



WOODBROOK BUSINESS PARK DEVELOPMENT REPORT

July 2009



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TABLE OF CONTENTS

	Page
Acknowledgments	3
List of Figures & Tables	8
EXECUTIVE SUMMARY	
Introduction	9
Evaluation	9
Conclusions	9
BACKGROUND	
Policy Direction	11
Study Area	12
Current Conditions	13
Purpose of Report	14
SUPPLY AND DEMAND ANALYSIS	
Site Evaluation and Property Inventory	15
Property characteristics	15
Property values	17
Redevelopment potential	19
Conclusions	20
Area-Wide Economic Trends	20
Population and demographic characteristics	20
Income characteristics by source of income	24
Use of special lunch programs in schools	28
Characteristics of the civilian labor force	29
Unemployment rates	30
Out-of-area employment	31
Employment by sector, including target market differentiation	32
Prospective Uses & Market	37
Stakeholder perspectives	37
Zoning	42
EVALUATION OF PHYSICAL CHARACTERISTICS	
Transportation Infrastructure	43
Local streets	43
Cross-Base Highway	43
Transit	43
Rail	43
Military access	44
Conclusions	44

TABLE OF CONTENTS (continued)

EVALUATION OF PHYSICAL CHARACTERISTICS (continued)	
Utilities	48
Storm sewer	48
Sanitary sewer	48
Water	49
Telecommunications	49
Electricity	49
Gas	49
Environment	49
Soils	49
Habitat	49
School	50
Housing	50
Numbers and types of units affected	51
Timing of effects	53
Legal obligations of private property owners to low-income mobile home owners when redeveloping property that may contain such units	53
Legal obligations of private property owners to renters	54
Potential public and private relocation assistance programs	54
Federal housing programs	55
Housing authorities in Pierce County	55
Low-income housing options used in other jurisdictions that might be considered in Lakewood	56
Potential role for private nonprofit organizations in housing relocation	56
Suggested approach to relocation of existing residents and ways to minimize adverse impacts	57
CONCLUSIONS & RECOMMENDATIONS	
Overview	58
Opportunities	58
Issues	58
Targeted Users	59
Alternative uses	59
Physical Improvements	60
Actions for consideration	61
Options for Mitigating Impacts to Housing and Surrounding Uses	63
Residential uses	63
School	63

TABLE OF CONTENTS (continued)

COST AND VALUE ESTIMATION	
Conceptual Infrastructure Improvements Assumptions	64
Transportation	64
Utilities	65
Infrastructure Costs	67
Potential Value of Land After Infrastructure Improvements	68
Potential Value of Structures After Infrastructure Improvements	68
Potential Alternative Target User Willingness to Pay for Improved Land	69
Potential Approach to Property Assembly, Development Management, and Marketing	69
BROAD BEST-USE ALTERNATIVES	70
Building Options	71
Implementation Options	72
Improvements on privately owned sites	72
Improvements in public right of way	73
Alternative Public Actions Considered	73
Infrastructure Improvement Costs	74
Overall Benefits and Costs	75
MARKETING	
Strategy	76
Marketing Challenges	77
Aspects of the proposal intended to address marketing challenges	77
Marketing opportunities and advantages	78
TIMING	78
APPENDIX A	79
Goals & policies related to the study area from <i>City of Lakewood Comprehensive Plan</i>	
APPENDIX B	81
Allowed uses within the Industrial Business Park (IBP) zoning district	
APPENDIX C	93
Preliminary Geotechnical Assessment	
APPENDIX D	99
Wetland, Stream and Priority Habitats Reconnaissance Level Assessment	
APPENDIX E	123
Public Participation	
APPENDIX F	125
Examples of Future Development	
REFERENCES	127

LIST OF FIGURES AND TABLES

	FIGURES	Page
Figure 1	Woodbrook IBP Study Area	12
Figure 2	Woodbrook Business Park Property Ownership	16
Figure 3	Population Growth Trends	21
Figure 4	Map of PSRC Forecast Analysis Zones	22
Figure 5	Personal Income Trends	24
Figure 6	Composition of Personal Income - Pierce County	25
Figure 7	Map of Census Tract & Block Groups	27
Figure 8	Size of Labor Force	30
Figure 9	Unemployment Rates	31
Figure 10	Projected New Jobs by Industry, 2006-2016	35
Figure 11	Lakewood Long-Term Employment Projection	36
Figure 12	Location of Military Access Gates & Rail	44
Figure 13	Industrial Road Section A	46
Figure 14	Industrial Road Section B	46
Figure 15	Industrial Road Section C	47
Figure 16	Industrial Road Section D	47
Figure 17	Prototypical Improvements	62

	TABLES	Page
Table 1	Ownership Size by Percentage	17
Table 2	Assessed Values in the Study Area	19
Table 3	Population and Household Growth Forecast	23
Table 4	Comparison of the Composition of Personal Income	26
Table 5	Population, Housing, and Income	28
Table 6	Public Schools Free and Reduced-Price Lunch Eligibility	29
Table 7	County-to-County Work Flow for Pierce County	31
Table 8	Employment by Sector	32
Table 9	Pierce County Employment, Firm Size and Wages	33
Table 10	Pierce County Top 20 Employers	34
Table 11	Lakewood Employment Forecast by Sector	36
Table 12	Housing Assumed to be "Very Low Rent"	52
Table 13	Infrastructure Improvements Cost	67
Table 14	Possible Alternatives	70
Table 15	Building Options	72
Table 16	Recent Industrial Building Sales	72
Table 17	Potential Public Actions	74
Table 18	Summary of Benefits and Costs	76

EXECUTIVE SUMMARY

Introduction

Conditions are ripe for change in Woodbrook. Lakewood tried to stimulate sewer extension to and jobs for the area by creating an industrially zoned area at the time its comprehensive plan and zoning were adopted in 2000 and 2001, respectively. Ultimately, this was instrumental in gaining funding for the sewer project.

A little more than 20 of the 117+ acres in the industrial zone has been acquired by a single entity in anticipation of the redevelopment opportunity that sewer extension would bring. However, it's clear that any redevelopment might be sporadic and haphazard without an overall look at how the area might redevelop.

In 2008, the Port of Tacoma partnered with the City of Lakewood to fund this study in order to examine redevelopment potential for the area. The contract was let for the work in 2008, and work continued through early 2009.

Evaluation

Information-gathering and analysis was performed by a multidisciplinary consultant team comprised of planners; economists; and public relations, environmental, and engineering professionals. The report contains in-depth information on current conditions, infrastructure and what is lacking, property holdings, zoned uses that might be likely to situate there, likely price points for property, and an array of improvements that would facilitate industrial redevelopment of the area.

Conclusions

In response to the issues and opportunities identified in the study, the following improvement program is suggested to support industrial use in the Woodbrook area:

1. Implement a right-of-way improvement program to create a typical business park image. This includes wider roads, street trees and sidewalks to improve safety and to accommodate truck and pedestrian travel.
2. Relocate the Woodbrook Middle School to a different location. In the interim, use fencing, on-site parking and loading modifications, and landscaping to mitigate the incompatibility between the school and industrial uses.
3. Extend sewer to unserved areas in the eastern portion of the study area as needed.
4. Work with housing agencies to relocate the lowest income units to replacement low income housing in areas with more appropriate levels of public services for residential uses.
5. Work with the Washington State Department of Transportation (WSDOT) and others to construct the segment of the Cross-Base Highway from 146th Street SW to Fort Lewis as soon as possible.

6. Implement landscaping requirements to reinforce streetscape business park image.
7. Provide fencing and landscape buffer for adjacent residential zoned areas.
8. Two of the recommendations (Cross-Base Highway segment construction and Woodbrook Middle School relocation) may involve multi-agency funding with uncertain timing. Costs are provided for infrastructure improvements expected to be funded separately from the school relocation and Cross-Base Highway construction.

Timing is important. To further the goal of creating the highest initial value and maximum number of jobs at the site, it is highly desirable to relocate the school, construct the Cross-Base Highway segment, and install right-of-way improvements prior to development of property. Without these improvements, initial business uses may be of a lower capital value than is optimally desirable for job creation. In recognition of the high cost of school relocation and construction of a Cross-Base Highway segment, the timing and phasing portions of this report discuss potential ways to move ahead without these initial improvements.

BACKGROUND

Policy Direction

Lakewood incorporated in 1996 and includes the Wookbrook neighborhood, which is physically isolated from other parts of the city by McChord Air Force Base (AFB), Fort Lewis, and I-5. Wookbrook is accessible from the I-5 Thorne Lane exit. In consideration of the fact that it has no sewer service, a stimulus to sewer extension was sought during the City's comprehensive planning process which took the form of a redirection of land use from residential to industrial in a significant portion of Woodbrook. A future land-use designation of Industrial was placed upon an approximately 117.5-acre portion of the area with the comprehensive plan's adoption in 2000. A list of the comprehensive plan goals and policies relating to the area is included in **Appendix A**.

This action was not without controversy; it was appealed¹ by the Low-Income Housing Institute, together with other parties, and was also subject to a separate, related appeal by the same parties which dealt with a different aspect of the comprehensive plan. At resolution, the City's redesignation of the area to industrial remained in place.

When new zoning consistent with the City's comprehensive plan was adopted in 2001, a corresponding Industrial Business Park (IBP) zoning district was identified within Woodbrook. The purpose of the IBP zone is to provide "for a coordination of uses and design to facilitate an active integration of employment, services, and business/light industrial uses."² A full list and description of primary permitted, administratively permitted, and conditional (permitted after hearing examiner approval) uses is included in **Appendix B**.

Some private land assembly has been occurring in anticipation of redevelopment, but none of the properties within the IBP zone has been redeveloped to conforming uses at this point. Wholesale redevelopment of this area would displace residents of what is predominantly low-income housing, most privately owned but some publicly owned, and some rentals, including mobile home parks where tenants may own their individual units but lease space within the park. In such cases, displacement would not only involve tenant relocation but also relocation of the units, if they are in suitable structural shape to be moved.

Redevelopment away from residential uses also has the potential to impact the remaining residential uses and adjacent school site.

The City is in the process of extending sewer service to the area, and the industrially zoned area was influential in enabling the City to acquire funding for the sewer system.

¹ CPSGMHB #00-3-0017

² LMC 18A.30.610

This project will bring trunk lines into the area, while redevelopment of individual sites will involve developer extensions.

Study Area

The study area encompasses the area shown as the “IBP Zone” in **Figure 1** below:

Figure 1. Woodbrook IBP Study Area



Current Conditions

The study area pictured above is bounded on the south by Fort Lewis, east by Woodbrook Drive, north by residential area and McChord AFB, and west by Woodbrook Middle School. The approximately 117.5-acre area contains:

- 64 acres of land "currently redevelopable for industrial purposes" defined in this report as total land plus structure value less than \$5 per square foot³ (includes 30 acres of vacant land).
- 600 housing units including 50 vacant units and 550 occupied housing units. Occupied units are estimated⁴ to include 95 mobile home units in three parks and 427 multifamily units. Of these units, 140 have assessed structure value plus land value less than \$7 per square foot and might be redeveloped to industrial use.
- Four acres may be wetlands or other critical area. Specific environmental assessment was outside the scope of this report.

The area has a public domestic water supply, but other public infrastructure in the Woodbrook area is currently less than what would be considered typical for an urban use as the area lacks basic sewer service and sidewalks. The study area was developed to rural standards for residential purposes under County jurisdiction; streets have a narrow pavement width with gravel shoulders. Under the state Growth Management Act, areas that are urban or intended to be urban should have an urban level of services including sidewalks, storm drains, public water and public sewer. Single-family residential use in Woodbrook has become less viable over time due to changes which have isolated the area including construction of I-5 and increased restrictions on movement between the study area and nearby residential areas on McChord AFB.⁵

³ The use of \$5 per square foot for this definition allows an additional \$2 of cost to be allocated to the property to pay for public improvements and still stay below a \$7 per square foot target for industrial land. (Seven dollars per square foot is the approximate current sale price for fully serviced vacant industrial land as of December 2008 used in this report.) See additional discussion of value contained in report.

⁴ Housing unit numbers are based on both 2000 Census data and 2008 Assessor's data. Since these two data sources reflect different time periods, it is not possible to determine the exact distribution of types and characteristics of housing using these available data sources.

⁵ Prior to Lakewood's incorporation, Pierce County sued and won a monetary judgment against the federal government after McChord AFB took possession of part of Woodbrook Road. Two months before the federal government paid the judgment, Lakewood voted to incorporate. Lakewood then asked that Pierce County either turn over the money to the City or improve the Woodbrook area roads and intersections impacted by the closure of Woodbrook Road. This dispute progressed on to a court case and appeal. (144 Wn.2d 118; 30 P.3d 446) The County prevailed and was required neither to give Lakewood the funds nor to complete the road improvements.

Purpose of Report

This report assesses what public actions might be taken to prepare the area for redevelopment in light of current conditions and is intended to be used by the City of Lakewood as a basis for working with those currently owning property and/or living in the study area to identify needed investments and to facilitate an orderly, interconnected and functional industrial area in keeping the City's comprehensive plan. General goals include:

- Identification of economic development opportunities that are in the best interests of the City of Lakewood, Port of Tacoma, Pierce County, and the central Puget Sound region.
- Evaluation and potential adjustment of permitted uses to create value-added redevelopment potential that incorporates a harmonious menu of uses and complementary activities.
- Economic considerations and long-term land-use goals are viewed as the most important factors driving the infrastructure and transportation investments needed to facilitate not only redevelopment, but also efficient freight movement associated with end uses.
- Identification of multiple economic development and marketing actions that will help decision makers to evaluate strategic choice packages, with a long-term perspective
- Estimation of investments that must be made in infrastructure and other actions in order to ready the area for redevelopment. This included examining investments in public works, road improvements, utilities, marketing and business development from a systematic perspective that considered the area's placement on the I-5 corridor and its interrelationship with major transportation facilities. It also included mitigation measures to reduce impacts to abutting non-industrial uses.

Tasks to address the above goals were described in an agreement with the consulting team which included specialists in economics, real estate, public involvement, housing, transportation and infrastructure planning. Work was conducted over a nine-month period between August 2008 and April 2009.

To avoid confusion, it should be noted that this project was contracted for and public outreach was conducted under the name *American Lake Gardens Industrial Redevelopment Master Plan*. Over the course of the project, its name was changed to *Woodbrook Business Park Development Report*. Some references to American Lake Gardens will be still be found in this document where they refer to existing documents with that name.

SUPPLY & DEMAND ANALYSIS

This study begins with evaluating the supply and demand factors relevant to the study area. An evaluation of supply and demand involves three major parts:

- Site evaluation and property inventory
- Current market and labor force information
- Potential land uses and market demand for those uses

The following sections include analysis of each of these factors, drawing conclusions where warranted.

Site Evaluation and Property Inventory

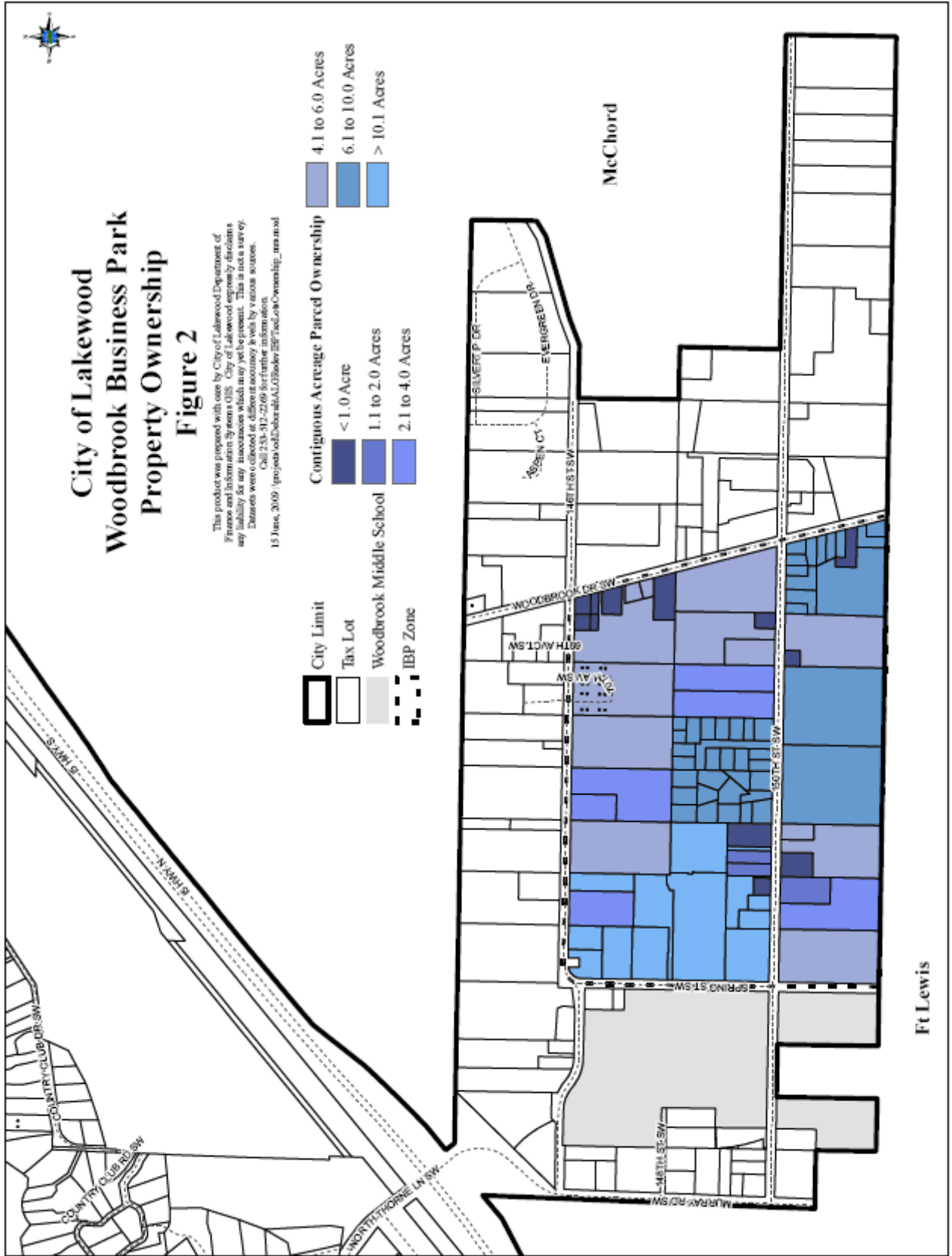
Property characteristics

One important aspect of redevelopment is the site size available to investors. It can be very difficult to assemble land into appropriate "redevelopment parcels" because of the natural tendency of sellers to hold out for a high price if they perceive that their property is a critically needed piece. To determine the extent to which land assemblage difficulties could delay redevelopment in the Woodbrook area, ownership size was analyzed as a representation of the size of sites that may be available for redevelopment without additional purchases.

Ownership size was determined from the Pierce County Assessor's records indicating ownership information by parcel. It is important to distinguish between tax parcels and contiguous ownerships in this discussion. The tax parcels used by the Assessor simply represent separate tax accounts. While most often they also represent legally established lots that may be sold separately, this is not always the case. Contiguous ownership is a more accurate representation of the actual site size that may be available for development since one person or organization can and often does own more than one lot or parcel. If the typical ownership size is not as large as typical development sites, this can be a significant impediment to redevelopment. Before redevelopment could occur, there is a need to assemble properties under a common ownership to result in an appropriate lot size.⁶

Figure 2 on the next page shows ownership size. Ownership size is of concern in the study area because there are many small parcels interspersed with larger ones. On a positive side, a speculator has already begun to assemble properties to create a lot large enough for business and commercial use.

⁶ A type of boundary line adjustment known as a lot consolidation to extinguish internal lot lines and create a single large lot is assumed in the case of land assembly.



Property ownership characteristics are shown below and illustrate that the majority of the area is in an ownership range of three to eight acres. The three- to eight-acre size ownership is adequate for many small manufacturing and office businesses. Larger distribution warehousing or manufacturing uses can demand sites larger than the entire study area and will not be appropriate for this area.

Table 1. Ownership Size by Percentage

Size Range	Acreage by Size Range	Percent of total IBP area in Size Range
0 to 1 acres	7.1	6.0%
1.1 to 3 acres	9.5	8.1%
3.1 to 8 acres	71.3	60.7%
8.1 to 20 acres	29.6	25.2%
<i>Totals</i>	<i>117.5</i>	<i>100.0%</i>

Conclusions drawn from the above information:

1. If a specific development can fit on a parcel of three to eight acres in size, it may be accommodated in the Woodbrook IBP without further land assembly.
2. One large holding of about 21.5 acres exists due to an early property assembly effort, but if there is demand for more than one site of this size, users will need to assemble parcels from more than one owner.

Parcel assembly required for users that need sites of over ten acres in size may make the Woodbrook IBP less attractive than areas where sites of appropriate size are available without assembly.

Property values

Pierce County Assessor's records indicate that properties within the industrially zoned area have a total 2008 assessed value of \$33,044,900 (\$12,868,000 for land and \$20,176,900 for structures).⁷ Anecdotally, it appears at least some of these assessments may be overreaching. It has recently come to light that many assessments across the county have not been field checked within the statutorily required six-year period and instead have been increased based on assumptions that may or may not bear true. While tax assessments may offer an indicator of value, they should not be relied upon in lieu of market value appraisal, which is outside the scope of this report. For the purpose of this report, assessed valuation represents a best available figure in terms of the site's value.⁸

⁷ Values expressed in this report were developed during the last quarter of 2008, prior to 2009 changes in property tax assessments. December 2008 costs and prices are used throughout to maintain a relative consistency. When the word "current" is used in the report with respect to financial figures, it may be assumed to refer to fourth quarter 2008.

⁸ Land and structure values used in this report are from published sources and are generally reported as averages. The average values are not meant to reflect the actual market value of any individual parcel, which is expected to vary widely from the values reported.

If all property within the industrial area were redeveloped with industrial buildings to typical density, this would create a value⁹ of \$143,312,400 to \$184,258,800 million depending on structure type. To create this full value, current structures (valued for tax purposes at \$20,176,900 as noted above) would have to be demolished and infrastructure improvements would have to be made.

The maximum potential current value per square foot for industrial property (vacant land with all services) in this location is estimated at approximately \$7.00.¹⁰ Using the property tax assessment, half of the area currently has combined structure and land values higher than this, but land values would increase as a result of the improvements.

Applying a \$2-per-square-foot increase to the entire study area yields a total increase in assessed value for land (after improvements are made) of \$10.2 million. Comparatively, the *Central Puget Sound Real Estate Research Report* shows warehouse/manufacturing/business park land values for the Tacoma/Fife area of \$6.00 to \$10.00 per square foot.¹¹

Using these assumptions, a \$9 to \$10 million investment in infrastructure (\$2 per square foot over 117.5 acres) in Woodbrook could ultimately create an increase in land and structure value from \$33,044,900 (property tax value) to between \$143,312,400 and \$184,258,800 million. This benefit might occur slowly over a long period of time, reducing its value in current dollars.

Half of the property in the study area has a combined land and structure assessed value of less than \$5 per square foot. A conservative assumption may be that values on this portion would rise by \$2 per square foot upon completion of the public improvements. This may create an immediate increase in value of \$5,118,300. Additional tax revenues from new buildings and sales and land value increase in the rest of the study area would accrue over time.

⁹ *Central Puget Sound Real Estate Research Report Fall 2008*, page 66, indicates that the Tacoma/Fife area has typical building values of \$70 to \$90 per square foot for warehousing in a manufacturing business park. Assuming a land coverage of 40 percent this translates to a building area for 117.5 acres of 2,047,320 square feet and a building and land value for 117.5 acres of \$143,312,400 to \$184,258,800.

¹⁰ This is an estimate of sales price for industrial land in locations such as DuPont. A value of this level would only apply to Woodbrook after the infrastructure improvements proposed are made and assumes that the Woodbrook Middle school has been relocated and the Cross-Base Highway is built.

¹¹ *Central Puget Sound Real Estate Research Report Fall 2008*, page 66.

Redevelopment potential

Redevelopment potential was estimated in the study area by comparing land and structure value information from Pierce County Assessor's records to probable sales prices for industrial land. If the assessed value of land plus structure value is less than the target sale price, the property is considered "redevelopable" as the owner could realize economic benefits from converting to an industrial use. Comparing assessed value to actual sale value may not be completely accurate because assessed values are estimates that are infrequently updated, while sales data represent an actual transaction. As explained previously, the figures are used for the purpose of drawing general conclusions about the study area, not to suggest a specific value for a specific piece of property.

Vacant land. Property sale information for vacant land was provided by subconsultant GVA Kidder Mathews (GVAKM). Twenty-three industrial property land sales were noted by GVAKM for locations near the study area. The average sale price was \$6.24 per square foot. (An average was also calculated by leaving out the three lowest and highest values. This average is \$5.43 per square foot.)

A spot check of the assessed value of land for eight developed industrial/manufacturing uses with zoning similar to the study area was conducted. Land values ranged from \$5.51 to \$14.61 per square foot, with an average of \$8.46 per square foot. Based on this data, GVAKM indicated a suggestion that \$7 per square foot be considered as a "target sale price" for Woodbrook industrial property. *It is important to note that this price assumes relocation of the school, mitigation for residential uses, and construction of the Cross-Base Highway. If these actions do not occur, the assumed "target sale price" for industrial use may be lower, estimated at only \$5 per square foot.*

Developed land. For locations near the study area, GVAKM provided 103 industrial office and warehouse sales. The average sale price was \$112.8 per square foot. Parcels that have an assessed value of land plus structure value of less than \$5 per square foot are assumed to be likely to redevelop to industrial use and able to pay up to \$2 per square foot for public improvements.

Table 2. Assessed Values in the Study Area

Category	Acres	Average assessed value for structures plus land by category
Vacant (assessed value is for land only)	34.23	\$2.24
Developed/redevelopable (assessed value of land plus structures less than \$5/sf)	30.96	\$3.33
Developed/redevelopable (assessed value of land plus structures greater than \$5 but less than \$7/sf)	10.49	\$5.74
Developed (assessed value of land plus structures greater than \$7/sf)	41.81	\$14.42
<i>Total</i>	<i>117.49</i>	

Conclusions

The above information reveals that:

1. The 65 acres of the study area that is vacant land, or has assessed value or land plus structures of below \$5 per square foot, is assumed to be economically viable to redevelop to industrial use and able to pay for infrastructure to bring sale price up to the \$7 per square foot level.
2. An additional 10.5 acres of the study area has assessed value of structures and land between \$5 and \$7 per square foot. It may be economically viable for this area to redevelop for industrial use, but the ability to pay for infrastructure is uncertain.
3. An additional 40 acres of land is developed, with assessed value of land and structures higher than the sales price for industrial property. This land is not expected to redevelop for industrial purposes in the foreseeable future.
4. Considering that 40 acres of the study area may not redevelop to industrial use, it presents a challenge to creation of a cohesive business park area. A mixed-use business and residential area may exist for a long period of time.

