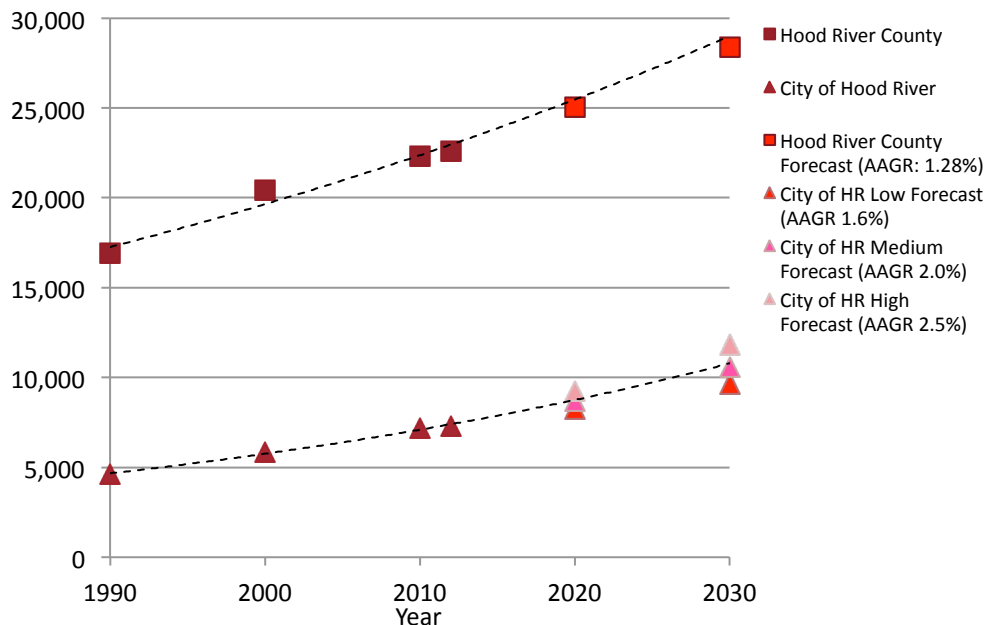
Note: Change 2000-2012 and AAGR’s calculated by ECONorthwest.

³⁵ Chase, 2011, 8.

³⁶ Chase, 2011, 7-8.

Forecast population growth in Hood River County and the City of Hood River (Figure 3) is based on a study conducted by ECONorthwest in 2008 using data primarily from the Oregon Office of Economic Analysis. A low, medium, and high average annual growth rate were used for the City of Hood River population growth rate. In 2030, Hood River County’s population is estimated to be 28,404, and the City of Hood River’s population is expected to be between 9,667 and 11,841.

Figure 3: Hood River Historical Population and Forecast Growth, 1990-2030



Source: United States Census, accessed 12 June 2013; ECONorthwest, “Hood River County Coordinated Population Forecast, 2008-2028,” October 2008.

The Hood River Official forecasts of employment for the County assume that the expected continued growth of the Portland region will “spillover” to Hood River County and the City of Hood River.³⁷

Per capita money income over the past 12 months from 2007 to 2011 in Hood River County was \$25,030, which is less than Oregon’s \$26,561.³⁸ However, Hood River County’s median household income from 2007 to 2011 was \$54,109, which was higher than Oregon’s \$49,850. Hood River County had 10.0% of people below the poverty level from 2007 to 2011, lower than Oregon’s 14.8% rate.³⁹

³⁷ Chase, 2011, 6.

³⁸ The US Census uses 60 months to estimate the past 12 month per capita money income: the number represents the characteristics of a population over a 60-month collection period.

³⁹ US Census, Hood River County QuickFacts.

In Hood River County, 65.4% of people identified as White, Non-Hispanic, and 29.8% of people identified to have Hispanic or Latino origin. 0.7% identified as Black, 1.0% identified as American or Alaska Native, 1.4% identified as Asian, and 0.3% identified as Native Hawaiian or other Pacific Islander. Compared to the state of Oregon, Hood River County has less people who identify as White, Non-Hispanic (Oregon 78.1%) and more people who identify as having Hispanic or Latino origin (Oregon 12.0%). Hood River County has less people who identify as Black (Oregon 2.0%), American Indian and Alaska Native (Oregon 1.8%), Asian (Oregon 3.9%), and Native Hawaiian/Other Pacific Islander (Oregon 0.4%).⁴⁰

Land Availability

As of 2011, there were 545 acres of industrial land available in the Columbia River Gorge region, but a “fairly limited supply of competitive vacant commercial and industrial building floor area.”⁴¹ Vacant land in the Hood River UGB was 111.7 acres.⁴²

20-year net industrial/government/ other land demand in the Hood River UGB ranged from 11-63, while current supply was 38. With low or medium growth, there will be a land surplus, but with high growth, there will be an industrial land shortage.⁴³

The 20-year net office/employment land demand ranges from 16-20 acres, while current supply is 0.7 acres. Thus, office space demand will likely not be met in the future. 20-year net commercial/retail land demand ranges from 23-36 acres, while current supply is 73 acres. For all three growth scenarios, there will be a commercial/retail land surplus in the Hood River UGB.⁴⁴

While there is a relatively large supply of current vacant industrial land in the Columbia River Gorge, there is a limited supply of large vacant development sites within the Hood River UGB. Large industrial users are not likely to be accommodated within the next 20 years.⁴⁵

⁴⁰ US Census, Hood River County QuickFacts.

⁴¹ Chase, 2011, 5.

⁴² Chase, 2011, 11-12.

⁴³ Chase, 2011, 12-14.

⁴⁴ Chase, 2011, 12-14.

⁴⁵ Chase, 2011, 12-14.