Area-Wide Economic Trends

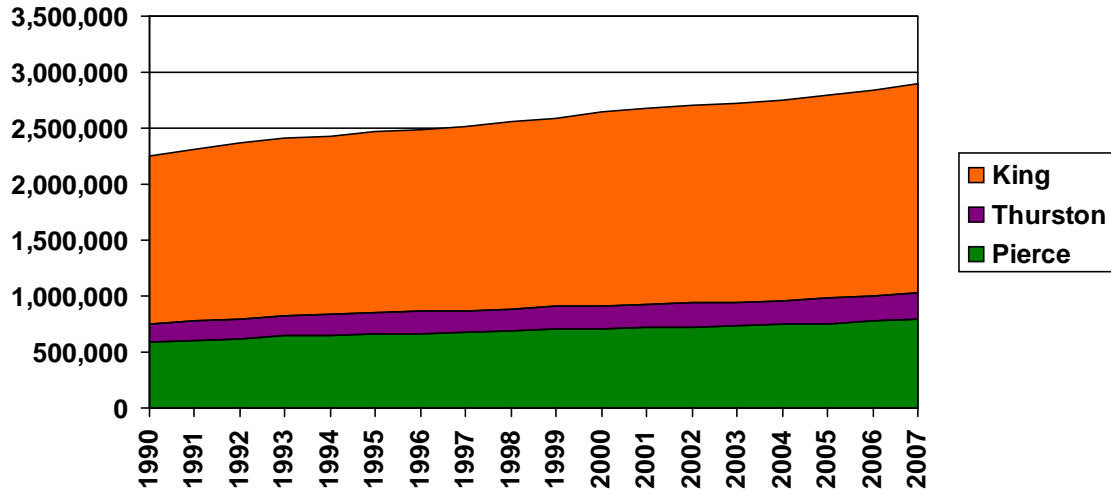
The following work examines economic trends in Pierce, King and Snohomish counties. Factors examined include population, income, and employment, among others. In addition to analysis at the regional level, information is presented for the City of Lakewood and for the Woodbrook area.

Population and demographic characteristics

The Woodbrook area is centrally located in the central/southern Puget Sound region and is surrounded by a large and growing population. This area includes Pierce County, as well as King County to the north and Thurston County to the south. Population growth figures for these counties were provided by the Puget Sound Regional Council (PSRC) and Thurston Regional Planning Council (TRPC).

Between 1990 and 2007, the population of this area grew from 2.25 million to nearly 2.9 million, an increase of 650,000 residents. Population growth averaged 1.5 percent per year over that period, with faster growth between 1990 and 2000 (1.6 percent per year) than between 2000 and 2007 (1.3 percent per year).

Figure 3. Population Growth Trends¹²



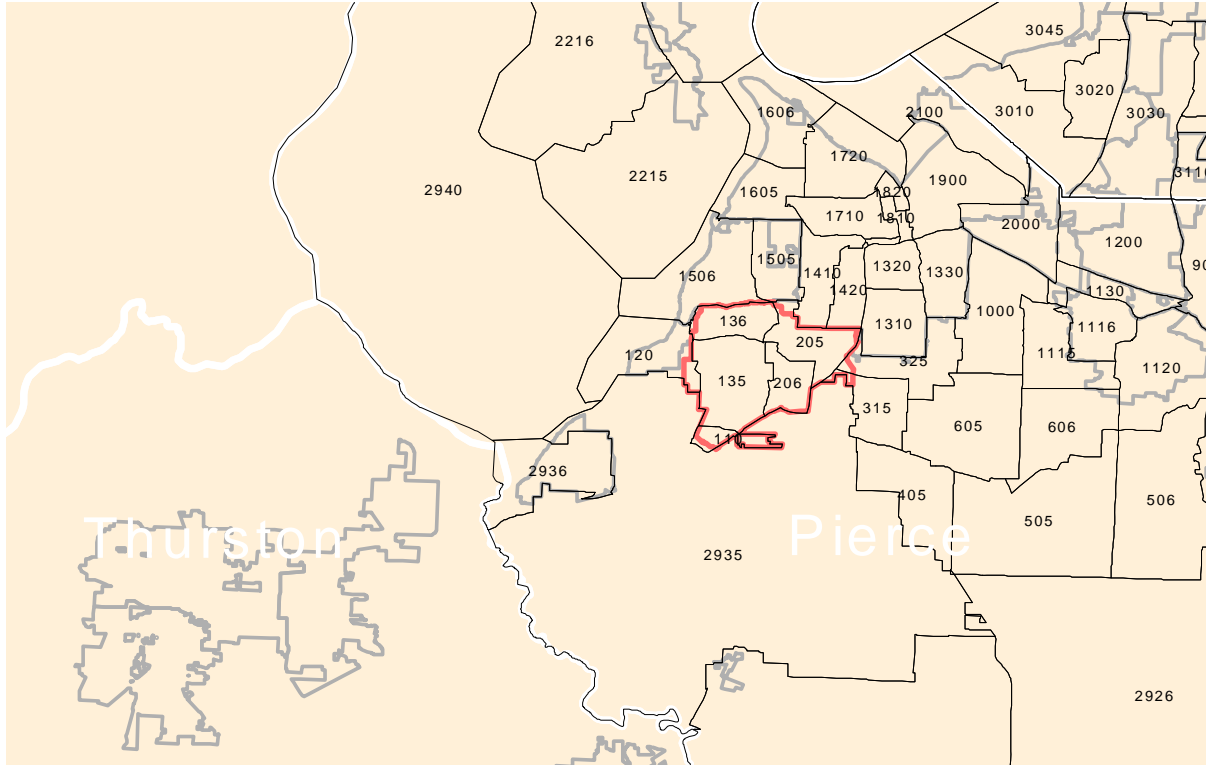
Of the three counties examined, Thurston County has seen the fastest growth in population, followed by Pierce County, and then distantly by King County. Between 1990 and 2007, the population of Thurston County grew at a compound annual rate of 2.3 percent; since 2000 the rate has averaged 2.0 percent. For Pierce County, the population growth rate averaged 1.8 percent between 1990 and 2000, then slowed slightly to 1.7 percent per year between 2000 and 2007. In King County, the population grew by 1.2 percent over the 17-year period, including average growth of 1.4 percent per year during the 1990s and 1.0 percent per year during the current decade.

In addition to providing historical time series, the PSRC produces forecasts of population, housing, and employment at the sub-county Forecast Analysis Zone (FAZ) level. As shown in the following map, Lakewood includes all or most of five FAZs, including:

- 110 - Tillicum/American Lakes (sic) Gardens
- 135 - Lakes
- 136 - Fort Steilacoom
- 205 - Monte Vista/Flett
- 206 - Lakewood area/Ponders Corner

¹² Source: PSRC, TRPC

Figure 4. Map of PSRC Forecast Analysis Zones¹³



According to forecasts from the PSRC, the five FAZs in Lakewood are expected to see population growth of nearly 6,700 residents between 2010 and 2030. The total number of households is projected to climb by more than 4,400 during that period, with the addition of 2,500 multi-family households and 1,900 single-family households.

¹³ Source: PSRC, BST Associates

Table 3. Population and Household Growth Forecast¹⁴

FAZ	Location / Nearest City	2000	2010	2020	2030	Growth 2010- 2030	CAGR 2010- 2030
Total Population							
110	Tillicum/American Lakes (sic) Gardens	4,754	4,650	4,893	5,376	726	0.7%
135	Lakes	14,441	14,825	16,026	17,320	2,495	0.8%
136	Fort Steilacoom	12,274	12,976	13,261	14,022	1,046	0.4%
205	Monte Vista/Flett	12,321	12,933	12,723	12,448	(485)	-0.2%
206	Lakewood area/Ponders Corner	12,334	12,892	14,248	15,803	2,911	1.0%
	Total	56,124	58,276	61,151	64,969	6,693	0.5%
Total Households							
110	Tillicum/American Lakes (sic) Gardens	1,954	1,949	2,122	2,411	462	1.1%
135	Lakes	5,843	6,116	6,840	7,645	1,529	1.1%
136	Fort Steilacoom	4,808	5,105	5,281	5,702	597	0.6%
205	Monte Vista/Flett	5,213	5,576	5,665	5,721	145	0.1%
206	Lakewood area/Ponders Corner	5,172	5,507	6,290	7,208	1,701	1.4%
	Total	22,990	24,253	26,198	28,687	4,434	0.8%
Single Family Households							
110	Tillicum/American Lakes (sic) Gardens	883	865	934	1,049	184	1.0%
135	Lakes	5,104	5,184	5,555	5,945	761	0.7%
136	Fort Steilacoom	2,671	2,770	2,802	2,941	171	0.3%
205	Monte Vista/Flett	2,450	2,618	2,665	2,690	72	0.1%
206	Lakewood area/Ponders Corner	2,434	2,580	2,926	3,304	724	1.2%
	Total	13,542	14,017	14,882	15,929	1,912	0.6%
Multi Family Households							
110	Tillicum/American Lakes (sic) Gardens	1,071	1,084	1,188	1,362	278	1.1%
135	Lakes	739	932	1,285	1,700	768	3.1%
136	Fort Steilacoom	2,137	2,335	2,479	2,761	426	0.8%
205	Monte Vista/Flett	2,763	2,958	3,000	3,031	73	0.1%
206	Lakewood area/Ponders Corner	2,738	2,926	3,364	3,904	978	1.5%
	Total	9,448	10,235	11,316	12,758	2,523	1.1%

The majority of the population growth is expected to occur in FAZs 135 and 206 (see map). The Lakes FAZ (FAZ 135) is projected to add approximately 1,530 households between 2010 and 2030, evenly split between single-family households (761 units) and multi-family households (768 units). The Lakewood area/Ponders Corner FAZ (FAZ 206) is projected to add 1,700 new households during that period, with more multi-family (978 units) than single-family (724 units).

¹⁴ Source: PSRC, BST Associates

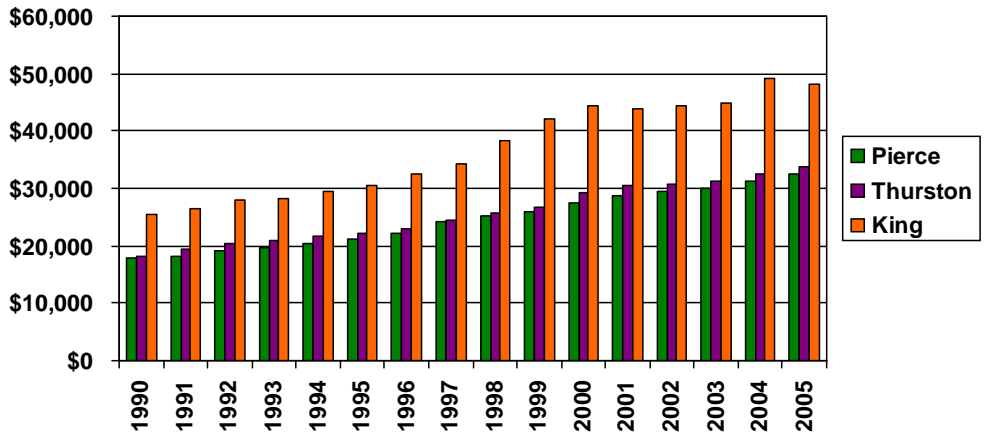
Projected growth for the Tillicum/American Lakes (sic) Gardens FAZ (FAZ 110) is 726 new residents and 462 new households between 2010 and 2030. This household forecast includes 184 new units of single-family housing and 278 new units of multi-family housing.

Income characteristics by source of income (wage, salary, retirement, investments, and transfers)

Personal income in the three-county area has increased substantially over the past 15 years, with compound annual growth rates of between 4.0 and 4.4 percent from 1990 through 2005. The rate of growth was fastest in King County (4.4 percent), followed by Thurston County (4.2 percent), and Pierce County (4.0 percent). In contrast, the Consumer Price Index grew by an average of just 2.7 percent during that same period.

In Pierce County, personal income grew from \$17,900 per capita in 1990 to \$27,600 in 2000, and to more than \$32,400 in 2005. However, growth was slower in the last five years of that range than during the middle five years: between 1995 and 2005 personal income grew at 5.4 percent per capita, but from 2000 through 2005 this rate of growth dropped to 3.3 percent per year on average.

Figure 5. Personal Income Trends¹⁵



Personal income is generated by a number of sources, including net earning (wages and owners income), retirement payments, investment income (dividends, interest, and rent), unemployment benefits, and income maintenance. In Pierce County, net earnings account for the majority of personal income, and this share has been growing for nearly a decade.

According to data from the Bureau of Economic Analysis, in Pierce County the share of net income that is generated by net earnings increased steadily between 1996 and 2004

¹⁵ Source: Bureau of Economic Analysis

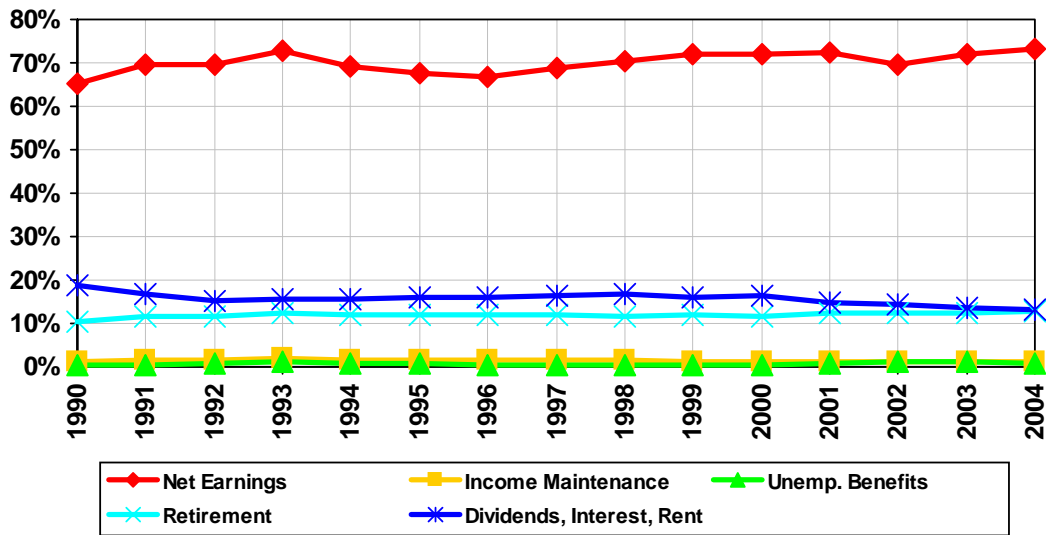
(the last year for which data was available). In 1996 net earnings accounted for 68.8 percent of personal income, and by 2004 that had increased to 73.1 percent.

Investments are the second-biggest source of personal income in Pierce County. The share of personal income generated by investments (i.e. dividends, interest, and rent) increased slowly between 1992 and 2000, but dropped substantially in recent years. In 1990, investments accounted for nearly 19 percent of per capita personal income in Pierce County. This share dropped to 15.3 percent in 1992, then slowly climbed back to 17 percent in 1998. Since 1998, the share of income generated by investments has declined steadily, to a low of 13.4 percent in 2004.

Retirement payments are the next largest source of personal income in Pierce County, accounting for approximately 12 percent of income for more than a decade. In 2000, retirement income accounted for 10.6 percent of per capita income. This share grew to 12.4 percent in 1993 and hovered around the 12 percent level until 2000. Since 2000, retirement payments have accounted for an increasing share of personal income, growing to 12.8 percent of total by 2004.

Income maintenance payments and unemployment benefits are minor sources of personal income in Pierce County. Since 1990, unemployment benefits have accounted for an average of less than one percent of per capita personal income, while income maintenance payments have accounted for an average of 1.5 percent.

Figure 6. Composition of Personal Income – Pierce County¹⁶



In comparison with King and Thurston counties, the share of personal income generated by net earnings (i.e., wages, owners’ incomes) is relatively high. It has also shown more of a change than that of the other counties. As described above, net earnings generated

¹⁶ Source: Bureau of Economic Analysis

an increasing share of personal income between 1990 and 2004. In Thurston County, the share also grew but at a slower rate, and in King County, net earnings accounted for a decreasing share of total personal income.

Retirement payments account for similar shares of total personal income in Pierce and Thurston counties, approximately 13 percent in 2004. For both of these counties, that represents a substantial increase from 1990, when the share was 10.6 percent for Pierce County and 11.2 percent for Thurston County. In contrast, retirement payments have accounted for a decreasing share of personal income in King County. In 1990, that share was 8.3 percent, and by 2004, it had dropped to 7.4 percent.

Investment income, on the other hand, accounts for a much larger share of income in King County than either Pierce or Thurston county. In 2004, investments accounted for more than 21 percent of personal income in King County, but less than 14 percent in both Pierce and Thurston counties.

In all three counties, unemployment benefits and income maintenance payments account for less than three percent of total personal income.

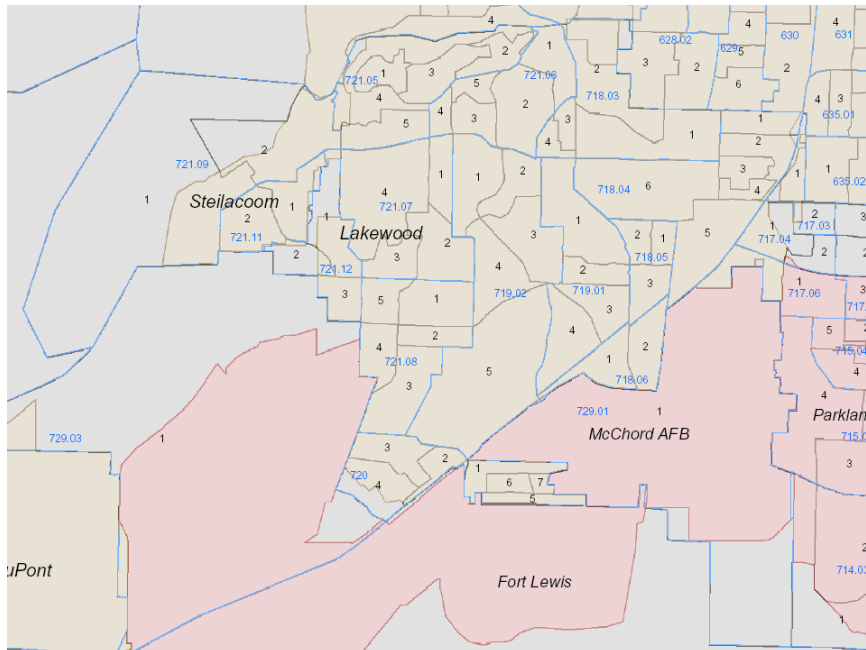
Table 4. Comparison of the Composition of Personal Income (% of Total Income)¹⁷

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Net Earnings															
Pierce	65.1	69.7	69.6	72.7	69.4	67.6	66.7	68.8	70.6	72.2	72.1	72.5	69.8	72.0	73.1
King	70.9	70.6	71.9	71.9	70.9	70.4	70.7	71.3	72.5	74.9	74.5	74.3	73.3	73.2	69.9
Thurston	68.2	68.2	69.3	69.5	68.6	68.3	67.8	68.3	68.2	68.8	69.1	69.7	70.8	71.1	71.0
Unemp, Income Maintenance															
Pierce	1.7	2.3	2.5	2.9	2.7	2.5	2.3	2.0	2.0	1.9	1.8	1.9	2.5	2.5	2.0
King	0.9	1.2	1.4	1.6	1.6	1.4	1.3	1.1	0.9	0.9	0.8	1.1	1.5	1.5	1.0
Thurston	1.5	1.8	2.1	2.2	2.2	2.1	2.0	1.7	1.7	1.7	1.5	1.6	2.0	1.9	1.6
Retirement															
Pierce	10.6	11.6	11.7	12.4	12.0	12.2	12.1	12.1	11.8	11.9	11.8	12.5	12.3	12.6	12.8
King	8.3	8.4	8.3	8.5	8.4	8.6	8.4	8.2	7.5	7.1	6.9	7.6	7.6	7.8	7.4
Thurston	11.2	11.1	11.4	11.4	11.6	12.1	12.2	11.9	11.7	11.9	11.7	12.4	12.6	12.9	13.1
Dividends, Interest, etc.															
Pierce	18.7	16.7	15.3	15.8	15.8	15.9	16.1	16.5	17.0	15.9	16.5	14.9	14.4	13.5	13.4
King	19.9	19.9	18.4	18.1	19.1	19.5	19.6	19.4	19.1	17.1	17.8	17.1	17.6	16.7	21.9
Thurston	19.1	18.9	17.3	16.9	17.6	17.5	18.1	18.1	18.5	17.6	17.6	16.3	14.6	13.4	13.1

The conclusion drawn from these personal income statistics is that residents of Pierce County work for a living and earn an increasing share of their income from jobs.

¹⁷ Source: Bureau of Economic Analysis

Figure 7. Map of Census Tract & Block Groups¹⁸



The 2000 Census provides detailed information on the population of the Woodbrook/Tillicum area, reflective of 1999. Although this data is not as current as other data sets, it provides information at a much finer geographic level and is useful in examining small areas. As shown on the map, census data is divided into census tracts, and census tracts are further divided in block groups. Woodbrook and Tillicum both fall into Census Tract 720. Census Tract 720 contains seven block groups of which four (BG 1, 5, 6, and 7) are in Woodbrook and three (BG 2, 3, and 4) are in Tillicum.

As shown in **Table 5** below, in 2000 there were stark differences between the residents of Woodbrook and the rest of the census tract, city, and county. Residents of Woodbrook were substantially younger than elsewhere, much more likely to rent their housing, and had much lower incomes.

Woodbrook had a population of 2,694, or approximately 57 percent of the census tract total. Census Tract 720, in turn, contained approximately 8.2 percent of Lakewood's 58,211 residents. In terms of ethnicity, the share of residents who were white was the same in both Census Tract 720 and in Lakewood, 65 percent. In Woodbrook, the share of the population that is white was only slightly lower, at 63 percent.

¹⁸ Source: Census 2000

Table 5. Population, Housing, and Income¹⁹

	Census Tract 720	Woodbrook				Tillicum			Lakewood	Pierce County
		BG 1	BG 5	BG 6	BG 7	BG 2	BG 3	BG 4		
Total population	4,754	530	678	864	622	614	540	906	58,211	700,820
White alone	3,100	330	435	522	423	434	349	607	37,734	549,369
Median age	26.3	26.2	23.1	24.0	22.8	32.1	32.2	31.5	35.0	34.1
Housing units	2,189	246	276	378	287	287	281	434	25,396	277,060
Households	1,954	215	254	336	276	262	222	389	23,792	260,800
Vacant	235	31	22	42	11	25	59	45	1,604	16,260
Ave household size	2.43	2.47	2.67	2.57	2.25	2.34	2.43	2.33	2.38	2.60
Owner occupied	421	37	19	62	46	70	68	119	11,357	165,598
Renter occupied	1,533	178	235	274	230	192	154	270	12,435	95,202
% Renter occupied	78.5%	82.8%	92.5%	81.5%	83.3%	73.3%	69.4%	69.4%	52.3%	36.5%
Median household income in 1999	\$21,853	\$21,250	\$23,750	\$20,625	\$19,900	\$21,157	\$23,750	\$24,167	\$36,422	\$45,204
Per capita income in 1999	\$11,479	\$9,389	\$10,996	\$7,984	\$9,098	\$16,387	\$18,405	\$10,449	\$20,569	\$20,948

Housing in Woodbrook was overwhelmingly renter-occupied. In the four block groups making up this area, renter-occupied units account for an average of 84.8 percent of all housing units. In contrast, in Tillicum, renter-occupied units accounted for 70.6 percent, while in Lakewood the share was 52.3 percent and in Pierce County as a whole, 36.5 percent.

The average household size was marginally higher in Woodbrook than it was elsewhere in Lakewood. In Woodbrook, the average household had 2.49 residents, compared with 2.36 per household in Tillicum and 2.38 per household in Lakewood overall. In Pierce County, the average household had 2.60 residents.

Household income is the measure by which Woodbrook differed most dramatically from the rest of the area. Per capita income in Woodbrook averaged \$9,276, and in Block Group 6 it was just \$7,984. In Tillicum, per capita income averaged \$14,304, and for Census Tract 720 as a whole, per capita income averaged \$11,479. In contrast, at \$20,569, per capita income in Lakewood overall was more than twice as high as in Woodbrook, and the same was true of per capita income in Pierce County (\$20,948).

Use of special lunch programs in schools

Public schools in Lakewood are part of the Clover Park School District. As indicated by eligibility for free or reduced-price lunches, students in this district are substantially more likely to come from low-income families than they are in Pierce County as a whole or elsewhere in the state. Furthermore, at the two schools closest to the study area,

¹⁹ Source: 2000 Census. “BG” means Block Group.

Woodbrook Middle School and Tillicum Elementary School, family incomes are lower than the district-wide average.

Table 6. Public Schools Free and Reduced-Price Lunch Eligibility²⁰

School/District/Area	2002	2003	2004	2005	2006	2007
Woodbrook Middle School	62.7%	65.9%	65.6%	62.5%	74.6%	71.5%
Tillicum Elementary School	92.0%	92.6%	88.1%	92.7%	92.8%	94.9%
Clover Park School District	52.9%	53.6%	55.8%	59.0%	61.9%	63.8%
Pierce County	36.6%	37.0%	36.3%	36.7%	36.6%	37.8%
Washington	35.5%	37.0%	37.5%	37.9%	37.5%	38.2%

These statistics show that 71.5 percent of students at Woodbrook Middle School are eligible for free or reduced-price lunches. This figure represents a decline from the 2006 level of 74.6 percent but also represents a substantial increase from the 2002 level of 62.7 percent. At Tillicum Elementary, 94.9 percent of all students were eligible in 2007, the highest level of the past six years.

In contrast to these two schools, the eligibility rate in the Clover Park School District overall was 63.8 percent in 2007, which also represents the highest level in the last six years. County-wide, the 2007 eligible share was just 37.8 percent, which represented a slight increase from the 2002 level of 36.6 percent. Pierce County’s 2007 eligibility rate was slightly lower than the statewide average of 38.2 percent.

Characteristics of the civilian labor force

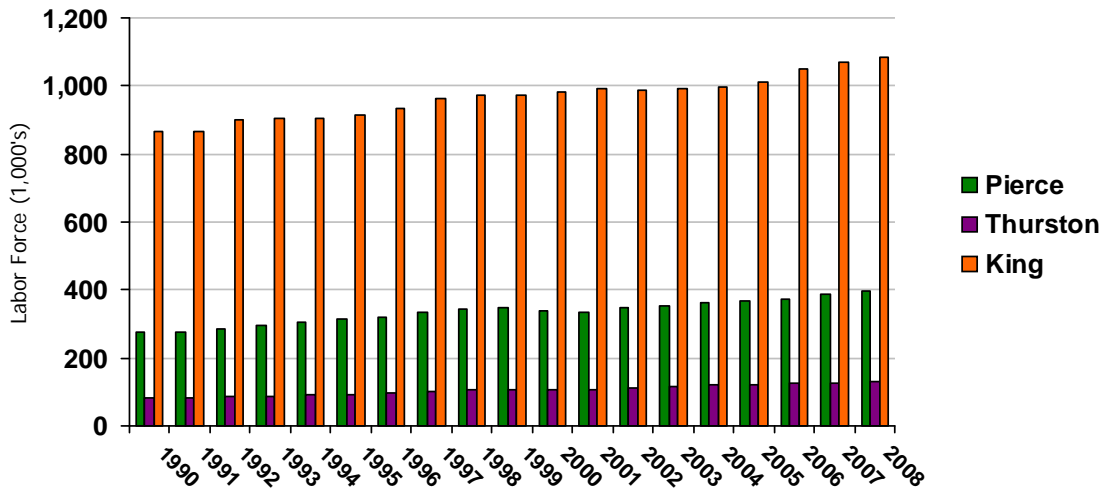
The labor force in the three-county area has been growing steadily over the past decade. From a base of 1.42 million in 1998, the workforce grew to 1.61 million in 2008, representing average growth of 1.3 percent per year.

In Pierce County, the rate of growth of the labor force was stronger, averaging 1.5 percent per year. The total number of workers grew by 55,000 over the last decade, from 342,500 in 2008 to 397,500 in 2008.

In Thurston County, the labor force grew even faster, 2.4 percent per year, and 27,700 new workers were added to the labor force over the last decade. In King County, labor force growth was much slower (i.e., less than 1.1 percent per year), but with a much larger base to grow from the total number of workers added over the past decade was nearly 110,000. For Washington State as a whole, the workforce grew at 1.3 percent per year between 1998 and 2008.

²⁰ Source: Office of the Superintendent of Public Instruction

Figure 8. Size of Labor Force²¹



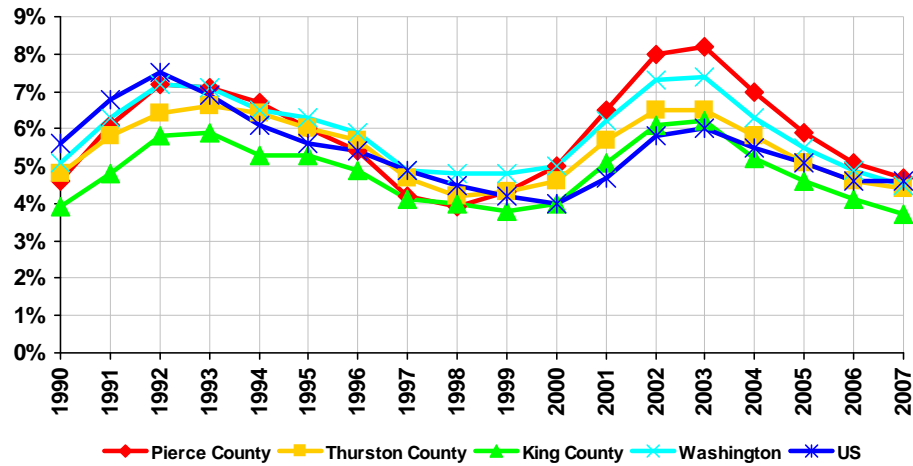
Unemployment rates

Unemployment is a bigger problem in Pierce County than in King or Thurston county and is also higher than the state or national averages. This has not always been the case: as recently as 1998, the unemployment rate in Pierce County was lower. For all of three counties, 1998 represented the best employment picture since 1990: in Pierce County, unemployment was less than four percent, and for each of the other counties it was less than five percent. As the economy began to slow, the unemployment rate began to rise, and the recession of the early 2000s led to substantially higher unemployment rates. Pierce County was hit especially hard, with unemployment peaking at 8.2 percent in 2003. In Thurston King counties, the unemployment rate was 6.5 percent or less in 2003; in Washington State it was 7.4 percent, and in the US it was 6.0 percent.

Between 2003 and 2007, unemployment rates dropped for each of these areas but remained highest in Pierce County, at 4.7 percent. In King County, the unemployment rate dropped to 3.7 percent; in Thurston County, 4.4 percent; in Washington State, 4.5 percent; and in the US, 4.6 percent.

²¹ Source: Bureau of Economic Analysis

Figure 9. Unemployment Rates²²



Out-of-area employment

Pierce County does not have as many jobs as it does workers, which creates a leakage of workers out of the county. At the time of the 2000 Census, there were 52,466 more workers living in Pierce County but holding jobs outside the county than there were workers who lived in other counties but worked in Pierce County.

As illustrated in **Table 7**, the 2000 Census reported that Pierce County had a resident workforce of more than 324,000 workers but only 228,000 of these worked in Pierce County, indicating that 96,000 Pierce County workers actually worked in other counties. Balancing this out somewhat was the fact that 43,500 Pierce County jobs were filled by workers from other counties. The net effect of these two worker flows was that there were nearly 52,500 fewer jobs in Pierce County than workers.

Table 7. County-to-County Work Flow for Pierce County²³

Category	
Total Workers by Place of Work	271,819
County Resident Workforce	324,285
Resident Workers: Workers Who Worked in County of Residence	228,282
Resident Workers as a Percent of County Resident Workforce	70.4%
County Resident Workforce as a Percent of Total Workers Employed in County	119.3%
Resident Workers as a Percent of Total Workers in County	84.0%
Residents Working in Other Counties	96,003
Workers Residing in Other Counties	43,537
Net Flow of Workers	-52,466

²² Source: Bureau of Labor Statistics

²³ Source: 2000 Census

Employment by sector, including target market differentiation

Pierce County had an average of 274,832 jobs in 2007, and nearly one out of five of these jobs was generated by government. These statistics indicate that local government, including schools, was the major government sector, followed by state and federal government. It should be noted, however, that these figures do not include the tens of thousands of military personnel stationed at Fort Lewis (including Madigan Army Medical Center) or McChord AFB.

Table 8. Employment by Sector²⁴

NAICS Code	Industry	Pierce		Thurston		King County		State	
		Avg Emp	% of Total	Avg Emp	% of Total	Avg Emp	% of Total	Avg Emp	% of Total
11	Ag., forestry, fishing and hunting	1,188	0%	1,507	2%	2,541	0%	84,699	3%
21	Mining	249	0%	70	0%	N/A	N/A	3,036	0%
22	Utilities	667	0%	245	0%	N/A	N/A	4,648	0%
23	Construction	23,779	9%	4,910	5%	71,380	6%	194,491	7%
31-33	Manufacturing	20,123	7%	3,310	3%	111,899	10%	289,286	10%
42	Wholesale trade	11,135	4%	2,716	3%	61,610	5%	125,710	4%
44-45	Retail trade	32,824	12%	11,395	11%	112,053	10%	321,206	11%
48-49	Transportation and warehousing	10,275	4%	1,702	2%	45,200	4%	85,493	3%
51	Information	3,677	1%	1,417	1%	75,412	6%	102,006	3%
52	Finance and insurance	8,703	3%	2,470	2%	50,502	4%	101,824	3%
53	Real estate and rental and leasing	4,670	2%	1,359	1%	25,425	2%	49,968	2%
54	Professional and technical services	8,618	3%	3,190	3%	90,027	8%	151,728	5%
55	Management of companies and enterprises	1,231	0%	643	1%	24,667	2%	34,648	1%
56	Administrative and waste services	14,844	5%	4,088	4%	72,417	6%	149,995	5%
61	Educational services	3,813	1%	1,267	1%	15,552	1%	31,524	1%
62	Health care and social assistance	34,218	12%	10,473	11%	104,865	9%	296,667	10%
71	Arts, entertainment, and recreation	3,851	1%	1,104	1%	21,277	2%	45,563	2%
72	Accommodation and food services	23,137	8%	7,427	7%	88,979	8%	230,185	8%
92	Government	54,152	20%	36,146	36%	153,172	13%	509,022	17%
	Local government	33,140	12%	11,484	12%	86,656	7%	313,189	11%
	State government	10,741	4%	23,697	24%	45,195	4%	127,191	4%
	Federal government	10,271	4%	965	1%	21,321	2%	68,642	2%
	Total	274,832	100%	99,560	100%	1,173,579	100%	2,926,417	100%

Health care and social assistance is the next largest employment sector, generating more than 34,000 jobs, or 12 percent of the total. The retail sector is almost as large, with nearly 33,000 jobs and approximately 12 percent of the total. Other key sectors include: construction (23,700 jobs, nine percent of total); accommodation and food service (23,100 jobs, eight percent of total); manufacturing (12,100 jobs, seven percent of total); administrative and waste service (14,800 jobs, five percent of total); and transportation

²⁴ Source: Washington State Employment Security Department (ESD), for 2007.

and warehousing (10,300 jobs, four percent of total). Many other sectors also provide employment, but none of these generated more than 9,000 jobs or four percent of the total.

There is a wide variation among the different industries in the average wages each pays. The largest employment sector, government (excluding military personnel), pays some of the higher average wages in the county, averaging \$47,000. Health care, the next-largest job generator, also pays well, with average wages of \$41,000; and construction wages average nearly \$47,000. In contrast, wages for accommodation and food service average just \$14,400, and for retail average \$28,300.

Table 9. Pierce County Employment, Firm Size and Wages²⁵

NAICS Code	Industry	Avg # of Firms	Avg Wages	Avg Emp	Avg # of Employees
11	Ag., forestry, fishing and hunting	162	\$27,500	1,188	7.3
21	Mining	8	\$55,400	249	31.1
22	Utilities	25	\$64,200	667	27.2
23	Construction	2,741	\$46,900	23,779	8.7
31-33	Manufacturing	639	\$53,100	20,123	31.5
42	Wholesale trade	970	\$48,500	11,135	11.5
44-45	Retail trade	1,543	\$28,300	32,824	21.3
48-49	Transportation and warehousing	428	\$45,500	10,275	24.0
51	Information	109	\$50,100	3,677	33.8
52	Finance and insurance	568	\$69,700	8,703	15.3
53	Real estate and rental and leasing	731	\$26,900	4,670	6.4
54	Professional and technical services	1,154	\$51,500	8,618	7.5
55	Management of companies	46	\$66,000	1,231	26.8
56	Administrative and waste services	868	\$28,600	14,844	17.1
61	Educational services	165	\$34,400	3,813	23.1
62	Health care and social assistance	1,451	\$41,000	34,218	23.6
71	Arts, entertainment, and recreation	210	\$20,800	3,851	18.4
72	Accommodation and food services	1,280	\$14,300	23,137	18.1
81	Other services	5,497	\$22,700	13,677	2.5
92	Government	173	\$47,000	54,152	312.6
	Local government	34	\$52,600	10,271	302.1
	State government	57	\$44,200	10,741	189.3
	Federal government	83	\$46,100	33,140	401.7
	Total	18,765	\$39,600	274,832	14.6

Industries with average wages higher than government include: utilities, mining, manufacturing, wholesale trade, information, finance and insurance, professional and technical services, and management of companies. While these sectors are not the largest providers of jobs in Pierce County, several do generate significant employment. According to analysis by the Economic Development Board for Tacoma-Pierce County, the largest source of jobs in Pierce County is the military. This differs from the state

²⁵ Source: ESD

reporting because it includes military personnel as well as civilian employment. In contrast, state employment data does not include the military personnel.

As shown in **Table 10**, the three main military employers in the county, Fort Lewis, McChord AFB, and Madigan Army Medical Center, collectively employ more than 50,000 people. Of this total, approximately 34,000 are military personnel.

According to this analysis, the only two non-public entities among the top ten employers are health care systems – Multicare Health System and Franciscan Health System (which owns St. Clare Hospital in Lakewood), with close to 10,000 employees combined. Most of the firms in the 11th through 20th positions are in the private sector, including three in the retail sector, two in finance and insurance, one in manufacturing, and one in accommodation and food service.

Table 10. Pierce County Top 20 Employers²⁶

Rank	Organization	Employees	Detail	Industry
1	U.S. Army Fort Lewis (Total)	40,091		Military
	(Military)		28,719	Military
	(Civilian)		11,372	Military
2	Local Public School Districts	13,434		Education
3	U.S. Air Force McChord	10,443		Military
	(Civilian & Reserve)		6,693	Military
	(Military)		3,750	Military
4	Washington State Employees	8,099		Government/Public Offices
5	Multicare Health System	5,832		Health Services
6	Franciscan Health System	4,041		Health Services
7	U.S. Army Madigan Army Medical Center	3,796		Military Health Care
	(Civilian)		2,421	Military Health Care
	(Military)		1,375	Military Health Care
8	Pierce County Government	3,220		Government/Public Offices
9	Washington State Higher Education	3,170		Colleges
10	WA State National Guard *	2,711		Military
11	Tacoma, City Of (Does Not Include Tacoma Public Utilities)	2,394		Government/Public Offices
12	Fred Meyer Stores	2,383		Retail
13	Wal-Mart	1,990		Retail
14	Emerald Queen Casino	1,915		Casino Gaming
15	Boeing Company, The (Frederickson)	1,760		Aerospace
16	Safeway Stores, Inc.	1,635		Retail (Grocer)
17	U.S. Postal Service	1,552		Government/Public Offices
18	Tacoma Public Utilities	1,313		Public Utility
19	Russell Investments	1,144		Investment Management
20	State Farm Insurance Companies	1,133		Insurance

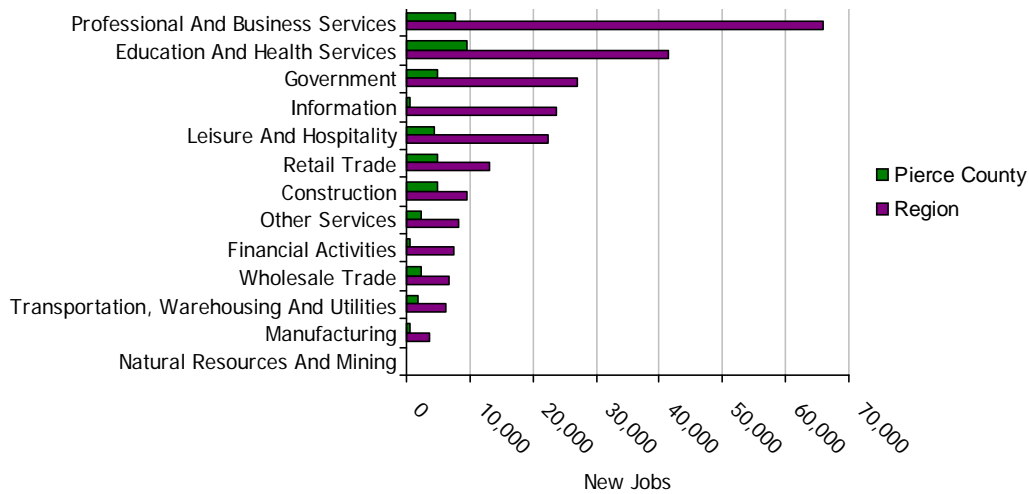
According to projections from the ESD, between 2006 and 2016, Pierce, King, and Snohomish counties are expected to see more new jobs in professional and business

²⁶ Source: Economic Development Board for Tacoma-Pierce County

services than in any other sector, more than 65,000 new jobs (see Figure 8). The next four largest generators of new jobs are expected to be education and health services, government, information, and leisure and hospitality, each of which is projected to add more than 20,000 new jobs.

In Pierce County, education and health services are projected to see the most new jobs, nearly 10,000. The next largest is professional and business services, followed by retail trade, construction, government, and leisure and hospitality.

Figure 10. Projected New Jobs by Industry, 2006-2016²⁷



Forecasts developed by PSRC group industries into five major categories, including government/education, finance/insurance/real estate/services (FIRES), retail, wholesale/transportation/communications/utilities (WTCU), and manufacturing.

According to the latest projections, the largest sources of new jobs in Lakewood through the year 2040 are expected to be in the FIRES sector. From an estimated 10,277 jobs in 2008, this sector is projected to add another 4,542 jobs.

²⁷ Source: ESD. “Region” as shown here, includes Pierce, Thurston, & King counties.

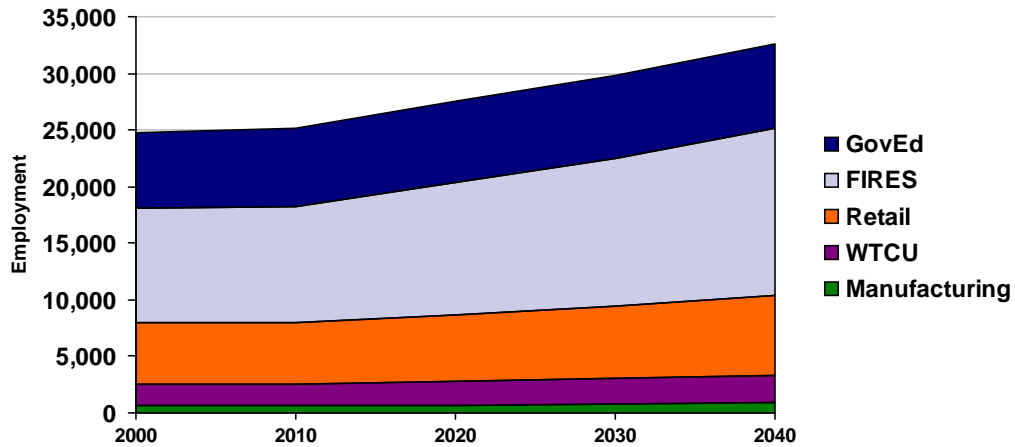
Table 11. Lakewood Employment Forecast by Sector²⁸

Industry	2000	Est					08-40
		2008	2010	2020	2030	2040	
Manufacturing	679	627	615	708	818	948	321
Wholesale/Transportation/Communications/Utilities (WTCU)	1,822	1,891	1,909	2,089	2,236	2,420	529
Retail	5,426	5,419	5,417	5,876	6,387	6,982	1,563
Finance/Insurance/Real Estate/Services (FIRES)	10,177	10,277	10,302	11,699	13,094	14,819	4,542
Government/Education	6,606	6,890	6,963	7,179	7,273	7,410	520

The retail sector is forecast to add 1,563 new jobs, growing from 5,419 in 2008 to nearly 7,000 in 2040. Both WTCU and government/education are projected to add more than 500 new jobs. For the WTCU sector this represents total growth of 28 percent, but for government/education it represents less than eight percent.

Manufacturing employment in Lakewood is projected to grow by more than 50 percent between 2008 and 2040, but from a very low base. By 2040, total manufacturing employment in Lakewood is projected to reach less than 1,000.

Figure 11. Lakewood Employment Long-Term Projection²⁹



²⁸ Source: Puget Sound Regional Council (PSRC)

²⁹ Source: PSRC

Prospective Uses & Market

A series of stakeholder interviews were conducted to assist in identification of site strengths and weaknesses and potential target users. Feedback from each of the interviewees is included below:

Stakeholder Perspectives

Blair Howe, GVAKM. Blair Howe toured Woodbrook and nearby competing sites along with several of his associates. He also conducted a study session with a number of real estate professionals to discuss the Woodbrook site. His work led to several important conclusions.

The first of these conclusions is that the price would have to be right. In order to convert the existing income-generating residential properties in Woodbrook into industrial uses, existing property owners would require a return greater than they are now generating. At the same time, the property could not be priced higher than competing properties. DuPont has product that competes with potential development in Woodbrook. The asking price for the DuPont property was \$6.00 at the height of the market, up from \$4.00 to \$5.00 a few years ago. A maximum of perhaps \$7.00 is the target price for industrial land. As discussed later in this section, some of the existing landowners are asking for substantially more than this market rate.

Aesthetics are another issue. The DuPont property is in a nice environment. It is clean, good housing is available nearby, and there is a critical mass of industrial uses. At Woodbrook none of this is the case. The initial impression upon exiting I-5 and entering the area is not attractive.

On the positive side, freeway access to the site is good. The Cross-Base Highway would make that even better. It is also well-located in relation to the bases.

The area would be more attractive to industrial developers if the school was not there. Industrial developers do not like to be near schools. Relocation of the school was strongly recommended to improve the marketability of property for industrial use and open up for development a large property at the entrance to the area³⁰.

The location adjacent to the military bases would seem to lend itself to military-related uses. However, the bases are large, and there would need to be a lack of space available on base in order to force contractors to look at nearby locations.

Finally, the market for flex space, such as the 512 Corporate Center, is not very deep. It would be easy to develop too much of that type of space.

³⁰ The school site is not industrially zoned, and redevelopment to industrial use is not contemplated within this report.

Steve Perrenot, Fort Lewis Director of Public Works. Currently, many contractors are allowed to operate from facilities on the base. For example, the General Dynamics contract for the Stryker program guarantees that the Army will provide space. However, space is tight on the base.

Space on the base has become more of an issue in recent years as the number of personnel stationed at Fort Lewis has jumped from 18,000 to 28,000. An additional 4,000 are expected in the near future.

As contracts are renewed in the future, it may be possible to rewrite them so that the Army is not providing space on base. That could create the demand for space near the base. With its location adjacent to the Fort Lewis Logistics Center, Woodbrook might be a good location for contractors.

In addition, not all contractors are located on base. For example, there is a new light industrial development in DuPont that has at least three defense contractors as tenants.

Jay Stewart, Port of Tacoma Manager of Real Estate Development. The Port of Tacoma does not have any specific use in mind for Woodbrook. However, two goals of the Port are to maintain the inventory of industrial land in Pierce County and to encourage the development of distribution center space.

Given the location, military-related uses may make sense at Woodbrook.

One of the difficult issues for developing industrial uses in Woodbrook is the interest of the existing landowners. Many of the properties in the area have existing residential uses on them that generate income to the owners. In order to convince owners to sell or redevelop, the income to the property owners would have to be higher than what they are currently earning. At the same time the price would have to be competitive with competing industrial properties.

Kevin Foley, YKC, LLC. YKC has assembled the largest privately-held property in Woodbrook. The 21.5 acres owned by YKC were assembled over eight years from contiguous parcels located on Spring Street SW and that span the length of the block between 146th and 150th Streets SW.

The property is essentially vacant and includes both corners. There are existing tenants, but their leases allow a 30-day termination.

The YKC property is the first one in the IBP when entering the area from I-5.

YKC has no preconceived notions of what to do with the property. The light industrial zoning allows a wide range of permitted uses. YKC is not limiting what potential users might do.

YKC is asking \$11.00 per square foot for the property.

Charm Harris, Prodigy Real Estate. Charm Harris is representing a property owned by her brother. It is a 0.94-acre parcel with two houses and two garages.

They have considered putting mini-storage on the property. In addition, a roofing company expressed interest in storing equipment on the property. Now he wants to sell the property.

The asking price has been dropped from \$340,000 to \$275,000 (\$6.72 per square foot).

The houses generate a total of \$1,850 in monthly rent.

Susan Seuss, Tacoma-Pierce County EDB. The primary focus of the EDB is to bring new money into the county. Industries of particular interest include manufacturing, financial services, and health care.

The amount of land in the county that is zoned for industrial uses is decreasing. There is a lot of space available for lease in the 5,000- to 20,000-square-foot range. Properties larger than that are hard to find.

Examples of inquiries that they have had recently include:

- 130,000 square feet, solar manufacturing
- 120,000 square feet, use not specified
- 5,000 to 10,000 square feet, assembly
- 35,000 square feet, manufacturing
- 60,000 to 75,000 square feet, food manufacturing.

Mike Klass, Tacoma Rail. The rail line operated by Tacoma Rail is on the opposite side of I-5 from Woodbrook. Unless somebody wanted to pay for an overpass they see no economic reason to serve the property.

BNSF is on the correct side of the freeway and serves the Fort Lewis Logistics Center.

Kenneth Enslow, EDS Properties. EDS owns a group of adjacent properties located at the southeast corner of the IBP. The properties are located at the corner of Woodbrook Drive SW and 150th Street SW. Total area is 7.5 acres.

The property is in an excellent location if the Cross-Base Highway is built. It is located at one of the two signalized intersections leading from the highway into the IBP.

Ken has no firm ideas on what to do with the property. It has residences on it now, generating income. One idea they have had for the property is warehouse space to lease to individual tenants, perhaps spaces of 3,000 feet each to rent to trades people.

If somebody offered a ground lease for the whole property they would be tempted.

They would also take all-cash deal that paid \$5.00 to \$6.00 per square foot.

Jim McCormick, McChord AFB.³¹ He does not feel that the bases have a use for the property. Woodbrook was twice as big at one time, but the AFB took half of the property.

There once was a road connection running between the two bases and through Woodbrook, but there isn't now. If the Cross-Base Highway is built it is likely that it would include an overpass for a new connector.

Michael Mesa, Keller-Williams Real Estate, representing National Association for Black Veterans (NABVETS) of Washington. Michael Mesa is brokering a deal to sell the RoAnn Apartments to NABVETS.

The sale includes the apartments on nine acres, for \$8.4 million. This price equates to approximately \$21.50 per square foot. The deal will close soon.

Mr. Mesa feels that the Woodbrook area is well-suited for affordable housing. It is located between the two bases that drive much of the demand for affordable housing in the area. If owners were allowed to invest in their residential properties he thinks that the quality of the housing stock would increase.

In addition, when he was stationed at Fort Lewis there was no place nearby for base personnel to go to buy necessities, such as a drug store. The nearest shopping requires a trip on the freeway. He felt that a large drug store or similar type of limited retail development should be allowed in Woodbrook.

Ray Miller, Clover Park School District. Woodbrook Middle School is located on 25 acres directly across Spring Street SW from the IBP area and the YKC property.

Theoretically, the school district might be willing to sell the Woodbrook Middle School property. In order for this to happen, however, many issues would have to be resolved. Woodbrook Middle School was built primarily to serve the children living on the two bases, as well as those from Tillicum and Woodbrook. Before the road connecting Fort Lewis and McChord AFB was closed in the late 1990s, it was easy to get kids to and from the school. Now, however, they have to be transported through the main gates and down I-5 to get to the school. It is very inefficient.

The school was built in the early 1960s and is badly in need of repair or replacement. The main question is whether to spend the money at the current location or to move. Since the majority of the students are from Fort Lewis, locating the school on base may make sense. Fort Lewis officials have identified a site on the base where a new school could be constructed. In order for this to happen, though, somebody would have to come up with the money. If the school district were to pay for the school, there would be an

³¹ Mr. McCormick is no longer with McChord AFB, having retired since this interview was conducted.

issue of who actually owns the building. If the military were to build it, funding would have to come from somewhere. If the school were to move it would take at least three years, including one year to plan and two years to build.

The proposed Cross-Base Highway would run along the west side of the school district property and then curve around the south side. One of the two signalized intersections leading into Woodbrook would be next to the site.

Conclusions. The landowners interviewed did not disclose well-developed ideas of what to do with their properties. They appeared to understand that a wide variety of uses are permitted under the zoning but are waiting to take action. Most of these properties currently generate rental income, so any new use would need to be more lucrative than the current residential uses.

The value of current land uses in Woodbrook will affect the decisions of current landowners. The estimated target price for industrial land of \$7.00 per square foot would need to be higher than what owners currently generate with the existing residential uses. For one large landowner interviewed this seems feasible, but another is asking 50 percent higher than that.

The site would be more attractive to development if Woodbrook Middle School were no longer located in Woodbrook. The proximity to a school is a negative for industrial developers, and the size of the school property and its location make it an attractive development site.

The proximity of Fort Lewis and McChord AFB is one of the biggest influences on the development potential of Woodbrook. As the bases expand and the level of outsourcing increases there may be a market for industrial space from military contractors. In order for this to develop, though, there would need to be a lack of space available for contractors on base. A recent article appearing in The Fayetteville Observer indicates that this very type of development is occurring in conjunction with growth at Fort Bragg in North Carolina. A 36-acre private development located off base is being planned to include Class A office space, a conference and training center, warehouses, and other uses catering to military contractors. Construction is expected to begin in fall 2009, and negotiation is reportedly already underway with three tenants.

The increasing size of the bases also creates a demand for retail services for military personnel.

Overall, this points to the following strengths and weaknesses of the area:

Strengths

- Proximity to Fort Lewis, Madigan Army Medical Center, and McChord AFB
- Base expansion may generate need for off-base business support (maintenance, office, retail)
- Access to I-5 and future Cross-Base Highway makes site attractive in a regional business market
- Sewer and water infrastructure are available and are a positive factor

Drawbacks

- Current roads are inadequate for business/industrial use
- Presence of school and existing residential uses are a drawback for business/industrial use
- Site isolation is a problem for residential use

Zoning

The existing IBP zoning code was reviewed for language that could present marketability issues unique to the study area. The review was based on the concept that the area will be a mixed residential and business area for some period of time.

The City's landscaping code appears to require landscaping on private property street frontage in the IBP zone that will help to create a consistent image. Landscaping is also required along side and rear property lines that will help buffer existing residential uses that may remain.

Current zoning allows five to six story buildings. This level of development is unlikely to occur over the whole district in the short term but may be an appropriate intensity for long term use or special users in the short run.

Based on ownership sizes available and a desire to facilitate the approval process for "jobs rich" users, targeted business development on sites up to about eight acres should be allowed without special permits or review to the extent possible. Using a building coverage ratio (building area to site area) of 0.4³² for an eight-acre site suggests that buildings up to about 140,000 square feet be permitted without special review. The code was reviewed and it appears that most "jobs rich" uses up to a level of 140,000 square feet are allowed as primary permitted uses. No specific adjustments to the IBP zone as applied to the study area were identified as necessary.

The creation of area-specific design guidelines is one approach typically used to assure a consistent visual image for a district such as Woodbrook. When there is a single owner, this can be implemented via private covenants, but the number of property owners (over

³² 1998 *Industrial Land Supply and Demand in the Central Puget Sound Region*, page 46, provides a typical range of building coverage ratio of 0.33 for high tech flex use space and 0.4 for large manufacturing buildings and office.

30) is likely to undermine any application of covenants. One possible implementation technique would be for the City to lead an effort to create design guidelines with the participation of interested property owners. If property assembly continues, it may be appropriate for a few major property owners to develop guidelines for a portion of the study area. The end result could be an overlay zone or other form of agreement that addresses visual quality and other aspects of development. Once a set of design guidelines are prepared, they will be an effective tool in marketing the property as well by offering a consolidated image.

EVALUATION OF PHYSICAL CHARACTERISTICS

Transportation Infrastructure

Local streets

The study area is served by a system of relatively narrow, generally 20-foot-wide paved roads with gravel shoulders. Some internal private roads exist.

The existing 60-foot-wide right of way will allow some roadway widening to support industrial use, bicycle travel, and pedestrian movement. Based on cursory visual site observation, pavement conditions on 146th Street SW, Woodbrook Dr. SW, and 150th Street SW are fair to poor. Upgrade is recommended to support industrial use. Murray Road pavement condition appears fair.

Development within the study area may create a need for improvements to Murray Road and the intersection of Murray Road and 150th Street SW. This need should be evaluated on a case-by-case basis as development proposals are received.

Cross-Base Highway

Construction of the Cross-Base Highway segment through the study area would avoid a situation where developers are required to make improvements to address congestion on Murray Road that are later made unnecessary or redundant by Cross-Base Highway construction. However, funds to construct this portion of the Cross-Base Highway project have not been identified, and right of way has not yet been acquired through the study area and school site. This road segment would improve access to the study area, but due to the uncertain timing of this project it may be necessary to investigate interim improvements to Murray Road if warranted by traffic impacts from development.

Transit

Pierce Transit serves the study area with Route 206, which circles through Woodbrook and connects the Lakewood Transit Center to the north with Madigan Army Medical Center to the south. Buses currently run approximately every 30 minutes from 5:00am to 11:00 pm on weekdays and Saturdays, with approximately hourly service on Sundays.

Rail

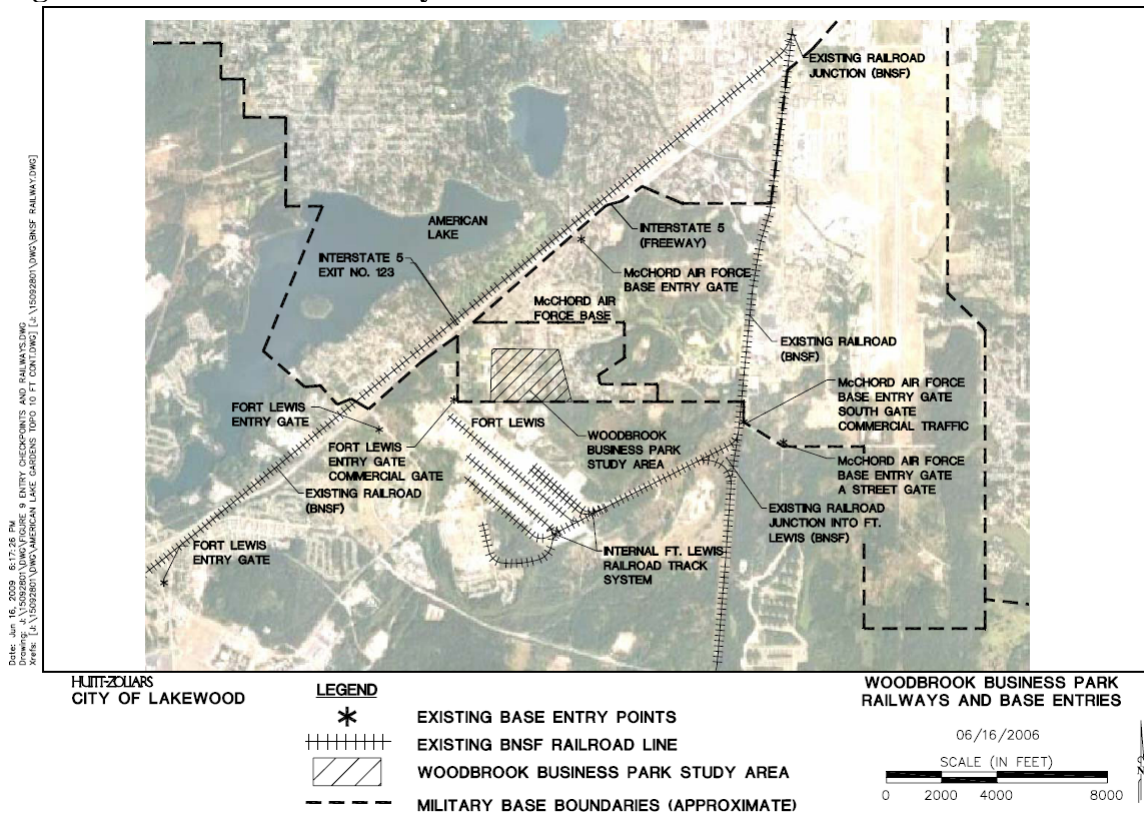
The site is not currently served by rail access. Extension of the Sound Transit (former Burlington Northern Santa Fe) line located on the northwest side of I-5 is not deemed

feasible because freeway crossing would be required. Extension of rail from the east or south is physically feasible but seems unlikely; it would require coordination with the military bases through which these lines pass.

Military access

There is direct access to the Fort Lewis Logistics Center Gate at Murray Road and, further east off 150th Street SW, to the McChord South Gate. Post 9-11 changes to the military gates have resulted in all commercial traffic being directed through these gates, which could provide future access points to the Woodbrook business site if the area redevelops with predominantly military-serving uses. Traffic studies performed for the City of Lakewood under a separate contract indicate that improvements to the intersection of 150th Street SW and Murray Road, as well as other improvements, may be needed to support the combination of military-related traffic and traffic generated from redevelopment of the study area.

Figure 12. Location of Military Access Gates & Rail



Conclusions

A limited transportation evaluation was carried out under the agreement for Woodbrook. As a separate effort, the City of Lakewood and The Transpo Group undertook a modeling effort to estimate long-term traffic impacts and improvement needs. The following conclusions were developed during this study.

Principal Access Points for the Properties. The principal access road for the project will be 150th Street SW.³³ The entrance will initially be at the intersection of 150th Street SW with Murray Road SW. The entrance will move approximately 500 feet west once Cross-Base Highway construction occurs, which will relocate the intersection. The reasons for this approach are:

1. Most traffic initially is expected to enter and leave from Murray Road.
2. 150th Street SW is planned to be connected to the future Cross-Base Highway just east of Murray Road; therefore, 150th Street SW can continue to be the principal access route after Cross-Base Highway construction.

Because of its function both as an important road for through traffic before the Cross-Base Highway is built and as a local access road for adjacent property, 150th Street SW is planned with a minimum of three lanes to allow truck traffic to turn in and out of driveways without blocking through traffic.

The intersections of Spring Street SW and Woodbrook Drive SW with 150th Street SW will be important secondary entries for the project. Signs at these locations would be appropriate to direct visitors to businesses.

Woodbrook Drive SW will become an important entry to the project after the Cross-Base Highway is constructed as it is planned to connect to the Cross-Base Highway just south of the IBP district. Woodbrook Drive SW is therefore planned as a three-lane minimum width to accommodate both local access and through traffic in a manner similar to 150th Street SW.

146th Street SW and the portions of Woodbrook Drive SW and Spring Street SW north of 150th Street SW will form a loop road along the perimeter of the IBP area. These roads will serve a mix of residential and business traffic. Since these roads will not go through after the Cross-Base Highway is constructed, they will carry only local traffic. A two-lane road section is proposed for these roads as traffic blockage caused by truck and school bus turning movements is of less concern due to the low traffic volumes. Limiting the pavement width used by vehicular traffic to two lanes will allow expanding the portion of the right of way used for pedestrian and landscaping purposes. This will help support and buffer residential and school uses across the street from the study zoned area. The City has not identified specific industrial road sections that would be used in such areas or developments; as part of this study, several potential industrial road designs were conceptualized, shown as **Figures 13 through 16** on the next two pages.

³³ The use of 146th Street SW was considered as the principal access road but was not incorporated into final alternatives for the following reasons:

1. Left turns to and from 146th Street SW to Murray Road SW could increase congestion on Murray Road SW on a curve with limited sight distance;
2. 146th Street SW west of Spring Street SW has vertical and horizontal curves that are not suitable for truck traffic; and
3. 146th Street SW is planned as a dead end when the Cross-Base Highway is constructed.

Figure 13. Industrial Road Section A

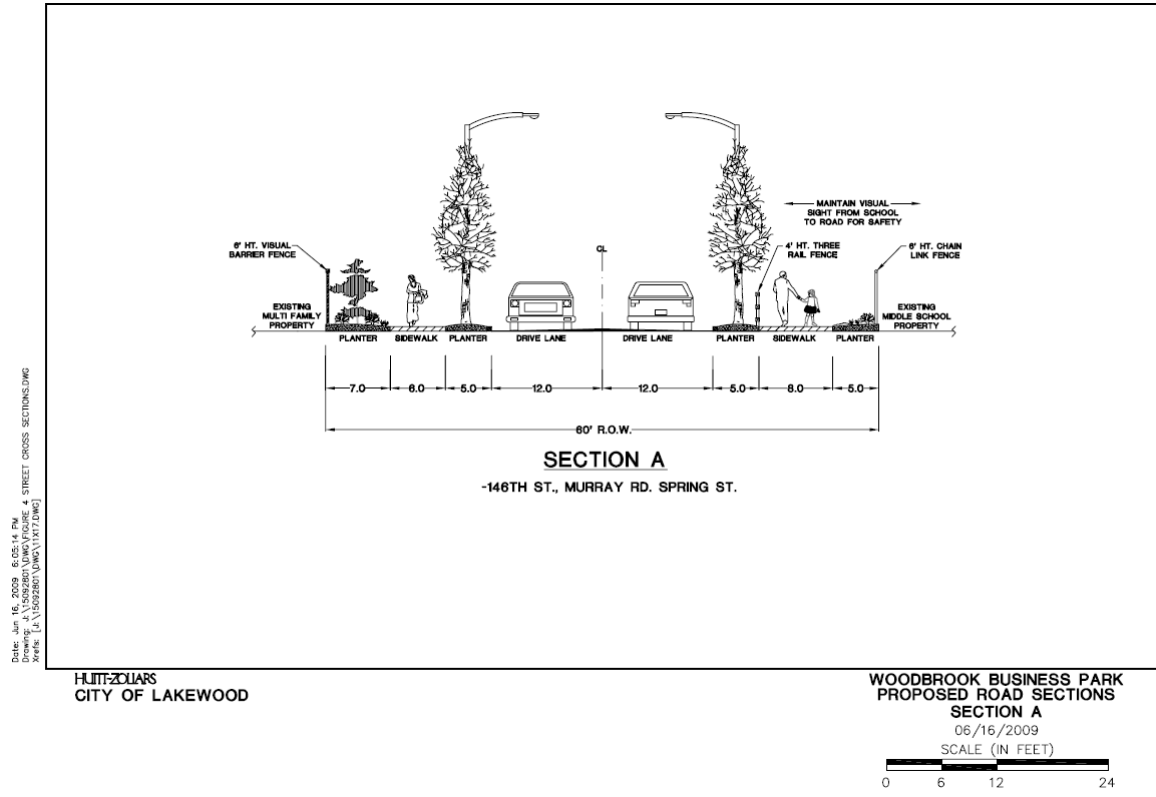


Figure 14. Industrial Road Section B

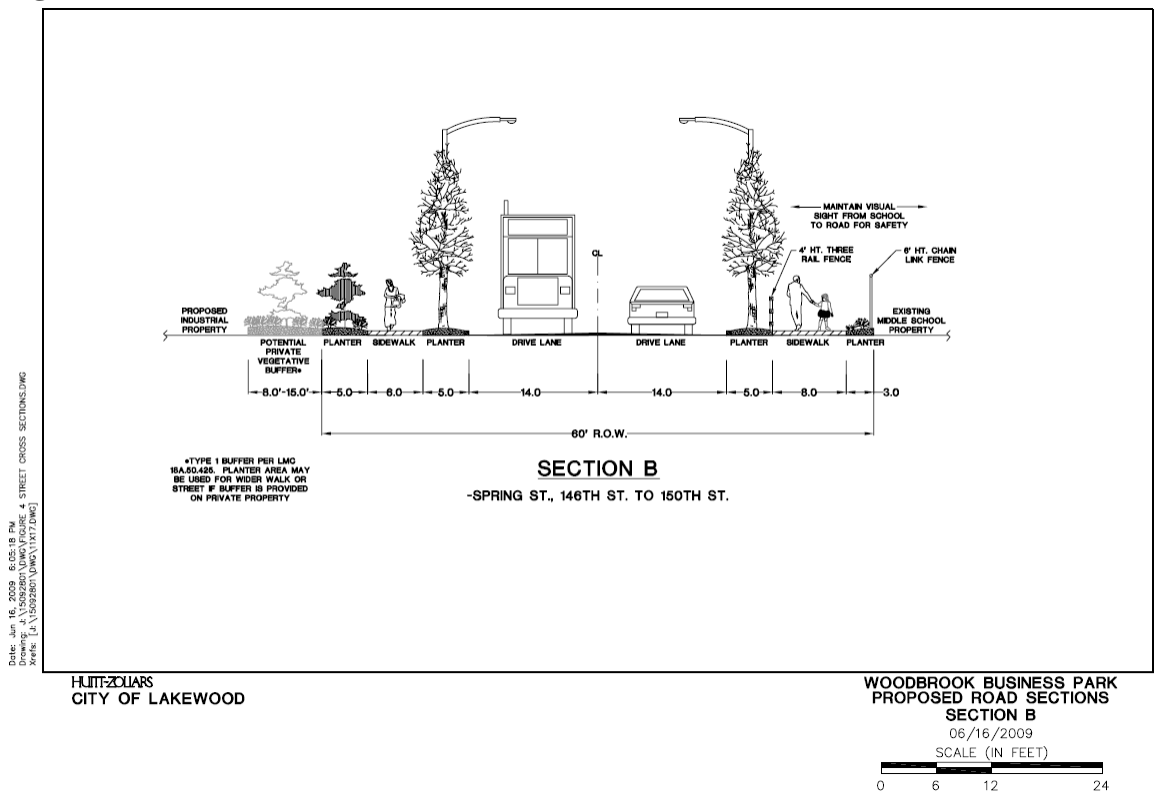


Figure 15. Industrial Road Section C

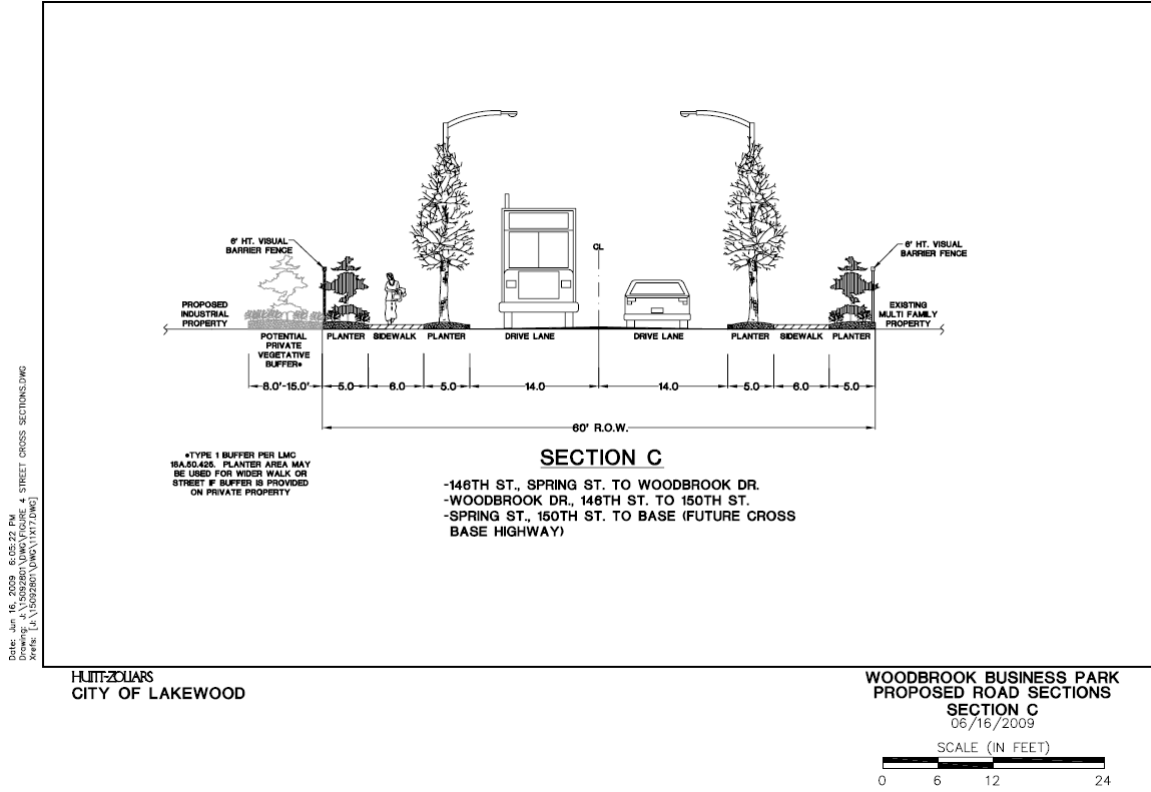
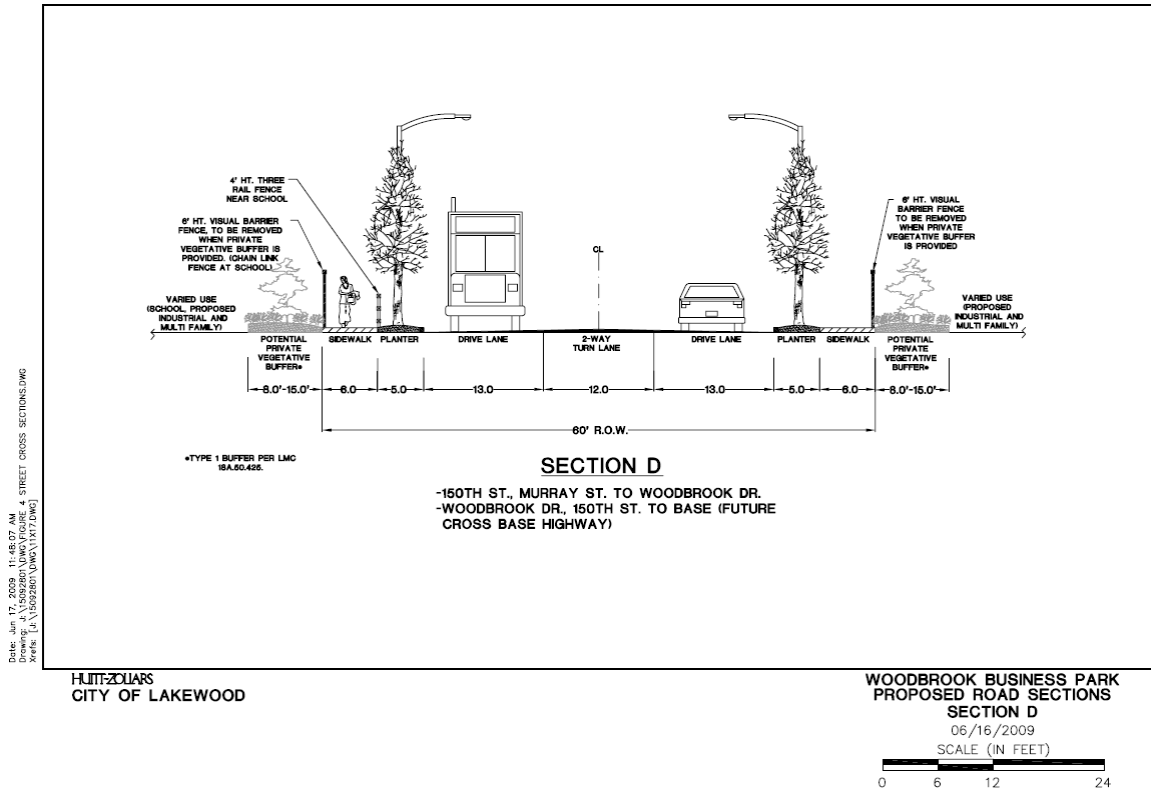


Figure 16. Industrial Road Section D



Traffic Generation & Mitigation. The results of a traffic modeling effort prepared by The Transpo Group for the City of Lakewood will be available separately. Preliminary results from this effort suggest that improvements to the Murray Road SW and 150th Street SW intersection are needed to accommodate traffic movements at the time the study area is built out.

The recommendation in this report is that initial business proposals evaluate traffic impacts and provide improvements if needed on a case-by-case basis until such time as the segment of the Cross-Base Highway between I-5 and 150th Street SW can be constructed. The construction of the Cross-Base Highway segment between I-5 and 150th Street SW/Fort Lewis gate is recommended to occur as soon as possible to support project development.

Utilities

Storm sewer

The roads and private property in the area is served primarily by infiltration rather than conveyance to a discharge point. Some roadside surface swales, culverts and ditches exist that convey water to the catch basin/drywell system.

The storm system will be upgraded in those areas where impacted by the construction of sanitary sewer improvements in the Woodbrook area.

Sanitary sewer

A new gravity sanitary sewer, pump station and force main are planned for construction in 2009-2011. A pump station will be located at 146th Street SW and Spring Street SW to serve the study area. An additional, adjacent pump station will serve nearby housing on McChord AFB.

The current proposal is to install gravity lines in Spring Street SW, 146th Street SW (from Murray Road to a point 200 feet east of Spring Street SW) and in 150th Street SW (from Spring Street SW to a point 1,500 feet east of Spring Street SW).

The environmental assessment performed for the project indicates that extension of the sanitary sewer to serve properties not fronting on the line will be the responsibility of individual property owners. Even properties fronting onto the system would not be connected without individual connections (i.e., the line into the property from the street) being paid for by property owners. Future sewer extensions can be accomplished through the use of either a Utility Local Improvement District (ULID) or LID. The ULID or LID are processes that enable Pierce County (for ULID) or the City of Lakewood (for LID) to use long-term, tax-exempt financing to construct utility improvements to serve properties in a specific area. The cost of the extension is borne in whole or part by special assessments on the benefiting properties and allows property owners low interest rates and up to 20 years pay for the cost of improvements.

Water

Water service is provided by Lakewood Water District. The area is served by 12-inch mains in 146th Street SW and Spring Street SW and 16-inch mains in 150th Street SW and Woodbrook Drive SW. Lakewood Water District indicated there is a 3.5 million-gallon water tank adjacent to Woodbrook Drive SW, and 55 to 57 psi pressure in mains through the study area. As such the District doesn't perceive any problems with serving business uses, although industrial water use is highly variable depending on the usage requirements of the specific industry. Generally, the District welcomes more water use in this area to obtain more water circulation in the tank; however, as with any land-use proposal the District must defer a determination as to water availability until specific uses are proposed. If individual users would require high volumes of water for processing or fire flow, system upgrades could be required and would most likely be at the expense of individual user requiring them.

Telecommunications

Service is provided by private providers that generally provide needed extensions and upgrades based on service requests.

Electricity

Service is provided by Puget Sound Energy (PSE). Extensions and upgrades are expected to be provided based on service requests. Street lights are provided on utility poles throughout the study area. The cost is borne by either the City or the property owner on whose property the light fronts, depending upon public policy. PSE regards this as a City decision

If underground service is desired, space for a utility trench should be reserved within the right of way or required across private property, and the cost will be greater.

Gas

The study area is served by a four-inch line in 146th Street SW, a two-inch main in Murray Road SW (south of 148th Street SW), a four-inch main in 150th Street SW from Murray Road SW to Spring Street SW, and a four-inch main in Spring Street SW. Service is generally extended and upgraded based on service requests.

Environment

Soils

A technical feasibility memo, included in **Appendix C**, regarding soil characteristics for building foundation and storm water infiltration was prepared based on literature review and field reconnaissance, with no drilling or test pits. No major problems affecting use for industrial purposes were identified.

Habitat

A technical feasibility memo, included in **Appendix D**, regarding potential presence of wetlands, buffers, and threatened and endangered plant and animal species in the study area was prepared based on literature review and field reconnaissance, with no field delineation or flagging. The area contains some habitat considerations (oak trees and

wetlands in the eastern portion) that may need to be addressed in planning for development of specific sites in the eastern portion.

School

The Woodbrook Middle School is in an undesirable long-term location for several reasons:

1. Many of the children served are on base, suggesting an on-base location may be more appropriate.
2. There are few students in the immediate area.
3. Students from Tillicum must be bused across the freeway.
4. The Cross-Base Highway will impact the school grounds.
5. Redevelopment of the study area is likely to generate additional truck traffic in the vicinity of the school, creating potential safety issues.

In addition to these conditions that make the current location less than ideal, relocation of the school is a desirable action from the standpoint of converting the study area to business use.

While school relocation is desirable, redevelopment of the area is not dependent on it. The following measures are could be used to improve compatibility between the school as it is currently situation and the future business park:

1. Relocate the loading area along 150th Street SW and replace with a planted buffer to reduce impacts from increases in traffic that will occur on 150th Street SW.
2. Install upgraded sidewalks and buffering within the right of way on all street frontages. Include a “rail barrier” in these improvements to physically deter children from accessing the street except at intersections.

Housing

A series of actions by public agencies over a long period of time have increased the Woodbrook area’s isolation, including placement of military reservation boundaries, construction of the previous US 99 and later I-5, and closure of gates between the McChord AFB residential area and Woodbrook. Future actions planned or under consideration by WSDOT (Cross-Base Highway) and the Clover Park School District (relocation of Woodbrook Middle School, possibly to a location on post) will further isolate the Woodbrook area and reduce services, with negative effects on residential use. Ultimately, many of the residential uses in Woodbrook are envisioned to be redeveloped to business park-type uses over time as a result of policy decisions made as a part of the City’s comprehensive plan.

Housing impact is of concern because some of the housing units in the Woodbrook area serve very low income groups. As indicated elsewhere in this report, per capita income in Woodbrook is less than half that of Lakewood or Pierce County. Another important

statistic is that the percentage of housing in Woodbrook that is renter occupied is very high, over 80 percent for the area as a whole. The transition from residential to business use will affect housing that serves low income persons and households.

Numbers and types of units affected

As land containing residential uses is redeveloped, residents will need to relocate to other areas. The 117.5-acre study area contains 550 occupied housing units, including 95 mobile home units in three parks; 28 single-family structures; two duplex structures and approximately 427 multi-family units. The area has an additional 50 vacant housing units. Residential uses (including vacant units) occupy about 77 acres of the study area. Block Groups 1 and 7 (within the Woodbrook area but outside the IBP zone) contain an additional 490 occupied housing units that would be affected if the business zoning is expanded.

Existing housing and area characteristics were considered, in order to help describe housing relocation effects. Housing value, in relation to land value, was considered as a possible proxy for two categories of housing.

The first category, low cost rent/market rate rent housing, includes those units that will likely be able to be replaced through the free market (possibly augmented by use of rent subsidy programs such as housing choice vouchers). The assumption used in the analysis is that parcels where structure value plus land value is currently higher than business park land value likely contains units rented at market rates that are typical for similar housing in other areas in the city or county.

The second category, very low cost rent housing, includes those units where structure value plus land value is lower than the value of business park land. These units are assumed to have rents that are lower than is typical for privately provided or subsidized housing in the city or county.

It may be difficult for current residents in very low cost rental housing to find replacement housing. This difficulty may be due in part to the unique characteristics of the tenants. Residents may not qualify for housing vouchers because they are unemployed, sporadically employed, or on waiting lists. Tenants may be on government assistance programs but not living in subsidized housing. Public housing may not be available to the residents due to long waiting lists or poor matches with selection priorities. The supply of very low cost housing units for rent may be constrained by quality, code compliance and cost issues.

It is beyond the scope of this work to make a detailed forecast of the number of rental units that fall in this "very low cost" category. However, the land value plus structure value proxy used here is believed to provide a general sense of the magnitude of the impact on very low cost rental housing. Review of Assessor's data indicates a "break" in land value plus structure value at roughly the value of business park land. This information supports the concept that a number of units in the Woodbrook area serve a

very low income population that is somewhat distinct from the majority of rental units in the area.

The property listed in the table below has been identified as containing 140 residential units on parcels that have assessed value of land plus structures that is lower than the sale price of industrial property of \$7 per square foot assumed in this report.³⁴ These properties are assumed to be those where rents are lower than might be generally available in other areas and therefore may represent potential impact to housing for very low income persons and households.

Table 12. Housing Assumed to be "Very Low Rent"

Address	Description	Approx. Unit Count
14601 - 14615 70th Court SW	Condominium	16
7110 - 7116 146th Street SW	Mobile Home Park	40
7301 - 7301B 150th Street SW	Single-Family Dwelling	2
14818 Woodbrook Drive SW	Mobile Home Park	37
7013 - 7017 150th Street SW	Single-Family Dwelling	3
XXXX 150th St SW	Residential	1
7324 150th SW	Mobile Home Sr./Disabled - Exempt	2
7404 - 7412 146th St SW	Single-Family Dwellings and Mobile Homes	5
7409 - 7415 B 150th St SW	Mobile Home Park	10
7418 150th St SW	Mobile Home	1
6922 146th St SW	Single-Family Dwelling	1
14705 - 4713 Spring St SW	Single-Family Dwelling	2
7131 150th St SW	Apartments	1
7510 146th St SW	Single-Family Dwelling	1
7523 150th SW	Single-Family Dwelling	1
7317 150th SW	Apartment	8
14715 - 14727 Spring St SW	Single-Family Dwelling	6
7013 - 7017 150th St SW	Triplex	3
<i>Total</i>		<i>140</i>

Housing units located on parcels where the structure plus land value is higher than business park land value may be ultimately eliminated, but do not necessarily create a serious impact to very low income persons. Residents may have to relocate, but comparable units are expected to be available elsewhere in the city and county. Renters may utilize the housing choice voucher program for this type of housing.

³⁴ Value of structures and land is from Pierce County Assessor's records. The assumptions related to the sale price of industrial land are noted elsewhere in this report.

Timing of effects

Redevelopment is not expected to immediately force the rapid relocation of residents, but will occur over a long period of time, giving residents, property owners and housing providers time to adjust.

1. Redevelopment is expected to occur first on vacant land (34 acres or 30 percent of the study area) where no relocation impacts would occur.
2. The next wave of redevelopment would occur on land containing residential structures, where the combined value of structure and land is less than that of commercial land. This is the phase that would likely affect low income persons the most. Forty-one acres (35 percent) of the study area contain housing in this category (140 units affected).
3. The final area to be redeveloped includes parcels where the combined value of structure and land is higher than the current value of business park land. This type of land occupies 42 acres, or 35 percent of the study area. These areas will redevelop when the land in the business park becomes scarce and/or land values rise in relationship to income potential from residential use (410 units affected).

The expansion of business uses in the study area will slowly reduce one source of housing for very low income persons. Because of the long time frame that is expected for the area to redevelop, only those tenants with unusually long tenancies may be affected by this redevelopment. As economic conditions gradually favor conversion to business use, rental units are expected to be left vacant for a period of time, or demolished after tenants move, due to natural turnover.

Legal obligations of private property owners to low-income mobile home owners when redeveloping property that may contain such units

The legal obligations of private property owners to mobile home owners, when redeveloping property that may contain such units, are included in the Washington State Manufactured/ Mobile Home Landlord-Tenant Act (MHLTA - RCW 59.20). This statute describes rights and responsibilities to owners of manufactured and mobile homes, who rent a space for their home, as well as landlords who own manufactured and mobile home parks.

A variety of rental issues are covered by the MHLTA. The following are relevant to the legal obligations of private property owners to mobile home owners when redeveloping a mobile home park:

- If the landlord files a petition to change the zoning of a mobile home park, the landlord must notify tenants of that mobile home park within five days of the filing of that petition. A description of the proposed changes must be made available to park tenants.

RCW 59.20.130(10). Notify each tenant within five days after a petition has been filed by the landlord for a change in the zoning of the land where the mobile home park is located and make a description of the change available to the tenant.

- Mobile home owners who are renting spaces must be given at least a year's notice before they have to move.

RCW 59.20.080 (e). Change of land use of the mobile home park including, but not limited to, conversion to a use other than for mobile homes, manufactured homes, or park models or conversion of the mobile home park to a mobile home park cooperative or mobile home park subdivision: PROVIDED, That the landlord shall give the tenants twelve months' notice in advance of the effective date of such change, except that for the period of six months following April 28, 1989, the landlord shall give the tenants eighteen months' notice in advance of the proposed effective date of such change;

Legal obligations of private property owners to renters

If land containing rental apartments or other rental housing is redeveloped, notice to renters must be provided in accordance with their lease agreements, or 20 days which ever is greater.

RCW 59.18.200(1) (a). When premises are rented for an indefinite time, with monthly or other periodic rent reserved, such tenancy shall be construed to be a tenancy from month to month, or from period to period on which rent is payable, and shall be terminated by written notice of twenty days or more, preceding the end of any of the months or periods of tenancy, given by either party to the other.

Potential public and private relocation assistance programs

There are potential public and private relocation assistance programs for mobile home park residents. Programs related to preservation of housing or mobile home parks are not reviewed as these are inconsistent with future use of the area.

The Washington State Housing Relocation Assistance Act (RCW 59.21) provides for direct loans to mobile home residents who own their mobile homes and must move them. The loans are made to residents who earn at or below 80 percent of Area Median Income as defined by the U.S. Department of Housing and Urban Development. For qualified residents, the loans are up to \$7,500 for owners of single-wide units, and up to \$12,000 for owners of double-wide units. The loans are only available as reimbursement for already paid expenses by the mobile home owners and carry flexible terms. The program is administered by the state Department of Community, Trade and Economic Development³⁵ and is funded by mobile home purchases. However, the program is currently experiencing delays in reimbursing applicants due to funding issues. It is funded by a fee or surcharge on mobile home purchases, and the downturn in mobile home purchases combined with increase in mobile home park closures have resulted in

³⁵ Soon to be renamed Department of Commerce. It is unknown at this time what the new Web address will be. The Web site shown at the bottom of this section will be updated in the final version of the report if a new citation is available.

unmet demand. Reimbursements are typically lower than the maximums noted above. Details for the current status of this program may be found at <http://www.cted.wa.gov/site/484/default.aspx>.

Federal housing programs

Federal housing programs are managed by the US Department of Housing and Urban Development (HUD). Funds are available to housing authorities and apartment owners. The City of Lakewood is not currently eligible to be a recipient of HUD housing related funds. HUD programs include:

1. Low-Rent Apartments. Funds are paid directly to the apartment owner to lower the rents they charge to low-income tenants. There are 32 apartment buildings in the program in Pierce County, operated by private and private non-profit organizations.
2. Housing Choice (formerly "Section 8") Vouchers. Housing choice is the federal government's major program for assisting very low income families, the elderly and the disabled to afford decent, safe, and sanitary housing in the private market. Housing choice vouchers are administered locally by public housing agencies such as the Pierce County and Tacoma housing authorities.
3. Public Housing. HUD provides funds to public housing authorities for publicly owned rental housing under several programs.

Housing authorities in Pierce County

The following housing authorities in Pierce County use federal HUD funds from the above described programs and other sources to provide housing assistance.

Pierce County Housing Authority (PCHA). The PCHA serves more than 5,100 households annually. It provides the following major housing assistance programs utilizing funds from federal, state and local governments, bonds, and rental income:

1. Apartment Homes and Communities. Pierce County Housing Authority manages 13 apartment communities that provide housing to low income persons. One of these complexes, Brookridge, is within the study area at 7320 146th Street SW. The wait list for these units is currently closed.
2. Housing Voucher ("Section 8") Program. Under this program, PCHA pays the difference between 30 percent of household income and market rent for low income families in the program. There is currently a waiting list to receive vouchers. The PCHA currently lists 226 properties that are eligible to receive tenants with Section 8 vouchers.

Tacoma Housing Authority (THA). The THA and related tax-credit partnership owns about 1,650 dwelling units of various designs and types scattered throughout the city of Tacoma. Considering all programs together, THA serves about 12,000 persons, or six

percent of the City's residents, primarily elderly, disabled or minor children. Highlights of THA activities include the following programs for low income persons:

1. Public Housing. The THA manages seven family housing projects and seven projects for elderly and disabled persons. The Salishan housing project is undergoing planned redevelopment and will provide 985 units of mixed income housing by 2011.
2. Housing Voucher (Section 8) Program. The THA manages a housing choice voucher program that provides rental assistance to about 3,500 households.

Low-income housing options used in other jurisdictions that might be considered in Lakewood

The following options to improve housing affordability were found in other jurisdictions:

1. Low Income Housing Replacement Requirement. Some jurisdictions require that developers who eliminate low income housing provide alternative housing or pay mitigation funds. This could be an option for the Woodbrook area. Lakewood does not have a program of this type.
2. Zoning for Higher Densities. In some cases, zoning for higher densities can reduce public service costs and the cost of housing.
3. Tax or Zoning Incentives. The provision of low income housing can be encouraged by providing incentives to provide housing that meets low income targets. Incentives can include relief from taxes or mitigation fees and/or density bonuses.

Potential role for private nonprofit organizations in housing relocation

The primary role of private non-profit organizations is in the provision of housing for low income persons and households. Shelter housing and emergency housing services are also provided.

Low rent apartments are provided by private non-profit groups using funds from private donations and HUD. The HUD Web site indicates that there are currently 32 apartment buildings in the HUD Low Rent Apartment Program in Pierce County, operated by private and private non-profit organizations.

The number of low income housing units in Pierce County might be expanded depending on availability of funding from HUD and other sources and the willingness and ability of private and private non-profit groups to undertake provision of more low income housing.

Suggested approach to relocation of existing residents and ways to minimize adverse impacts

This section suggests an approach to relocation of existing residents and ways to minimize adverse impacts. It is written with the understanding that the housing use in the study area is intended to be replaced with business use in support of land-use goals established through the comprehensive planning process. Under the assumption that it is consistent with the comprehensive plan to relocate housing to other areas with more appropriate levels of public services, options related to housing preservation or mobile home park preservation are not directly applicable to the study area and therefore have not been included.

The potential impact on housing of conversion of the study area to business uses is the elimination of 550 housing units in the study area. Of the 550 units in the study area, approximately 140 units are assumed to offer housing to very low income persons.³⁶ Elimination of housing units that currently serve very low income persons may reduce housing options for this group, if alternate housing is not developed for displaced low income tenants.

Expansion of housing options offered by private, public and non-profit groups in areas that are better served by public services than Woodbrook is the best measure to mitigate the loss of housing in the study area. Historically, the provision of low income housing is undertaken by the private sector, private non-profit groups and agencies such as the PCHA and THA. Low income housing is usually developed using funds from HUD and other sources. Due to the long time frame during which low income units will be eliminated in the Woodbrook area, groups with responsibility and interest in developing low income housing should be able to provide replacement housing in areas where services can be provided more efficiently and effectively.

One of the most effective actions that the City can take to reduce adverse impacts to individual tenants is to publicize that the conversion of rental property to business use is likely to occur. In this way, people who move into the area before conversion occurs are aware of likely future events, and agencies can respond with the development of replacement housing.

Direct mitigating measures such as provision of replacement housing for low income residents is not generally within the range of programs currently offered by the City of Lakewood.

Measures suggested facilitating development for business use such as sidewalks and wider roads will also improve conditions for existing residences in the study area as redevelopment occurs.

³⁶ Estimate based on assessed value data.

CONCLUSIONS & RECOMMENDATIONS

Overview

Overall, the analysis work performed for this study provided the following sketch of the study area's potential:

Opportunities

The study work identified opportunities and positive features to support industrial use:

1. The area has excellent access to I-5.
2. The area contains over 30 acres of vacant land.
3. At the time of analysis, about 75 percent of the site area was held in ownership sizes of between two and ten acres. Most business users looking for space in the Woodbrook area would not need to assemble property from multiple owners.
4. Water service is available to support more intensive use.
5. Public transportation is excellent.
6. The nearby military bases may have need for uses to support activity on base.
7. The western portion of the study area is very close to "shovel ready." It is largely vacant and when the planned sewer is completed and service initiated will have full sewer service.

Issues

The study work identified site characteristics which may delay development or restrict private investment:

1. The 2008 land and structure values of about half the study area exceed current typical sale price of vacant industrial land. Without public investment or subsidy, about half the study area is unlikely to redevelop to business/industrial use under a free market approach.
2. The road system is inadequate to support business use.
3. The level of current traffic congestion at 150th Street SW and Murray Road at peak afternoon periods is high enough that new development may be required to provide traffic studies and implement mitigation measures.
4. Substantial improvement to the Murray Road corridor or construction of the planned Cross-Base Highway is needed to support full development.
5. The adjacency of Woodbrook Middle School is inconsistent with heavy truck traffic and reduces the desirability of areas east of the school for industrial use.
6. Existing single-family residential uses in the area are inconsistent with industrial use and may make selling property for industrial purposes more difficult.
7. Current roads (Spring Street SW, 146th Street SW and Woodbrook Drive SW) are not wide enough for industrial use and pavement is of inadequate thickness.
8. Planned sewer service will not extend to the eastern portion of the study area.

Targeted Users

Consideration of the strengths and weaknesses of the study area from the perspective of industrial reuse, combined with economic factors, has resulted in a recommendation for manufacturing-oriented target businesses. As examples, inquiries recently received by the Pierce County EDB include "jobs rich" uses that would fit on the three- to eight-acre ownership sizes within the business park.

The creation of a business park district would likely result in uses that can coexist with residential uses, as the area will likely continue to contain some degree of residential uses for many years. The following actions are recommended in terms of general preparation of the area:

- Provide street improvements to attract/support business users, particularly manufacturing uses with high wage jobs and military contractors.
- Target users that require sites of three to eight acres to reduce or eliminate land assembly costs and speed redevelopment.
- Provide infrastructure development and streetscape improvements to provide an image that will assist in marketing parcels to target users.

Alternative uses

Investigation of alternative uses focused on manufacturing and light industrial uses. Large distribution uses (100,000- to 1,000,000-square-foot buildings) might result in a faster buildout because these types of uses represent a large portion of the market demand for industrial space. As an example, a 200,000-square-foot distribution building might occupy a 12-acre site. These uses were not considered as "target users" as they have low employment per acre. The largest distribution buildings require larger sites than are available or could likely be assembled in the Woodbrook area.³⁷

Interviews with potential users suggest that contractors that serve nearby military bases may be particularly appropriate users for the size of parcels available at Woodbrook. Since Fort Lewis is expanding under the "Grow the Army" initiative, there may be an increasing need for space for firms that service military contracts.³⁸ No special measures to accommodate military users have been identified so these users are considered part of the general manufacturing and industrial target user group. The actual demand for these ancillary uses is difficult to predict but based on comments by base officials, space on

³⁷ As an example, the relatively new Target Distribution Center in Lacey is a two million square-foot building that occupies a 130-acre site.

³⁸ Steve Perrenot, Director of Public Works for Fort Lewis, indicates that currently many contractors are allowed to operate from facilities on the base. For example, the General Dynamics contract for the Stryker program guarantees that the Army will provide space. However, he states that space is tight on the base. As contracts are entered into in the future, it may be possible to structure them so that the Army is not providing space on base. That could create the demand for space near the base. With its adjacency to the Fort Lewis Logistics Center, Woodbrook might be a good location for contractors. In addition, not all contractors are located on base. For example, there is a new light industrial development in DuPont that has at least three defense contractors as tenants.

base may be at a premium now or in the future, suggesting that off base locations for some users that serve the military may be appropriate.

A second source of potential users is business that is expanding and needs additional space in a business area. These uses could come from areas up and down the I-5 corridor from Everett to Vancouver including Tacoma, Seattle, and Olympia.

A third tier of potential users is businesses looking for lower-cost land. If we assume that the market value of vacant industrial land in Woodbrook is roughly \$7 per square foot, there may be some users that find this cost more attractive than more metropolitan locations. After adding the costs of infrastructure improvements at \$2 per square foot to the current assessed value of land and improvements in Woodbrook, about half of the land in Woodbrook may be attractively priced in relation to land in more dense urban areas and may have better access to freeway transportation.

A key problem with this third tier of user is that land in Woodbrook that is developed for residential use (approximately half of total land) is generally worth more than vacant industrial land so there will be little or no financial incentive for owners of residential land to convert the use to manufacturing and industrial purposes. These value levels may delay transition of the higher value land in Woodbrook from residential to business use.

Physical Improvements

The proposed development concept follows current zoning and comprehensive plan policies to create a business park with multi-family uses on the periphery. Some residential uses are expected to remain within the study area during the period of transition to business and commercial uses. Residential uses will gradually transition to business and commercial uses over time.

Roads must be upgraded to accommodate truck, pedestrian and bicycle traffic. Sewer would be extended as properties develop. As noted previously, the City does not currently utilize a standardized industrial road design. Several prospective designs have been developed as a part of this study (see **Figures 13 through 16** above). Although the City's Public Works Department has reviewed these scenarios, it has not espoused a single design for the area. One or two standardized sections should be finalized for future developers' use. This will offer more certainty to developers and a clear commitment to surrounding property owners of improvements that might serve as a buffer between users, including truck traffic.

Landscaping and fencing are proposed to screen the adjacent residential zoned areas and school from the new industrial development. A landscaped entry sign is recommended for the business park.

Individual parcel development concepts are presented that are typical for development of industrial areas and fit parcels ranging from one to 20 acres in size that currently exist in

the area. If larger parcels become available through assembly of several parcels, the typical development concepts can be modified to fit larger development sizes.

The concepts considered in this report generally are limited by the area required for surface parking. If structured parking is utilized in the future or parking requirements are reduced, more intensive development than considered in this study could occur.

An ideal development pattern would separate residential and truck/industrial traffic. This could be accomplished with a new "primary spine road" road running parallel to 146th Street SW and 150th Street SW located half way between them. (A second option would be a system of cul-de-sacs or spur roads providing similar access.) Property fronting on the south side of 146th Street SW would use this new road for access rather than 146th Street SW. Property to the north of 150th Street SW could use it as well to reduce turning movements on 150th Street SW. This action would not be feasible without acquiring additional right of way and was not pursued further. It is beyond the scope of this study, plus City staff expressed concern that it would consume potentially (re)developable land within the industrial area.

Actions for consideration

Proceed with infrastructure improvements with an expected budget of \$9 to 10 million (excluding school relocation). Prototypical improvements are conceptualized in **Figure 17** on the following page.

One of the main reasons for the recommendation to proceed with improvements in public right of way is that about half the area currently has a relatively low assessed value (\$5 or less for structures and land per square foot), and the improvements will likely create a substantial increase in land value.

The value created is estimated to be up to a level of \$7 per square foot if actions such as school relocation, Cross-Base Highway segment construction, and visual separation from residential housing occurs. Higher values might occur if intensive retail, office and commercial uses were developed. A \$5 per square foot value estimate reflects the "discount" that investors may require to account for incompatible uses such as the school and housing, especially within the IBP area, and potential traffic improvement needs. The cost of public improvements is \$1 per square foot of private land over the entire study area or \$2 per square foot over the half of the study area, with assessed structure and land values less than \$5 per square foot.

From a cost and value created standpoint, it appears reasonable to expect private property in the area to pay for the cost of the public improvements estimated in this report because of benefits created in the form of higher land value. One approach would be to form a LID. The drawback to this approach is that private developers will want a high early return on investment to justify the expenditure. There is substantial uncertainty regarding the value that will be created. The market for new business park land is not strong at the current time. The value created depends on actions of agencies and individuals over which the investor has no control. Such actions include relocation of existing housing, relocation of the school and construction of the Cross Base Highway. In light of these uncertain factors, LID financing may not be readily approved by those who must pay.

Therefore, it is recommended that public entities (direct City funding, coupled with grants and/or loans from federal and state economic development agencies) take a leadership role in undertaking the infrastructure expenditure proposed because of the job and other economic benefits involved. If private parties alone are expected to bear the cost of infrastructure improvements, the likely result may be a reluctance to participate in the full improvement cost and a provision of business improvements with lower job and wage benefits than desired. If public agencies develop required infrastructure and publicize a commitment to future business use of the area, private investors are more likely to make higher investments which will produce greater job and tax benefits.

Options for Mitigating Impacts to Housing and Surrounding Uses

Residential uses

Relocation of residential uses to areas with more appropriate levels of public service will benefit residents and also will improve the marketability of the area for business uses in conformance with comprehensive plan goals. The City could publicize the ongoing transition to business uses and elimination of housing units as a way to alert organizations responsible for providing low income housing of a potential need to develop additional low income units. Landscaping requirements will help buffer new industrial and manufacturing sites from residential zoned areas adjacent to the business park area. New uses that locate in the area are expected to be typical of those in a light industrial park, and light, noise and air impacts are intended to be less than with heavy industry.

School

Relocation of the Woodbrook Middle School would be an advantage in successful redevelopment of the business park. The reluctance of insurance companies to issue policies to industrial truck-intensive users adjacent to school properties could otherwise be a "fatal flaw" in the property's attractiveness to prospective tenants. The school's relocation to an on-base location has been considered. An estimated cost of moving this school would be \$20 to \$30 million, excluding land costs. In light of this, the assumption is made that the school will remain in its current location for the immediate future.

In lieu of relocation, a substantial buffering improvement is proposed for the Woodbrook Middle School to accommodate truck traffic on adjacent streets. Improvements on the school site to offset insurance concerns for industrial users and insurance providers and to improve compatibility with business use and truck traffic is likely to run in the neighborhood of \$1 million. Improvements would include relocation of parking and bus loading areas and substantial buffering on site.³⁹ A buffer/noise wall approach would be used along 150th Street SW between Murray Road SW and Spring Street SW. A slightly lower buffer would be appropriate along Spring Street SW due to the lower traffic volume on this street.

³⁹ See Figure 5.5-1 in the Cross-Base Highway Final EIS for the approach identified by WSDOT to address similar impacts along the west side of the school site when the Cross-Base Highway is constructed.

An alternative to school relocation that was considered was to develop 146th Street SW as the main entry to the business park. The City is concerned about the consistency of this approach with the future Cross-Base Highway improvements. In addition, 146th Street SW would need to be improved with new vertical and horizontal alignment to serve truck traffic at a cost of \$0.5 to \$1 million.

These actions do not preclude future, eventual relocation of the school at such a time as funding may be available to do so, but will create an improved safety profile for the functioning of both the planned business park and the school during the intervening time period.

COST AND VALUE ESTIMATION

This section includes:

1. A description of conceptual infrastructure improvement assumptions; and
2. Consultant's opinions of costs for public infrastructure improvements, potential value of land after infrastructure improvements, potential value of structures after infrastructure improvements, potential alternative target user willingness to pay for improved land, and potential approach to property assembly, development management and marketing.

Conceptual Infrastructure Improvements Assumptions

Transportation

Local Streets. Upgrade of streets (146th Street SW, 150th Street SW, Woodbrook Drive SW, and Spring Street SW) is recommended to support industrial use, buffer existing residences from traffic, buffer the school from traffic, and improve pedestrian facilities. A cost is provided based on the following assumptions:

1. Cross-Base Highway is a needed improvement assumed to be funded by others.
2. Interim congestion mitigation, if required (such as improvements to the intersection at Murray Road and 150th Street SW or improvements to Murray Road) shall be paid for on a case-by-case basis by developers.
3. New curb/gutter/sidewalks/storm drains are provided on 146th Street SW, 150th Street SW, Woodbrook Drive SW, and Spring Street SW. Storm sewer will rely on infiltration, and treatment will be provided for new paved surfaces.
4. Driveway curb cuts are assumed to be provided every 150 feet.
5. Pavement thickness should be increased to a minimum of six inches to support heavy truck traffic.

6. New right of way is assumed to be required only for limited intersection widening at 150th and 146th Streets SW at Spring Street SW and at 150th and 146th Streets SW at Woodbrook Drive SW.
7. Separate bicycle facilities are not shown, but widened sidewalks and travel lanes consistent with the adopted non-motorized transportation plan are proposed in selected locations to help accommodate bicycle travel. Bike lanes and wider sidewalks could be provided at the expense of landscaped areas and still keep new improvements within the right of way.
8. Buffer landscaping and street trees are proposed on all streets.
9. Modifications in the vicinity of and on the school site include relocation of the loading area on 150th Street SW and installation of rail barriers on streets around the perimeter of the school to mitigate impacts of increased traffic.

Cross-Base Highway. The Woodbrook project is assumed to be independent of the Cross-Base Highway project. City funds are not included for Cross-Base Highway construction.

Freight Rail Access. No cost for extension of rail is shown.

Bus Service. Pedestrian facilities are assumed to be provided to connect with the existing stop locations. No cost for relocation and upgrade of stops is included.

McChord AFB and Fort Lewis Access Gates. Road facilities are assumed to connect with these access points.

Utilities

Storm Sewer. New catch basin/drywell/infiltration systems are proposed in the Woodbrook IBP area to be similar to the system installed in areas upgraded as part of the sewer project. Stormwater treatment will need to be provided.

1. New catch basins and dry wells will be installed (or relocated in areas where such upgrade has taken place under the sewer project).
2. Curb and gutter will be installed throughout to direct water to the new catch basin/drywell system.
3. Private property will not be served with publicly funded extensions.

Sanitary Sewer.

1. The sanitary sewer system is assumed to be extended by gravity in all streets serving the IBP to serve adjacent property. (A cost for pump stations has not been included as detailed analysis of whether these would be required is beyond the scope of this study.)
2. The pump station for nearby housing on the McChord AFB will be maintained.

Water. Existing water mains are assumed to be adequate to serve new development; no improvements are proposed. Hydrants will likely require adjustment or relocation as part

of roadway upgrades. Industrial development will likely require upgraded service lines for domestic and fire flow needs.

A high flow water user would be required to pay the cost of needed system expansion.

"Dry" Utilities. Telecommunications, electricity, cable are assumed to not be undergrounded, and no joint utility trench is planned.

Telecommunications. Service is provided by private providers that generally provide needed extensions and upgrades based on service requests. No cost is provided for these extensions.

Electricity. Service is provided by Puget Sound Energy. Extensions and upgrades are expected to be provided based on service requests if overhead power is continued.

1. A cost for relocation of poles is provided to accommodate roadway improvements assuming that aboveground power is continued.
2. Street lights are assumed to require upgrade; a cost is provided for a new street light system on poles that are separate from the utility poles. It is suggested that the City pay for poles and lights as part of street improvements. This is because demand for business use right now is somewhat tepid, and infrastructure may provide the incentive to leverage private funds sooner to a higher level of investment. Expecting private property owners to pay for lights may delay development and result in a lower value of development. It seems reasonable to have adjacent property owners pay for electricity for street lights on 146th Street SW, Woodbrook Drive SW and Spring Street SW where most traffic is local. The City might pay for street light electricity on 150th Street SW because the lighting benefits through traffic.
3. Space for a joint utility trench to accommodate future electrical and telecommunications undergrounding is a possible option. The cost of this option has not been estimated as it does not appear feasible to accommodate it within existing right of way unless landscaping or sidewalks are eliminated or the joint trench is placed under the sidewalk (a possible but higher cost/less desirable option). This option is assumed to require easements on private property.

Cable. Service is generally extended and upgraded based on service requests. No cost is provided for these extensions.

Gas. The area is currently served with gas as described in the description of current utility and infrastructure services. Service is generally extended and upgraded based on service requests. No cost is provided for these extensions.

Infrastructure Costs

The following table provides an opinion of costs for proposed infrastructure improvements:

Table 13. Infrastructure Improvements Cost

Item	Alternative	Quantity	Units	Unit Price	Total
TRANSPORTATION					
1	146th, Murray to Spring (Road Section A)	1,300	LF	\$ 755.00	\$ 981,500.00
2	Spring, 146th to 150th (Road Section B)	1,250	LF	\$ 691.00	\$ 863,750.00
3	150th, Murray to Spring (Road Section D)	1,275	LF	\$ 708.00	\$ 902,700.00
4	150th, Spring to Woodbrook (Road Section D)	2,800	LF	\$ 708.00	\$ 1,982,400.00
5	Woodbrook, 146th to 150th (Road Section C)	1,300	LF	\$ 584.00	\$ 759,200.00
6	146th, Spring to Woodbrook (Road Section C)	2,300	LF	\$ 584.00	\$ 1,343,200.00
7	Spring, 150th to Base (Road Section C)	650	LF	\$ 584.00	\$ 379,600.00
8	Woodbrook, 150th to Base (Road Section D)	675	LF	\$ 708.00	\$ 477,900.00
	Total				\$ 7,690,250.00
ON SITE SEWER					
1	146th, Murray to Spring	0	LF	\$ 150.00	\$ -
2	Spring, 146th to 150th	0	LF	\$ 150.00	\$ -
3	150th, Murray to Spring	0	LF	\$ 150.00	\$ -
4	150th, Spring to Woodbrook	1,250	LF	\$ 150.00	\$ 187,500.00
5	Woodbrook, 146th to 150th	1,300	LF	\$ 150.00	\$ 195,000.00
6	146th, Spring to Woodbrook	2,200	LF	\$ 150.00	\$ 330,000.00
7	Spring, 150th to Base	0	LF	\$ 150.00	\$ -
8	Woodbrook, 150th to Base	0	LF	\$ 150.00	\$ -
	Total				\$ 712,500.00
ON SITE STORM SEWER IMPROVEMENTS					
	Included In Roads				
ON SITE WATER DISTRIBUTION					
	Not Used				
	(Hydrant relocation and new service stubs in roads cost.)				
ON SITE STREET LIGHTING IMPROVEMENTS					
	Included In Roads				
ON SITE RAIL					
	Not Used				
JOINT UTILITY TRENCH					
	By Private Providers				
Total					\$ 8,402,750.00

Road and utility cost assumptions associated with the above table:

1. Demolition includes pulverizing and onsite reuse of all paving.
2. Storm sewer includes collection, conveyance, treatment and disposal. The cost does not include any right-of-way, property, or easement acquisition.
3. Hydrants to be relocated and adjusted to meet new roadway horizontal and vertical requirements.
4. Water service stubs for future domestic and fire service are located every 300 feet.
5. Right-of-way, easement, or property acquisition is not included.
6. No tax, contingency, permit, special studies, or design fees are included.
7. No retaining or noise walls or special features are included.
8. No unsuitable material excavation is included.
9. No costs are included for hazardous waste identification, assessment, treatment, or removal.
10. No side sewers, sewer treatment, or pumping is included.

In addition to the above costs, a budget of \$0.5 to \$1 million is recommended to modify the school site to buffer it from traffic.

Potential Value of Land After Infrastructure Improvements

A rough estimate of land value created by the above estimates can be made by assuming that all types of land, vacant, developed, and redevelopable, would benefit from the proposed improvements. While the exact estimate of this increase is beyond the scope of this study, it may be reasonable to assume, based on the analysis presented in this report, that land value would increase by \$1 to \$2 per square foot.

This is an increase of \$5.1 to \$10.2 million in value for the entire district. The higher figure might require school relocation.

Land value benefits that are not in the above estimate would also accrue to land along the north side of 146th Street SW that is not in the IBP district.

Potential Value of Structures After Infrastructure Improvements

If all property within the industrial area were redeveloped with industrial buildings to typical density, this would have a cost of \$170,376,664 to \$438,300,720 million depending on structure type. To create this full value, current structures (valued at \$20,176,900 for tax purposes) would have to be demolished.

Potential Alternative Target User Willingness to Pay for Improved Land

Based on the analysis in this report, business users are assumed to be willing to pay up to \$7 per square foot for land with industrial level of infrastructure service. Under this assumption, improvements to about half the IBP acreage could be financed by conversion to business use. The remaining residential property would also increase in value, and this property could also help pay for improvements through increased rents.

Potential Approach to Property Assembly, Development Management, and Marketing

One of the major factors in marketing an area like Woodbrook is to create a level of certainty and expectation for the area's future use. The City may expect to substantially improve the marketability of property in the area if it both publicizes a proposed infrastructure plan and provides a firm financial commitment to implement the plan. There are several important steps in moving forward with this project:

1. Construct sewers to the western edge as planned.
2. Improve roads as shown to the area served by new sewers immediately.
3. Make improvements to the school site immediately.
4. Develop an attractive, well-landscaped, signed entry location.
5. Make landscape code changes if necessary to assure residential and business uses can coexist.
6. Begin publicizing the availability of parcels in the three-plus acre range in the western half of the area.

If public agencies do not fund needed improvements, development is likely to be delayed, and have a lower initial and long term value and lower job and wage benefits than suggested by comprehensive plan policies. Delay and underdevelopment is a likely result of uncertainty faced by private investors in the area. The uncertainty for Woodbrook area investors is related to several factors. The market for new business park land is not strong at the current time. The value created on private land in Woodbrook depends on actions of agencies and individuals over which the investor has no control. Such actions include relocation of existing housing, relocation of the school and construction of the Cross-Base Highway. As shown in the cost and value analysis much of the Woodbrook residential use has a higher return than sale for business land. In light of these uncertain factors, investors will tend to emphasize short term, low cost, high return actions. Buildings have a long life span, and constructing lower value structures initially may limit the willingness of future developers to invest in higher value structures. The initial development tends to set the tone for the area for a long time to come. For these reasons it is recommended that a strong public role be taken initially to create a long-term image through physical improvements and promote a long-term vision through an aggressive marketing effort.

BROAD BEST-USE ALTERNATIVES

The range of alternatives that could occur in the area is generally described below. The area is not large by industrial standards. Many industrial users want sites of 100 acres or more. The current ownership pattern suggests emphasizing sites in the three- to eight-acre size. This will require some lot consolidations as the area is built out.

Table 14. Possible Alternatives

	Alternative	Public Improvements	Private Improvements	Typical Uses	Possible Employees Per Acre
1	No public sector action	Low or no public investment	Limited value, one-story metal buildings with outdoor storage	Vehicle repair, mini storage	2-8
2	Limited public sector funding	Limited road improvements (improved pavement but no sidewalks, curbs or landscaping.	Limited value, one-story metal buildings with outdoor storage	Trucking, warehousing, continued mix of residential and business use	4-12
3	Public sector funding of on-site right-of-way improvements including sewer extension; with aggressive marketing	Roads improved to urban standards for a business district with sidewalks, landscaping	One- to three-story buildings, on-site landscaping	Light manufacturing, military support uses, flex space and incubator space, retail and office possible	8-20
4	Public sector funding of both on- and offsite right-of-way and other improvements; with aggressive marketing	Roads improved to urban standards for a business district with sidewalks and landscaping; sewer extended, school relocated; Cross-Base Highway segment constructed	Two- to four-story buildings, on-site landscaping, some under/in structure parking	Office, laboratories, possible mixed use buildings with residential and retail uses. Possible government and financial and insurance uses.	20-40+

In considering which alternative(s) would be most desirable, the following three criteria were developed from the comprehensive plan goals and policies.

- Criterion 1: Number of jobs created and relative wage levels
Actions that create a higher number of jobs with higher wages should be emphasized.
- Criterion 2: Rate and value of development
Actions that create higher land and structure value and result in a more rapid buildout should receive priority over those that do not.
- Criterion 3: Costs in relation to benefits
A cost and value estimation was performed to determine benefits from taxes and jobs in relation to costs required to create those benefits.

After evaluating the various alternatives through the lens of these criteria, the City is encouraged to pursue Alternative 3 above in the short run, with a long-term goal of a transition to Alternative 4. This recommendation is based on the analysis presented in the cost and value section which suggests that without an aggressive public role in infrastructure development the area is likely to remain underdeveloped for a long period of time due to the uncertainty faced by private developers. In the long run, after school and residential uses are relocated and public improvements are made including cross base highway and local street infrastructure, the area could provide an excellent location for high value businesses. The conclusion in this report is that underinvestment in public infrastructure could foreclose the option for a high value business area.

Building Options

The following table shows the anticipated cost of major building options for Woodbrook. A lower site coverage (0.33) is used for manufacturing buildings than higher-value buildings (0.4). These costs are expected to be on the low side as they include development cost only and do not include many items such as permitting, design, fees, land and demolition costs, frontage and utility costs, interior finish etc.

Table 15. Building Options⁴⁰

Item	Alternative	Quantity	Units	Unit Price	Total
FACTORY BUILDING					
1	Structure	1,681,852	SF	\$ 71.00	\$119,411,464
2	Site Work	5,096,520	SF	\$ 10.00	\$50,965,200
	Total				\$170,376,664
LOW RISE OFFICE					
3	Structure	2,038,608	SF	\$ 111.00	\$226,285,488
4	Site Work	5,096,520	SF	\$ 12.00	\$61,158,240
	Total				\$287,443,728
RESEARCH LAB					
5	Structure	2,038,608	SF	\$ 185.00	\$377,142,480
6	Site Work	5,096,520	SF	\$ 12.00	\$61,158,240
	Total				\$438,300,720

As a check on the above costs, 103 industrial office and warehouse sales provided by GVAKM for locations near the proposal site were reviewed. Prices ranged from \$23 to \$350 per square foot. The average sale price was \$112.8 per square foot. To reflect low, medium, and high-value construction, the values were broken into categories which had the averages shown below:

Table 16. Recent Industrial Building Sales

Value Tier	Sale Price Range	Avg. Sale Price/Sq. Ft.
Lower One Quarter	\$23 to \$73	\$56
Middle One Half	\$73 to \$130	\$102
Top One Quarter	\$130 to \$354	\$190

Implementation Options

Improvements on privately owned sites

Development of private property within the project is essentially envisioned as a privately funded activity. Grants, loans, or other investment/economic development incentive programs may be available to private parties, and the City may wish to encourage or participate in these programs.⁴¹

⁴⁰ Unit price costs are from 2008 Means Site Work and Landscape Cost Data Pages 718, 720 and 721.

⁴¹ One example of such a program is the EB-5 regional center designation made by the City of Lakewood intended to utilize section 203(b)(5) of the Immigration and Nationality Act and assist in attracting foreign investment to the area. Under the EB-5 program, 10,000 immigrant visas per year are available to qualified individuals seeking permanent resident status on the basis of their engagement in a new commercial enterprise. Of the 10,000 investor visas (i.e., EB-5 visas) available annually, 5,000 are set aside for those who apply under a pilot program involving a regional center designated by US Immigration and Customs Enforcement. The Lakewood City Council, through its Resolution 2009-03, has included Woodbrook in a district proposed for EB-5 regional center designation and authorized the City Manager to pursue federal recognition for such a district.

Improvements in public right of way

The provision of improvements in public right of way can be funded through City tax dollars and possibly using some grants and loans from federal and state governmental units.

Impact fees or environmental mitigation fees may also be used, in which the cost of improvements is charged to those properties that benefit. These fees can include sewer rates, general facilities charges, hook-up fees, street frontage improvement requirements, traffic mitigation fees, and tax revenues from the benefiting area assessed through a LID.

Financing options exist for developers to provide street improvements in front of individual parcels at the time of development. If not managed carefully, this approach may result in piecemeal improvements which, in this area, would result in discontinuous right-of-way improvements, lower land and site improvement value, and lower job creation than suggested by comprehensive plan policies. Implementation techniques that might make this approach work include implementation of a system where the developer pays the cost of frontage improvements to a City fund to construct the frontage improvements later, or signs a recorded, irrevocable agreement to participate in fair share cost when the frontage improvements are constructed.

Alternative Public Actions Considered

One issue to consider is what public actions should be taken to respond to current land value and economic conditions. The study area conditions identified in this report suggest using the following assumptions when considering public action alternatives:

1. Under a scenario of no or limited public action or investment, the IBP area is unlikely to develop for high-value business uses in the near future.
2. In the short run, a “no public action” scenario may result in development with lower structural value and jobs creation than is desirable in the long run.

Table 17. Potential Public Actions

Action	Possible result
No public action	Limited business development on vacant lands and land with low-value structures over the next 10 to 15 years (about half of the study area)
Public infrastructure improvements in right of way	Somewhat higher value business development on vacant lands and land with low-value structures over the next 10 to 15 years (about half of the study area)
Public infrastructure improvements in right of way plus school relocation and Cross-Base Highway construction within study area. Encourage housing unit relocation to areas with more appropriate levels of public services	Higher-value business development on vacant lands and land with low-value structures over the next 10 to 15 years (about half of the study area)
Public infrastructure improvements in right of way plus code changes to allow intensive residential use on sites with existing residential zoning or in mixed use commercial structures within the study area.	Mixed use district of up to six-story structures over the next 30 years

Infrastructure Improvement Costs

An opinion of potential infrastructure improvement costs is presented in the cost and value estimate above. The possible cost of public improvements in the right of way to serve future industrial development appears to be approximately \$9 to \$10 million, excluding school relocation and off-site improvements to Murray Road SW and/or the Cross-Base Highway. (Half of the \$10 million figure represents a contingency as this is a preliminary opinion of cost, not based on actual design.) This cost includes road improvements, storm system improvements, sidewalks, sewer extension, landscaping, fencing and new lighting. The water system is assumed to be adequate for serving industrial users. The total infrastructure costs are intended to represent the cost of off-site improvements within existing right of way needed to bring the area as close as possible to a level that will compete with other business parks. Costs NOT included are

1. Current sewer improvements now starting construction
2. School relocation
3. Murray Road SW improvements or Cross-Base Highway segment construction
4. Intersection improvements such as signalization or additional right of way at Murray Road SW and 150th Street SW
5. Right-of-way acquisition to accommodate larger radius curves
6. Walls or grading to accommodate steep slopes or other special property line conditions

7. Engineering fees and contingency costs
8. Permits, special studies, or utility fees

A substantially lower cost for improvements could be considered, but a lesser level of improvements may have a negative effect on marketability of property within the business park area for industrial purposes.

Overall Benefits and Costs

Benefits and costs are summarized in the following table to assist with determining whether to proceed with investment required for the project. Costs include infrastructure development, site development and the loss of housing units; while benefits include an increase in property values and generation of jobs both on and off the sites. An estimated range of ten to 30 employees per acres is based on review of several studies:

- 2007 Pierce County Buildable Lands Report. Page 3 of Appendix E shows average employees per gross acre for manufacturing/warehousing as 13.8 and median employees per gross acre of 21.32. Average for all commercial uses is 21.92. Since warehousing and distribution is not a use being targeted at Woodbrook and parcel sizes may be on the small side, Huitt-Zollars recommends considering the higher median figure adjusted 20 percent upward (to account for roads) when applied to net acreage. Potential employees per net acre in Woodbrook based on this reference = 26.
- 2004 NEST Study. A number for employees per acre for the total of all eight sites was calculated from the development potential table (page 19). A low and high range for each site is given in the table. For all sites combined, the calculated low range of employees per net acre is 23.3, and the high is 35. Inspecting the figures for individual sites in this table suggests a recommended low range for employees per net acre in Woodbrook of 17 to 23. A suggested high range per acre is 35 to 45.
- 1998 Industrial Land Supply and Demand in the Central Puget Sound Region. A typical range for net employees per acre for manufacturing use can be calculated from data on page 45 based on 587 square feet of building space per employee and from page 46 using a building coverage ratio range of 0.33 for high tech flex use space and 0.4 for large manufacturing buildings and office. Based on the calculations noted, a recommended range for employees per net acre at Woodbrook is 24.5 to 27.

In summary; review of the studies suggests a likely value of about 26 employees per net acre. If a range is appropriate, a range of about 20 to 30 employees per acre is suggested. If an "upper limit" projection is important, employees per net acre might be forecast as high as 40. Lower numbers would be expected with warehouse distribution but this type of use is not being planned for.

To provide a conservative low range estimate, ten jobs per acre was used in this summary which is below the median level for Pierce County. Capital and land intensive business

can be lower than this level but was not deemed likely in Woodbrook. The potential for higher densities produced by uses such as office and intensive manufacturing was considered for the high end of the range.

Table 18. Summary of Benefits and Costs

Benefits	Potential Value
Jobs on site	1,170 to 3,500 jobs
Support jobs to serve on-site business and employees	Not quantified, but support jobs may be two to three times on-site jobs
Building/site development value increase	Land and structure value would increase from \$33,044,900 (assessed value) to between \$143,312,400 and \$184,258,800. (Assumes new buildings with 40 percent site coverage.)
Costs	
Structure and site development costs (including land purchase and demolition of existing structures)	Assume equal to value estimate above (\$143,312,400 to \$184,258,800)
Road, landscaping and utility improvements	\$8.5 million
Buffering and parking/loading modifications to the Woodbrook Middle School site	\$0.5 to \$1 million
2008 assessed structure value of 550 housing units displaced. Of this total, the assessed value of structures for the 140 "very low rent units" is \$2.2 million (see housing section).	\$20.2 million
Cross-Base Highway construction and Woodbrook Middle School relocation	(Costs not quantified; outside scope of this work.)

MARKETING

Strategy

A strong, consistent marketing effort is critical to the success of the Woodbrook Business Park. This effort must be carried out in partnership with property owners; since the area has many owners, the City will need to lead the effort. The marketing effort has three main foci:

1. Involve owners and potential target users in refining a vision for the physical aspects of the area and creating the necessary regulations to achieve the vision.
2. Coordinate public investment efforts of agencies such as WSDOT, Pierce Transit, and Clover Park School District with those of City of Lakewood and military.

3. Publicize the vision for the area that will be realized after Cross-Base Highway construction.

A picture is worth a thousand words. Woodbrook will be undergoing a transformation as public improvements are made in the area. Illustrating a vision of an end state and publicizing it can have a strong positive effect in achieving that vision.

Since the area is somewhat isolated, a self-contained, pedestrian-oriented business area is suggested. The ideal end state would contain buildings of three or more stories with enough retail and other support services for employees to meet many daily needs without having to drive. Maintaining some residential use in the residential zoned portion of the area will help support the retail uses that are also attractive to employees and employers. The current parcel configuration allows placing buildings near the sidewalks with parking behind. This approach would encourage pedestrian use, a higher visual quality for the district and higher level of investment.

A campaign to contact potential users identified in this report should be started as soon as possible. The initial effort would be to involve potential users in the effort to plan a vision and environment for the area they may move into. Through this involvement, potential tenants may be generated as well as assuring the vision developed is grounded in the needs of actual users.

Although this is not City-owned property, if the City desires to engage in direct recruitment efforts for the area it should seek "anchor" type target users that can use a three- to eight-acre parcel and stand on their own, but which will attract smaller businesses that will create a district of strong economic interrelationships.

Marketing Challenges

Some important challenges to marketing the site:

1. Competing areas such as DuPont have already established an attractive industrial park image and are planned with few conflicts with other types of uses.
2. The need for trucks to drive past the existing school may make it very difficult for new industrial users to obtain insurance. This reduces the ability to sell property for uses which need truck access.
3. Existing residential uses may reduce the ability to sell property in the area as a business owner may view adjacent residences as a problem.

Aspects of the proposal intended to address marketing challenges

The intent of the following proposal is to help stimulate development and increase the value of development that does occur.

1. Provide a business image through development of a district entry/gateway and street landscaping

2. Screen the school use with physical and visual barriers. Relocation of some on-site school uses away from streets used for truck access is proposed.
3. Require landscape buffers for new business adjacent to residential uses and ensure that air, noise and light impacts from new businesses are confined to the business site.

Marketing opportunities and advantages

The site has several aspects which contribute to a green, sustainable development. The military currently emphasizes green concepts in base planning. Other types of potential tenants may view green concepts positively. Aspects of the site that may assist in marketing to military and other environmentally conscious users include:

1. The site is well served by public transit.
2. Storm water may be accommodated through infiltration
3. Housing on the periphery may accommodate walking to work
4. Water and freeway infrastructure are in place
5. A substantial number of customers and suppliers may be located close to the site.

TIMING

In order to be most effective, the public infrastructure improvements should be constructed all at once prior to attempts to market the property. Street improvements should be constructed as soon as possible starting from the west to the east to visibly establish that improvements will be made and that private investment will be supported by public actions. Likewise, if phasing of improvements is necessary, they should generally be phased from west to east to reflect the current location of vacant lands and planned sewer improvements. Actions that will speed implementation include relocation of the school and construction of the Cross-Base Highway and right-of-way improvements in the area.

A concrete schedule and funding mechanism should be developed for implementation of recommendations contained within this report to which the City is willing to commit. In its current state, this document is not an "action" under WAC 197-11-704. If, at some point, one or more actions are proposed as an outcome of the information in this report, then this report would be included as part of that action and would be subject to environmental review in conjunction with the proposed action.

Development of vacant property near sewer lines may occur fairly quickly (within five to ten years, assuming economic conditions improve). Full development of the entire area may take a fairly long time (up to 30 years). The reason for this long implementation duration is that under current conditions, the return on redeveloped industrial property may not be higher than that of property with existing residential structures. Existing residential uses may reduce the desirability of the area for industrial uses that prefer not to locate near residences because of potential for complaints about operational aspects such as hours, noise, odors, or traffic. It is likely that the area will be a "mixed use" area with both residential and business uses as it develops to full buildout.

APPENDIX A

Following is a list of goals and policies related to the study area drawn from the *City of Lakewood Comprehensive Plan*:

3.2.4 Housing Relocation

GOAL LU-15: Recognize and address relocation issues brought about by demolition or conversion to another use.

Policies:

- LU-15.1: On an annual basis, provide a report to policy makers on the loss of affordable housing due to demolition or conversion, which also documents what steps have been taken to provide replacement affordable housing.
- LU- 15.2: Identify affordable housing resources that may be lost due to area-wide redevelopment or deteriorating housing conditions. Prior to actions that result in the major reuse or major redevelopment of residential areas into other non-residential activities, provide relocation assistance plan(s).
- LU 15.3: Require housing impact studies as part of project-level environmental review for new non-residential developments involving the major reuse or redevelopment of existing residential areas.
- LU 15.4: Enforce the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended by the *Uniform Relocation Act Amendments of 1987* and any subsequent amendments, to provide financial and relocation assistance for people displaced as a result of construction and development projects using federal funds. Lakewood shall also enforce Section 104(d) of the *Housing and Community Development Act of 1974*, as amended, requiring the replacement of low- and moderate- income housing units that are demolished or converted to another use in connection with a CDBG project.
- LU 15.5: Consider the use of CDBG funds for relocation payments and other relocation assistance to persons displaced as a result of demolition, conversion to another use, or public actions such as targeted crime reduction programs.

3.4.3 American Lake Gardens and Springbrook

GOAL LU-33: Facilitate the development of industrial uses in American Lake Gardens.

Policies:

- LU-33.1: Facilitate the planned development of the industrial area, actively seeking high employment generating land uses that can capitalize on proximity to regional transportation and markets and nearby military bases.
- LU-33.2: Facilitate the provision of adequate infrastructure concurrent with redevelopment.
- LU-33.3: Encourage assembly of lands for redevelopment, particularly where undersized parcels contribute to siting problems.

- LU-33.4: In consultation with the Clover Park School District, state education officials, the City of Lakewood, and the Department of Defense, facilitate a plan to replace Woodbrook Middle School.
- LU-33.5: Reduce land-use conflicts between industrial and other land uses through provision of industrial buffers, setbacks, and screening devices, as well as strict enforcement of noise and air quality laws.
- LU-33.6: After appropriate study, designate a principal truck route through American Lake Gardens, taking into account the needs of residents and schools.

3.10 Isolated Areas

GOAL LU-55: Seek a smooth and efficient transition from residential to industrial use for American Lake Gardens.

Policies:

- LU-55.1: Monitor redevelopment plans and facilitate relocation assistance to residents as residential lands in American Lake Gardens convert to industrial uses in response to City-sponsored land-use redesignation.
- LU-55.2: Protect adjacent residential uses outside the city, including those associated with McChord AFB, from the impacts of industrial redevelopment through appropriate buffering measures.

APPENDIX B

Following is a list of all allowed uses within the Industrial Business Park (IBP) zoning district, compiled from LMC 18A.30.630, .640, and .650 together with Chapter 18A.20 LMC.

Primary Permitted Uses. The following uses are permitted within the IBP zoning district, subject to approval of a zoning certification and all applicable development permits:

Business Services. Businesses primarily engaged in providing services to other businesses on a contract or fee basis. Examples include courier services, parcel delivery services, fax services, telegraph services, reproduction services, commercial art and photography services, stenographic services, and janitorial services.

Commercial Accessory. Uses accessory to a primary permitted commercial use or in conjunction with a commercial use requiring a discretionary permit, subject to all applicable construction permits.

1. Professional Offices Level 1
2. Daycare Facilities Level 3
3. Eating and Drinking Establishment Level 1/2
4. Outdoor storage, subject to the provisions of LMC 18A.50.170, Outdoor Storage and Commercial Yard Surfacing Standards.
5. Antennae and satellite dishes for private telecommunication services, subject to specific standards, including siting criteria, set forth in LMC 18A.70.600, Wireless Telecommunications Facilities.
6. Facilities used in on-site grounds maintenance.
7. On-site soil reclamation treatment in accordance with state regulations.
8. Retaining walls, freestanding walls, and fences.
9. Accessory caretaker's dwelling, subject to the provisions of LMC 18A.70.350.
10. Unloading of shipping containers and semi-truck trailers may occur in non-residential zoning districts. Railroad cars, shipping containers, and semi-truck trailers may be kept in conjunction with commercial, industrial and transportation use types only where the placement and or use of the vessel is typically integral to the use type, and properly screened areas for storage and maintenance of such vessels is shown on the site plans for the facility. For existing facilities, areas for storage of shipping containers and semi-truck trailers, etc. may be approved by the Community Development Director via the zoning certification process outlined in LMC 18A.02.140.

Communication Facilities. Facilities used in the transmission of information by wire, radio, optical cable, electromagnetic or other similar means. Examples include central office switching units, remote switching units, telecommunications radio relay stations and cellular communication facility support structures.

Level 1: Local cable, fiber optics, traffic control, or telephone transmission lines, poles, or apparatus, not including antennae, wireless telecommunications facilities, structures, or private antenna and satellite dishes.

Level 2: Regional cable, fiber optics, traffic control, or telephone transmission lines, poles, or apparatus, not including antennae or wireless telecommunications facilities.

Level 3: Stand-alone emergency services dispatch facilities (“com centers”) that provide service to multiple jurisdictions or entire regions.

Level 4: Commercial or non-profit radio and/or television broadcasting stations.

Contractor Yards. Construction or contracting business offices with area for associated interior or outdoor storage, repair or maintenance of heavy equipment, vehicles, and construction supplies and materials.

Level 1: Maintenance and storage facilities of up to five thousand (5,000) gross square feet and outdoor storage and yard area of up to twenty thousand (20,000) gross square feet, without storage and maintenance of heavy equipment.

Convenience Commercial. Stores which may be either primarily engaged in serving the auto-driving public or, at lesser levels, principally oriented to neighborhood pedestrian traffic, which may include any combination of gasoline sales, uses typical of Food Stores as listed herein, and same-structure collocation of limited prepared food and drink sales such as fast food or espresso; as distinguished from Food Stores Commercial use type, which does not allow gasoline sales.

Level 4: Structure of over twenty thousand (20,000) gross square feet, with more than nine (9) two-sided gas pumps. Level 4 shall include levels 1, 2 and 3, which include structure of up to ten thousand (10,000) gross square feet, without gas sales; structure of up to 10,000 gross square feet, with up to six (6) two-sided gas pumps; and structure of up to twenty thousand (20,000) gross square feet, with up to nine (9) two-sided gas pumps.

Drive-Through Facilities, limited to coffee kiosks. Facilities which are standalone or provided in conjunction with and accessory to a collocated allowed use for the purposes of allowing a customer or patron to transact business from a motor vehicle. Examples include fast food, coffee kiosks, financial institutions or unstaffed automatic teller machines, and pharmacy prescription drop-off/pick-up. Does not include drive-through car washes or other forms of automobile service, which shall instead be treated as Motor Vehicle Service and Repair Commercial use types. Drive-Through Facilities shall not be comprised of a mobile unit such as a trailer or other vehicle with chassis which has been parked and/or converted to a permanent installation by virtue of removal of wheels or addition of blocking and skirting.

Eating and Drinking Establishment. Establishments that sell prepared food and/or beverages, which may include liquor, subject to appropriate state and local licensure, including health permits. Such uses may or may not include Amusement and Recreation Commercial use types in conjunction but shall be considered to constitute Eating and Drinking Establishments for the purpose of zoning only where amusement and recreation is clearly secondary to a primary Eating and Drinking Establishment Commercial use type. Does not include sexually oriented businesses serving food and/or beverages, which are instead treated as Sexually Oriented Business Commercial use types.

Level 1: Mobile vending occurring from motorized or non-motorized outdoor carts or vehicles which go from place to place selling pre-prepared or made-to-order products, where no seating is provided. Examples include lunch wagons, coffee or hot dog carts, popcorn vendors, and ice cream trucks.

Level 2: Mobile vending as described in Level 1, but occurring from a fixed, identifiable location to which the vendor returns each business day, serving pre-prepared or made-to-order products intended to be consumed off the premises. Examples include taco trucks.

Electrical Facilities.

Level 1: Above ground and below ground electrical distribution lines, poles, and associated facilities and appurtenances with voltages of 55,000 volts and under.

Level 2: Above ground electrical transmission facilities of an operating voltage greater than 55,000 volts, with associated facilities and appurtenances, including substations.

Flex Space. Mixed-use industrial buildings or parks adaptable to multiple use types which primarily serve a number of small to medium-size tenants, which predominantly require direct access for truck deliveries and have limited or controlled on-site customer service, and which are generally comprised of adaptable open floor space with a delineated office area.

Level 1: Commercial office/warehouse/retail/residential uses combined within a single structure or structures, where residential is limited to live/work space and where a maximum of thirty-five (35) percent may be office use and a maximum of twenty-five (25) percent may be retail use.

Level 2: Commercial office/warehouse combined within a single structure or structures, where a maximum of thirty-five (35) percent may be office use.

Level 3: Commercial office/secondary manufacturing and major assembly and limited manufacturing/assembly at the level allowed in the zoning district, combined within a single structure or structures, where a maximum of twenty-five (25) percent may be office use and where a maximum of fifty (50) percent may be warehouse use.

Food and Related Products. Uses which involve the processing of non-animal food materials, raw milk, ice manufacturing, and other food products manufacturing, processing, storage and packaging. This use type does not include animal rendering or rendering of animal products. Examples include bakeries that distribute products to many retail outlets; creameries and other dairy products manufacturing without on-site dairy animals; soft drink bottling plants, breweries, and distilleries; feed, cereal, and flour mills; vegetable oil manufacturing, refining or storage; yeast, starch, glucose and dextrin manufacturing; pickles, sauerkraut, and vinegar manufacturing; and sugar refining, all subject to appropriate state and local licensure.

Level 1: Indoor production operations and associated warehousing of up to ten thousand (10,000) gross square feet.

Industrial Accessory. Uses accessory to a primary permitted industrial use or in conjunction with an industrial use requiring a discretionary permit, subject to all applicable construction permits.

1. Professional Offices Level 1
2. Daycare Facilities Level 3
3. Eating and Drinking Establishment Level 1/2
4. Outdoor storage, subject to the provisions of LMC 18A.50.170, Outdoor Storage and Commercial Yard Surfacing Standards.
5. Antennae and satellite dishes for private telecommunication services, subject to specific standards, including siting criteria, set forth in LMC 18A.70.600, Wireless Telecommunications Facilities.
6. Incidental hazardous materials storage or use, subject to applicable federal and state regulations.
7. Facilities used in on-site grounds maintenance.
8. On-site soil reclamation treatment in accordance with state regulations.
9. Retaining walls, freestanding walls, and fences.
10. Accessory caretaker's dwelling, subject to the provisions of LMC 18A.70.350.

Industrial Services. Uses providing large scale or bulk services to commercial and industrial businesses but not directly to the consumer. Examples include clothes cleaning plants, bulk laundries, diaper services, power laundries, linen supply, dry cleaning plants, industrial laundries, other laundry and garment services; and industrial services related strictly to industrial uses.

Limited Manufacturing/Assembly. Uses that involve intermediate processing of semi-processed material into a consumer good and to uses that involve the assembly of semi-processed and/or intermediate processed products into a consumer good. Such uses also may involve intermediate services such as machining, welding, grinding, and machine/industrial repair. Examples include:

- Manufacturing and assembly of clothing and fabricated products.
- Assembly of electronic computers, computer hardware components and related equipment, and other machinery, apparatus and supplies for the generation, storage, transmission, transformation and utilization of electrical energy.
- Assembly of industrial and commercial machinery and equipment.
- Assembly of finished products made entirely or mainly from wood for use in construction.
- Assembly of ferrous and non-ferrous metal products and a variety of metal and wire products.
- Manufacturing and assembly of products manufactured or assembled from plastic resins and from natural, synthetic or reclaimed rubber.
- Manufacturing and assembly of instruments for measuring, testing, analyzing and controlling, optical instruments and lenses, surveying and drafting instruments, medical instruments and equipment, photographic equipment, watches and clocks, and supplies associated with the previous products.
- Photographic processing labs.
- Manufacturing and assembly of glass and glass products, clay products, pottery, concrete and gypsum products, abrasive and asbestos products, and other secondary products from materials taken principally from the earth in the form of stone, clay and sand.
- Manufacturing and assembly of dyeing, finishing, coating, waterproofing and other treating of fiber, yarn and fabrics.
- Manufacturing and assembly of felt, lace goods, non-woven fabrics, and miscellaneous textiles.
- Other manufacturing and/or assembly processes in which processed or semi-processed materials are made or assembled into consumer products.

Level 1: Indoor manufacturing and assembly as an accessory use of up to one thousand (1,000) gross square feet.

Level 2: Indoor manufacturing and assembly of up to fifteen thousand (15,000) gross square feet.

Level 3: Indoor manufacturing and assembly exceeding fifteen thousand (15,000) gross square feet.

Motion Picture Production Studios. Warehouse-style facilities used in the production of motion pictures.

Motor Vehicle Sales and Rental. Establishments or places of business engaged in the sales or leasing of motor vehicles, utility trailers, recreational and/or sporting vehicles, commercial vehicles, construction equipment, and heavy equipment subject to compliance with all applicable federal, state, and/or local licensing requirements. Service of vehicles may be permitted as an incidental, and clearly secondary, accessory use.

Level 2: New and used motor, recreational, and sporting vehicle sales and rental of more than two (2) and up to five (5) acres in size.

Level 3: New and used motor, recreational, and sporting vehicle sales and rental of larger than five (5) acres.

Motor Vehicle Service and Repair. Facilities or places where the repair and service of motor vehicles, recreational vehicles, sporting vehicles, commercial vehicles, and construction equipment occurs. Includes the sale of or refilling of personal or recreational propane tanks. Where outdoor storage is allowed, may include usable and/or scrap tire piles of up to a total of two hundred (200) tires as an accessory use.

Level 3: Minor service and repair of motor vehicles with up to two thousand (2,000) gross square feet of outdoor storage of vehicles under repair. Level 3 shall include Level 1 uses, which include minor service and repair of motor vehicles, including glass repair and replacement, truck bedliners, installation of vehicle accessories, lube/oil, tires, mufflers, brakes, and carpet/upholstery and other related services, conducted entirely within a completely enclosed building of less than two thousand (2,000) gross square feet which utilizes no outdoor storage. Specifically excludes transmission and engine rebuild shops, vehicle painting, body work or the installation and/or testing of audio or alarm systems; but may include short-term parking of customer vehicles while awaiting service.

Natural Gas Facilities. Facilities engaged in the distribution and storage of natural gas. Examples include natural gas gate stations, natural gas storage facilities and interim propane storage systems.

Level 1: Local distribution lines.

Outdoor Recreation. Recreational areas and recreation facilities which primarily are owned or operated by public or non-profit entities for the use and enjoyment of the general public. Examples include neighborhood parks, community parks, regional parks, waterfront parks, open space, arboretums, small or special landscaped areas, community and “pea patch” gardens, fairgrounds, zoos, and swimming pools. In some cases, such areas and facilities may be incidental to private development, such as open space set-asides necessary for environmental mitigation and children’s play areas (“tot lots”) within a subdivision; are intended to be principally used by a finite group; and may constitute private property.

Level 1: Natural open space and passive recreation. Protected open space areas in a natural state, together with low-impact passive recreational facilities including single-track hiking trails, beaches, viewing areas, interpretive signage, and fences.

Level 2: Neighborhood-scale active recreation and limited accessory structures. Parks, playgrounds, arboretums, and community gardens two (2) acres or less in size; open sports fields two (2) acres or less in size, with no spectator seating; improved trail systems; paved multi-use areas and bridle trails within defined park areas; ranger stations; public restrooms; playground equipment; sports equipment, including swimming pools, for neighborhood use; and picnic tables and shelters.

Pet Sales and Services. Businesses primarily engaged in retail sales and services associated with small animals and household pets. Examples include pet stores, pet grooming shops, pet day cares, and veterinary hospitals for small animals and pets.

Level 4: Commercial kennels and catteries, subject to LMC 5.52.

Postal Services. Mailing services provided by the United States Postal Service or contractors, including branch post offices, contract stations, terminals, and distribution centers.

Level 1: Postal facilities serving neighborhoods, such as contract stations or branch offices.

Level 3: Terminal postal processing facilities which provide no or limited customer services.

Printing and Publishing. Uses engaged in printing by one (1) or more common processes, such as letterpress, lithography, or screen; services for the printing trade, such as bookbinding and platemaking; and publishing newspapers, books and periodicals.

Level 1: Printing/pressing operation of up to five thousand (5,000) gross square feet.

Level 2: Printing/pressing operation exceeding five thousand (5,000) gross square feet.

Private Training School. Educational services provided for profit by private organizations or individuals with the primary purpose of preparing students for jobs in a trade or a profession. Examples include commercial/vocational schools, drivers' training, beauty and barber schools, business or computer training schools, and conservatories of art, music, or drama. Facilities larger than ten thousand (10,000) gross square feet shall be regulated as a Level 2 Education Civic use type.

Level 1: Establishments of up to five thousand (5,000) gross square feet and/or which utilize up to one thousand (1,000) square feet of outdoor area for instructional purposes or for parking of vehicles or storage of materials utilized in the instructional program.

Level 2: Establishments of between five thousand (5,000) and ten thousand (10,000) gross square feet and/or which utilize more than one thousand (1,000) square feet of outdoor area for instructional purposes or for parking of vehicles or storage of materials utilized in the instructional program.

Professional Offices. Offices, private firms, or organizations which provide professional or administrative services to individuals or businesses. Examples include employment services, property management services, title companies, law offices, engineering/surveying consulting firms, architecture and landscape architecture firms, advertising and public relations firms, medical and dental offices, diagnostic testing services, advertising agencies, travel agencies, talent agencies, insurance offices, real estate offices, investment brokers, financial planners, banking services, administrative offices for non-profit and quasi-public agencies, and other business offices customarily associated with professional or administrative office services.

Level 1: Office building of up to ten thousand (10,000) gross square feet.

Level 2: Office building of between ten thousand (10,000) and thirty thousand (30,000) gross square feet.

Level 3: Office building exceeding thirty thousand (30,000) gross square feet.

Public Maintenance Facilities. Facilities for storage and maintenance of vehicles, equipment, or related materials used in a utility or public facility activity. May include usable and/or scrap tire piles of up to a total of two hundred (200) tires as an accessory use.

Level 1: Indoor maintenance and storage facility not exceeding three thousand (3,000) gross square feet. Outdoor storage of equipment, materials, or vehicles and vehicle maintenance is prohibited.

Level 2: Indoor maintenance and storage facility not exceeding five thousand (5,000) gross square feet with outdoor storage not exceeding two thousand (2,000) gross square feet.

Rental and Repair Services. Establishments primarily engaged in the provision of rental and repair services or closely related uses. Examples include home improvement, garden, and party equipment rental; upholstery shops; appliance repair shops; small engine and power tool rental

and repair such as lawn mowers and chainsaws; vacuum cleaner repair; medical equipment rental and repair services; rental furnishings; and instrument repair services. Does not include vehicle repair or auto body, which are instead treated as Motor Vehicle Service and Repair Commercial use types.

Level 1: Rental and repair services not exceeding five thousand (5,000) gross square feet with no outdoor storage.

Level 2: Rental and repair services not exceeding five thousand (5,000) gross square feet with up to one thousand (1,000) gross square feet of outdoor storage/display of equipment.

Research, Development, and Laboratories. Businesses primarily devoted to experimental research and development.

Level 1: Research, development, and laboratories with limited manufacturing/ assembly at the level allowed in the zoning district.

Level 2: Research, development, and laboratories with secondary manufacturing and major assembly at the level allowed in the zoning district.

Sales of General Merchandise (Level 1), limited to that which is accessory and related to on-site manufacturing and production. Establishments that sell new general merchandise including apparel and accessories; auto parts; bookstores which do not otherwise constitute Sexually Oriented Business Commercial use types; legal pharmaceuticals; optical goods; furniture and home furnishings; and computers and electronics. Does not include establishments primarily engaged in selling lumber and other building materials, paint, glass, wallpaper, hardware, nursery stock, and lawn and garden supplies, which are instead treated as Building/Garden Supply and Nurseries Commercial use types. May include usable and/or scrap tire piles of up to a total of two hundred (200) tires as an accessory use.

Level 1: Establishments of up to five thousand (5,000) gross square feet primarily engaged in retail sales activities.

Secondary Manufacturing and Major Assembly. Uses that involve the processing of previously prepared natural and/or synthetic materials. This use type does not include animal rendering or rendering of animal products, nor manufacturing of illegal substances. Examples include:

- Manufacturing of products by predominantly chemical processes and which are to be used for ultimate consumer or industrial consumption.
- Manufacturing of computer hardware components and related equipment, and other machinery, apparatus and supplies for the generation, storage, transmission, transformation and utilization of electrical energy.
- Manufacturing and assembly of industrial and commercial machinery and equipment.
- Manufacturing and assembly of paper and paperboard and its conversion into other paper-based products.
- Manufacturing and assembly of ferrous and non-ferrous metal products and a variety of metal and wire products manufacturing, including sheet metal.
- Manufacturing and assembly of woven and knit fabrics, and carpets and rugs from yarn.
- Manufacturing and assembly of equipment for transportation of people or cargo by land, air, rail or water.

Level 1: Indoor manufacturing and assembly of up to fifteen thousand (15,000) gross square feet.

Sewage Collection Facilities. Facilities used to collect sewage, such as wastewater transfer facilities, odor control structures, pump stations and lift stations.

Stormwater Facilities. A conveyance, system of conveyances, or stormwater control facilities (including roads with drainage systems, catch basins, curbs, and gutters); ditches; man-made channels; storm drains; retention/detention facilities; and infiltration facilities which are designed or used for collection, storage, conveyance and treatment of stormwater.

Level 1: Stormwater collection and local conveyance systems.

Level 2: Regional detention/retention ponds and facilities, and constructed wetlands.

Transportation. The provision of public or semi-public transportation services. Examples include parking garages, park-and-ride lots, commercial parking lots, bus shelters, bus stations, bus transfer centers, passenger rail stations, ferry docks, and other types of public and quasi-public transportation facilities.

Level 1: Transportation uses serving neighborhoods, such as bus shelters.

Level 2: Transportation uses serving communities and regions, such as passenger rail and bus stations; parking facilities, including park-and-rides; and weigh stations.

Level 3: Commercial parking lots, structures, and satellite lots providing short-term parking for operational vehicles.

Warehousing, Distribution and Freight Movement. Warehousing and distribution of manufactured or processed products for one (1) or more businesses and the large scale distribution of raw, manufactured or processed products for one (1) or more businesses at a central location. This use type does not include warehousing, distribution, or movement of illegal substances. Examples include grocery chain distribution centers and parcel delivery distribution centers, storage of fabricated concrete blocks, finished lumber storage yards, new automobile storage areas.

Level 1: Indoor facilities of up to ten thousand (10,000) gross square feet.

Level 2: Indoor facilities of up to twenty thousand (20,000) gross square feet and/or outside storage of up to five thousand (5,000) gross square feet.

Waste Transfer Facilities. Solid waste facilities where solid waste is collected or subjected to interim processing before being transported to a permanent disposal site. Examples include recycling collection sites, drop-box transfer stations, transfer stations, recyclables recovery facilities, waste separation recovery facilities, moderate-risk waste facilities, and scrap tire piles which are not otherwise listed as accessory to numerous specific use types.

Level 1: Recycling collection sites serving a single neighborhood or limited area, not requiring a state solid waste permit.

Water Supply Facilities. Water purification facilities, water storage facilities, wellheads and pump stations.

Level 1: Local distribution systems, wellheads, pump stations, water purification facilities not exceeding two thousand (2,000) square feet of building area. Water storage facilities.

Level 2: Water purification facilities exceeding two thousand (2,000) square feet of building area.

Level 3: Chemical storage, handling, and usage in a water supply facility.

Administrative Uses. The following uses are permitted within the IBP zoning district, subject to approval of an administrative use permit and all applicable development permits:

Bulk Fuel Dealers. Establishments that sell fuels which, by their nature, are flammable, explosive, or toxic, to businesses and households for transportation, heating, and business purposes. Examples include propane gas sales, heating oil dealers, liquefied petroleum gas dealers, coal, wood, or other fuel dealers.

Motor Vehicle Service and Repair. Facilities or places where the repair and service of motor vehicles, recreational vehicles, sporting vehicles, commercial vehicles, and construction equipment occurs. Includes the sale of or refilling of personal or recreational propane tanks. Where outdoor storage is allowed, may include usable and/or scrap tire piles of up to a total of two hundred (200) tires as an accessory use.

Level 4: Major service and repair of motor vehicles including transmission and engine rebuild shops; towing services; vehicle customization and fabrication; motor vehicle rebuilds; motor vehicle and vehicle trailer manufacturing/assembly; installation and/or testing of audio or alarm systems; body work and vehicle painting, subject to state air quality standards, including outdoor storage of vehicle body parts and vehicles under repair; and minor service and repair uses with more than two thousand (2,000) gross square feet of outdoor storage. Level 4 shall include Level 3 and Level 1 uses, which include minor service and repair of motor vehicles with up to two thousand (2,000) gross square feet of outdoor storage of vehicles under repair; and minor service and repair of motor vehicles, including glass repair and replacement, truck bedliners, installation of vehicle accessories, lube/oil, tires, mufflers, brakes, and carpet/upholstery and other related services, conducted entirely within a completely enclosed building of less than two thousand (2,000) gross square feet which utilizes no outdoor storage. Specifically excludes transmission and engine rebuild shops, vehicle painting, body work or the installation and/or testing of audio or alarm systems; but may include short-term parking of customer vehicles while awaiting service.

Pet Sales and Services. Businesses primarily engaged in retail sales and services associated with small animals and household pets. Examples include pet stores, pet grooming shops, pet day cares, and veterinary hospitals for small animals and pets.

Level 3: Retail and service establishments with outdoor sales, kennels, and/or yard area.

Pipelines. Facilities engaged in the transmission of water, petroleum, oil, natural gas, or other substance, where lines do not serve as local distribution lines but may serve as a single regional facility.

Research, Development, and Laboratories. Businesses primarily devoted to experimental research and development.

Level 3: Research, development, and laboratories and basic manufacturing.

Secondary Manufacturing and Major Assembly. Uses that involve the processing of previously prepared natural and/or synthetic materials. This use type does not include animal rendering or rendering of animal products, nor manufacturing of illegal substances. Examples include:

- Manufacturing of products by predominantly chemical processes and which are to be used for ultimate consumer or industrial consumption.

- Manufacturing of computer hardware components and related equipment, and other machinery, apparatus and supplies for the generation, storage, transmission, transformation and utilization of electrical energy.
- Manufacturing and assembly of industrial and commercial machinery and equipment.
- Manufacturing and assembly of paper and paperboard and its conversion into other paper-based products.
- Manufacturing and assembly of ferrous and non-ferrous metal products and a variety of metal and wire products manufacturing, including sheet metal.
- Manufacturing and assembly of woven and knit fabrics, and carpets and rugs from yarn.
- Manufacturing and assembly of equipment for transportation of people or cargo by land, air, rail or water.

Level 2: Indoor manufacturing and assembly exceeding fifteen thousand (15,000) gross square feet.

Conditional Uses. The following uses are permitted within the IBP zoning district, subject to approval of a conditional use permit and all applicable development permits:

Amusement and Recreation. Establishments or places of business primarily engaged in the provision of sports, entertainment, or recreational services to the general public or members, which may or may not include Eating and Drinking Establishment Commercial use types in conjunction, but where eating and drinking is clearly secondary to a primary Amusement and Recreation Commercial use type, and which do not otherwise constitute Sexually Oriented Business Commercial use types. Examples include video arcades; teen clubs; dance halls; athletic clubs; indoor swimming pools; billiard parlors; bowling alleys; ice or roller skating rinks; indoor and drive-in movie theaters; outdoor recreational equipment rental, including marine-related; mini-golf and indoor or outdoor driving ranges that are not located in conjunction with a golf course; enclosed sports arenas or stadiums; amusement parks; and gambling establishments or activities such as cardrooms, enhanced cardrooms (“mini-casinos”), bingo parlors, off-track betting, or similar gambling activities, subject to appropriate state licensure; specifically excluding Lottery and pull tabs. Such uses may include facilities or activities clearly incidental and secondary to the primary use which provide functions typical of a “pro shop” in conjunction with the primary use.

Level 4: Indoor facilities exceeding thirty thousand (30,000) gross square feet and/or outdoor facilities exceeding five thousand (5,000) gross square feet, with or without alcohol sales.

Contractor Yards. Construction or contracting business offices with area for associated interior or outdoor storage, repair or maintenance of heavy equipment, vehicles, and construction supplies and materials.

Level 2: Maintenance and storage facilities exceeding five thousand (5,000) gross square feet and outdoor storage and yard area exceeding twenty thousand (20,000) gross square feet, or where storage and maintenance of heavy equipment occurs.

Electrical Generation Facilities. Facilities that generate or cogenerate electric energy by, or as a resource for, utilities engaged in the transmission and distribution of electricity to the public. Examples include hydropower facilities, thermal generation facilities such as cogeneration and combustion turbines, and other facilities employed to generate electric energy by or as a resource for utilities.

Outdoor Recreation. Recreational areas and recreation facilities which primarily are owned or operated by public or non-profit entities for the use and enjoyment of the general public. Examples include neighborhood parks, community parks, regional parks, waterfront parks, open space, arboretums, small or special landscaped areas, community and “pea patch” gardens, fairgrounds, zoos, and swimming pools. In some cases, such areas and facilities may be incidental to private development, such as open space set-asides necessary for environmental mitigation and children’s play areas (“tot lots”) within a subdivision; are intended to be principally used by a finite group; and may constitute private property.

Level 4: Parks and playgrounds over twenty (20) acres in size, open sports fields with unenclosed seating for more than four hundred (400) spectators, and regional recreational facilities.

Public Maintenance Facilities. Facilities for storage and maintenance of vehicles, equipment, or related materials used in a utility or public facility activity. May include usable and/or scrap tire piles of up to a total of two hundred (200) tires as an accessory use.

Level 3: City-wide or regional maintenance and storage facility exceeding five thousand (5,000) gross square feet and/or exceeding two thousand (2,000) gross square feet of outdoor storage.

Public Safety Services. Public safety and emergency services such as police and fire stations; animal control facilities, such as an animal shelter or Humane Society facilities; and correctional facilities. This use type may include accessory dispatch facilities but does not include stand-alone dispatch facilities (“com centers”) that, by their nature, provide service to multiple jurisdictions or entire regions, which shall instead be treated as a Level 3 Communication Facilities Utilities use type.

Level 1: Police and fire/emergency medical aid stations, including private ambulance services.

Sewage Treatment Facilities. Facilities used to treat any liquid or waterborne waste of domestic origin or a combination of domestic, commercial or industrial origin, and which by its design requires the presence of an operator for its operation, including alternative treatment works and package treatment plants. Also included are all of the various types of associated equipment, structures, and operations as they are currently constructed and operating or will result from technology, such as administrative offices, storage, laboratories, public walkways, recreational and educational uses, and parking lots. Sewage treatment facilities do not include any facility used exclusively by an individual residence, septic tanks with subsoil absorption, industrial pretreatment facilities, privately owned treatment plants for industrial wastewater, or wastewater collection systems.

Stormwater Facilities. A conveyance, system of conveyances, or stormwater control facilities (including roads with drainage systems, catch basins, curbs, and gutters); ditches; man-made channels; storm drains; retention/detention facilities; and infiltration facilities which are designed or used for collection, storage, conveyance and treatment of stormwater.

Level 3: Stormwater pond facilities that are also developed to allow uses such as parks, recreational, educational and research structures and activities, known as stormwater multiple use facilities.

Transportation. The provision of public or semi-public transportation services. Examples include parking garages, park-and-ride lots, commercial parking lots, bus shelters, bus stations, bus transfer centers, passenger rail stations, ferry docks, and other types of public and quasi-public transportation facilities.

Level 4: Taxi, shuttle, and bus “barns” and yards, and motor pool facilities. May include usable and/or scrap tire piles of up to a total of two hundred (200) tires as an accessory use.

Warehousing, Distribution and Freight Movement. Warehousing and distribution of manufactured or processed products for one (1) or more businesses and the large scale distribution of raw, manufactured or processed products for one (1) or more businesses at a central location. This use type does not include warehousing, distribution, or movement of illegal substances. Examples include grocery chain distribution centers and parcel delivery distribution centers, storage of fabricated concrete blocks, finished lumber storage yards, new automobile storage areas.

Level 3: Indoor facilities exceeding twenty thousand (20,000) gross square feet and/or outside storage exceeding five thousand (5,000) gross square feet.

APPENDIX C



www.hartcrowser.com

June 16, 2009

Mr. Carl Stixrood
Huitt Zollars, Inc.
814 East Pike Street
Seattle, Washington 98122-3893

**Re: Preliminary Geotechnical Assessment
American Lake Gardens
Lakewood, Washington
17515-00**

Dear Carl:

As per your request, we are providing geotechnical information to assist with your conceptual design work for the American Lakes Gardens parcel in Lakewood, Washington. This letter presents our preliminary geotechnical assessment of the site. It includes:

- A summary of the general geology of the area, along with anticipated subsurface soil and groundwater conditions at the site; and
- Our opinion regarding the suitability of the site soils for building foundation support, stormwater infiltration, and other geotechnical elements of development.

A Vicinity Map (Figure 1), and a Site Geologic Map (Figure 2) follow the text.

SITE GEOLOGY AND SUBSURFACE CONDITIONS

General Geology of the Project Area

American Lake Gardens is located in southern Pierce County within an area termed the Steilacoom outwash plain (Reference 1). This area contains deposits from the ice sheets of the Vashon-age glaciation that generally include the following soil units, in descending order from the ground surface downward:

- Recessional Outwash Sand and Gravel;

1700 Westlake Avenue North, Suite 200
Seattle, Washington 98109-6212
Fax 206.328.5581
Tel 206.324.9530



- Glacial Till; and
- Advance Outwash Sand and Gravel.

Bedrock is estimated to be more than 1,800 feet below the ground surface. Both shallow and deep groundwater is generally present in the project area, with the shallow groundwater (less than 100 to 200 feet below ground surface) present within the Vashon glacial deposits.

Anticipated Site Subsurface Conditions

Logs of specific explorations and groundwater wells (Reference 2) on and adjacent to the American Lake Gardens site correspond well with the mapped geology of the area. Based on our review of this information, we anticipate that site soils generally consist of:

- A variable thickness of medium dense to dense, damp, brown to black, clean to silty Sand and Gravel and open work cobbly Gravel (Reference 3); overlying
- Very dense, silty Sand and Gravel (Glacial Till).

We have interpreted the overlying Sand and Gravel to be a recessional outwash deposit. At some locations, the overlying Sand and Gravel may be very thick (tens of feet) and at other locations (e.g., toward the eastern portion of the site), the Sand and Gravel may be a thin veneer, or not present at all, where the Glacial Till is exposed at the ground surface (See Figure 2). The recessional sands and gravels (commonly referred to as the Steilacoom Recessional Sands and Gravels) typically have a surficial topsoil zone that is relatively thick (on the order of 12 inches or more).

We generally expect that these natural soils described above are present at or very close to the ground surface, although, at some locations, they may be overlain by a few or more feet of fill material, depending on past construction and topographic modifications.

Site explorations and wells indicate the site groundwater level to be variable. It can be tens of feet below the ground surface, or where the Glacial Till is present, groundwater can be perched on top of the till, very near the ground surface.

PRELIMINARY GEOTECHNICAL ASSESSMENT

Building Foundations. The natural medium dense to very dense site soils in their native state would generally provide suitable support for shallow footing foundations that support light to moderate column and wall loads. If surficial fill were present above the natural soils, it would not be suitable



for foundation support and should be removed so that footings would bear on the natural soils. Alternatively, footings could bear on new structural fill (or potentially reworked and recompacted *in situ* soil) that is placed directly above the medium dense to very dense natural soil.

Building Slabs-on-Grade. The natural site soils would provide suitable support for moderately loaded slabs-on-grade. Uncontrolled fill soils should generally not be relied on for slab-on-grade support.

Pavements. The natural medium dense to very dense site soils would also serve as a suitable subgrade for pavement sections. It may be possible to allow fill soils to remain in-place beneath pavement sections after some densification. However, this would depend in part on the composition, thickness, and density of the existing fill material.

Permanent Slopes. For planning purposes, permanent slopes in the natural soils could be cut at an angle of 2 horizontal:1 vertical (2H:1V) or flatter.

Utilities. The natural site soils are generally expected to provide suitable on-grade support for buried utilities.

Use of On-Site Soils for Structural Fill. The natural site soils would generally be suitable for use as structural fill, provided that their moisture content at the time of placement is near optimum. As the amount of fines (that portion passing the No. 200 sieve) increases, the soil becomes increasingly sensitive to small changes in moisture content and adequate compaction becomes more difficult to achieve. The recessional Sand and Gravel unit generally contains a small amount of fines, while the Glacial Till contains a significant amount of fines. As such, the recessional Sand and Gravel is likely to be suitable for use as structural fill throughout the year. Although it may be possible to use the Glacial Till, its use would likely be restricted to the relatively drier summer months.

The upper "topsoil" zone of the recessional Sand and Gravel tends to be dark black in color to depths of 2 to 3 feet in some areas. Although much of this material appears to be topsoil that would not be suitable for use as structural fill, the gravel content is often high enough that much of this material would actually be reusable as fill.

PRELIMINARY STORMWATER INFILTRATION ASSESSMENT

The coarse-grained recessional outwash generally consists of relatively clean sand and gravel and/or open work cobbly gravel. It is well suited for stormwater infiltration and is commonly used in this capacity for developments in this area. A critical factor at this site, however, is the potential



variability of the silt content of the Sand and Gravel and the potential presence of the Glacial Till. The Glacial Till is generally a silty to very silty material and is not considered suitable for stormwater infiltration. If the till is present within a critical depth below an infiltration basin or if the till causes a perched groundwater table to be present within a critical depth of an infiltration basin, it will hinder or impede the stormwater infiltration. At locations where the Glacial Till is present as described, or where the Sand and Gravel unit contains a significant amount of silt, stormwater infiltration would not be feasible.

Typical correlations of grain size to infiltration rate (based on the Washington State Department of Ecology Western Washington Stormwater Manual) would suggest an infiltration rate for the sands and gravels of about 10 inches per hour (including a factor of safety of 2). More recently, we have conducted full-scale pit tests for projects in similar soils at Fort Lewis that resulted in design infiltration rates of 5 to 20 inches per hour.

LIMITATIONS OF THIS LETTER

Note that this preliminary assessment is based on a brief site reconnaissance, and a review of published literature and previous reports addressing similar soil conditions by Hart Crowser and others. As per your requested scope of work, we did not perform field explorations for this work. The information contained herein is preliminary in nature and should not be used for design. Site-specific field explorations and a specific design study should be performed as part of any final design work.

We trust that the information contained herein meets your present needs. If you have any questions or we can be of further assistance, please call.

Sincerely,

HART CROWSER, INC.

J. JEFFREY WAGNER, PE

Principal Geotechnical Engineer

Attachments:

References

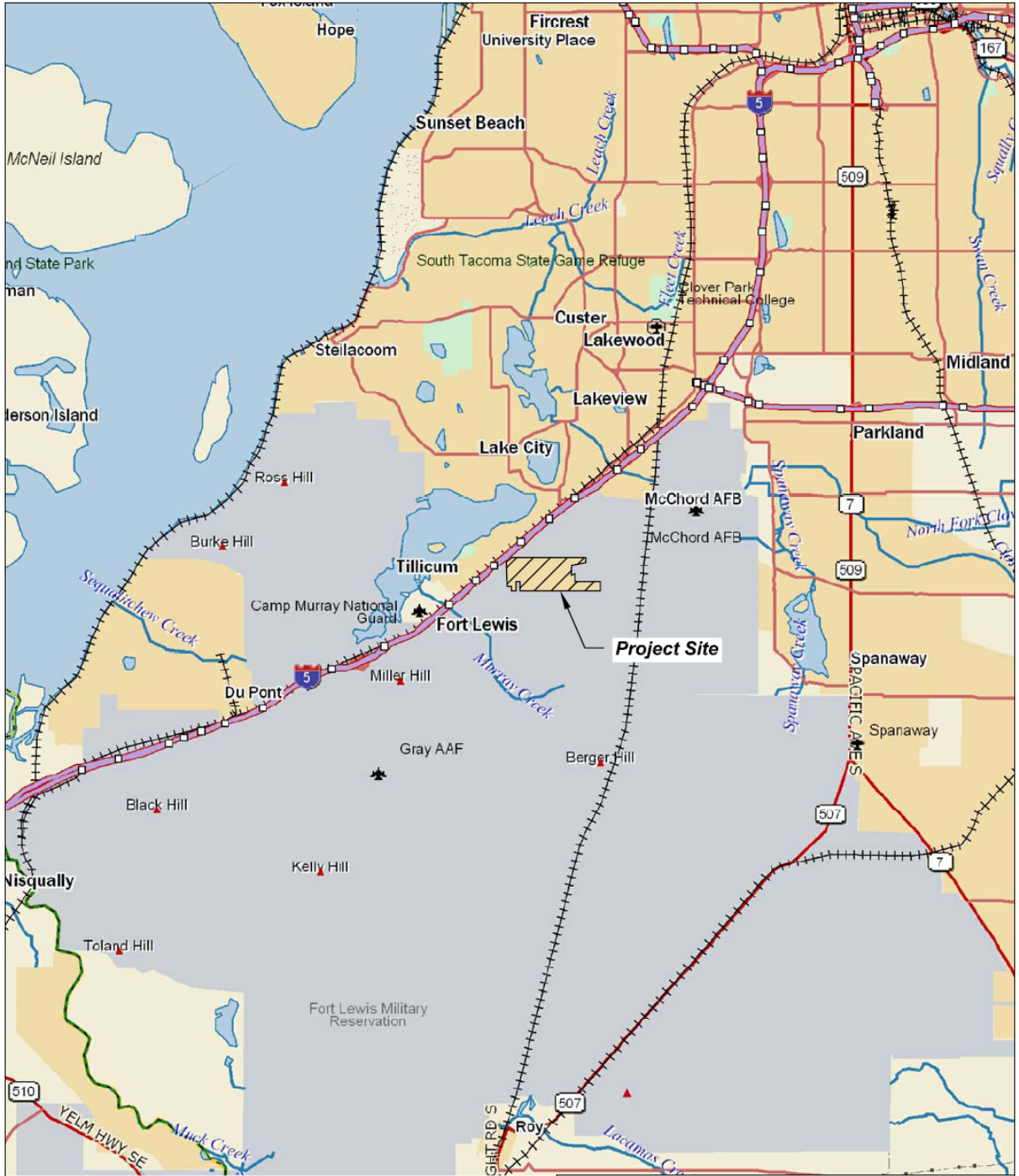
Figure 1 - Vicinity Map

Figure 2 - Site Geologic Map

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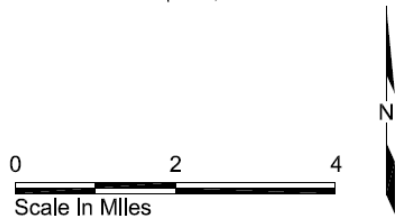
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1. City of Lakewood 2007. Environmental Assessment - American Lake Gardens and Tillicum Sewer Extension, Prepared for City of Lakewood by Parametrix, May 2007 (Page 3-13).
2. Department of Ecology, State of Washington. Well Log Imaging Internet Version 1 (2/12/2003) accessed November 7, 2008 from Department of Ecology Web Site:
<http://apps.ecy.wa.gov/welllog/>.
3. The Pacific Northwest Centre for Geological Mapping Studies (GeoMapNW) of the University of Washington. Post Technical Review, Description of Map Units : Tacoma South 7.5-Minute Quadrangle, accessed on November 7, 2008, from GeoMapNW Web Page:
<http://geomapnw.ess.washington.edu/>.



Source: Base map prepared from DeLorme Topo 7.0, 2007.

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American Lake Gardens Lakewood, Washington	
Vicinity Map	
17515-00	11/08
Figure 1	

APPENDIX D

HABITAT TECHNOLOGIES

October 15, 2008

Mr. Carl Stixrood, AICP
@ Huitt-Zollars, Inc.
814 East Pike Street
Seattle, Washington 98122

RECEIVED
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HUITT-ZOLLARS
SEATTLE

**RE: Wetland, Stream, and Priority Habitats Reconnaissance Level Assessment
American Lake Gardens IBP Planning Area
City of Lakewood, Washington**

Dear Mr. Stixrood,

Following your request Habitat Technologies has completed an onsite reconnaissance assessment of the approximately 117-acre American Lake Gardens IBP Planning Area project site. The project site is located to the east of the Interstate 5 Corridor - generally between Fort Lewis and McCord Air Force Base - in the Lakewood Gardens Area of the City of Lakewood, Washington (Figure 1). The project site is composed of approximately 93 parcels, all of which have been subject to primarily a variety of residential developments for the past several decades. The project site is bound on the north by 146th Street SW, on the east by Woodbrook Drive SW, on the west by Spring Street SW, and on the south by the boundary of Fort Lewis.

Onsite assessment followed the established criteria and methods as defined within the *Corps of Engineers Wetlands Delineation Manual* (1987 Manual), the *Washington State Wetlands Identification and Delineation Manual* (Wash Manual), the Washington Department of Natural Resources (WDNR) Forest Practice Rules, and City of Lakewood Title 14A – Environmental Protection. Please keep in mind that this reconnaissance level assessment letter report is intended for internal planning. This letter report is not intended to meet the criteria of a formal wetland, stream, and critical habitats delineation report.

BACKGROUND INFORMATION

National Wetland Inventory Mapping

The National Wetland Inventory (NWI) mapping completed by the U.S. Fish and Wildlife Service was reviewed as a part of this assessment. This mapping resource identified a small wetland generally with the east-central portion of the project site. This wetland was identified as palustrine, scrub-shrub, seasonally flooded (PSSC). This mapping resource also identified a wetland offsite to the north of the northwestern corner of the project site and another wetland offsite to

wetlands, streams, fisheries, wildlife – mitigation and permitting solutions
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the northwest of the project site. These offsite wetlands were also identified as palustrine, scrub-shrub, seasonally flooded (Figure 2).

State of Washington Priority Habitats and Species

The State of Washington Priority Habitats and Species (PHS) Mapping was reviewed as a part of this assessment. This mapping resource did not identify any priority habitats or species within the project site or adjacent areas (Figure 3). In addition, this mapping resource did not identify a wetland area within the east-central portion of the project site as defined in the NWI mapping above. This mapping resource did identify a wetland area offsite to the north of the northwestern corner of the project site as defined in the NWI mapping above.

This mapping resource identified the presence of Western gray squirrels (*Sciurus griseus*) offsite approximately 4,000 square feet to the southeast of the southeastern corner of the project site. The Western gray squirrel is listed as a State of Washington "threatened" species.

State of Washington Department of Fish and Wildlife

The State of Washington Department of Fish and Wildlife mapping was reviewed as a part of this assessment. This mapping resource did not identify any streams within or adjacent to the project site. This mapping resource did identify a "waterbody" offsite to the north of the northwestern corner of the project site similar to the NWI mapping above (Figure 4).

State of Washington Department of Natural Resources

The State of Washington Department of Natural Resources mapping was reviewed as a part of this assessment. This mapping resource did not identify any streams within or immediately adjacent to the project site. This mapping resource did identify a "waterbody" offsite to the north of the northwestern corner of the project site similar to the NWI mapping above (Figure 5). This offsite "waterbody" was further identified as Emerson Lake. This mapping resource also identified an unnamed drainage offsite to the east of the northeastern corner of the project site. This offsite drainage was further identified as a Type "U" Water (unknown).

Pierce County Mapping

The Pierce County Mapping was reviewed as a part of this assessment. This mapping resource identified a "potential" wetland generally with the east-central portion of the project site similar to the NWI mapping above. This mapping resource also identified a wetland offsite to the north of the northwestern corner of the project site and another wetland offsite to the northwest of the project site (Figure 6).

This mapping resource also identified the presence of Oregon white oak (*Quercus garryana*) trees generally throughout the eastern portion of the project site and extending offsite to the northeast, east, and southeast. Oregon white oak trees were also identified offsite to the northwest of the northwestern corner of the project site.

Washington State Natural Heritage Program

The Washington State Natural Heritage Program was reviewed as a part of this assessment. This resource did not identify any high quality, undisturbed habitat or habitats that support state Threatened, Endangered, or Sensitive plant species within the project site. This mapping resource did identify an area of white topped aster (*Sericocarpus rigidus*) offsite to the southeast of the project site.

Prior Assessments

Over the past several years Habitat Technologies has completed a number of wetland and habitat assessments within and adjacent to the project site. These prior assessments have generally identified the same wetland and habitat issues defined within the Pierce County mapping above.

ONSITE EVALUATION

Evaluation Methodologies

Onsite reconnaissance level assessment was completed between August and October 2008. This assessment followed the methodologies and procedures defined in the 1987 Manual, the Wash. Manual, the WDNR Forest Practice Rules, and City of Lakewood Title 14A – Environmental Protection. This assessment also generally followed the guidelines provided by the U.S. Fish and Wildlife Service for the preparation of *Biological Evaluations*.

Wetlands are transitional areas between aquatic and upland habitats. In general terms, wetlands are lands where the extent and duration of saturation with water is the primary factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface (Cowardin, et al., 1979). Wetlands are generally defined within land use regulations as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (1987 Manual).

Wetlands exhibit three essential characteristics, all of which must be present for an area to meet the established criteria within the Wash. Manual and the 1987 Manual. These essential characteristics are:

1. **Hydrophytic Vegetation:** A predominance of plants that are typically adapted for life in saturated soils.
2. **Hydric Soil:** A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper horizons.
3. **Wetland Hydrology:** Permanent or periodic inundation, or soil saturation to the surface, at least seasonally.

A stream is generally defined as a location where surface waters produce a defined channel or bed. A defined channel or bed is typically an area which demonstrates clear evidence of the passage of water and includes, but not limited to, bedrock channels, gravel beds, sand and silt beds, and defined channel swales. A stream need not contain water year-round. A stream typically does not include irrigation ditches, canals, storm or surface water run-off devices, or other artificial watercourses unless the constructed watercourse conveys a stream which naturally occurred prior to the construction of such watercourse.

Fish and wildlife habitat conservation areas are those areas that support regulated fish and wildlife species, typically identified either by known point locations of specific species, by habitat areas, or by both. Documented habitat areas or potential habitat areas and point locations for fish and wildlife species include specific habitat types which are infrequent in occurrence in City of Lakewood and may provide specific habitats with which endangered, threatened, sensitive, candidate, or monitored fish and wildlife species have a primary association (i.e. breeding habitat, winter range, and movement corridors).

Field Observations

Onsite reconnaissance assessment activities encompassed the entire project site. The project site was approximately 117 acres in size and was accessed by existing public roadways. A series of aerial photos was also used as a part of this reconnaissance assessment. No specific field data was collected as a part of this reconnaissance assessment.

The project site was composed of a number of existing parcels that had undergone prior land use manipulations to include forest harvest, clearing, grading, utility development, external and internal road construction, and primarily residential urbanization. The residential urbanization included single-family homesites, light to moderate density apartment complexes, and mobile home parks. A few of the parcels were vacant but appeared to have been used for residential purposes which have subsequently been removed.

- **Project Site Vegetation and Hydrology**

The plant communities throughout the project site are composed of a variety of native and ornamental species. These plant communities range from well managed landscaping adjacent to active residential areas, to fallow pastures and scattered pockets of mature trees. The majority of these plant communities exhibited characteristics typically associate with moderately well drained to well drained soil.

A small pocket generally within the northern portion of parcels 0219221045 and 0219221044 was dominated a plant community more typically associated with damp to saturated soils. This plant community included Oregon ash (*Fraxinus latifolia*), black cottonwood (*Populus trichocarpa*), willows (*Salix* spp.), rose (*Rosa* spp.), and red osier dogwood (*Cornus stolonifera*). This plant community was identified as hydrophytic in character (i.e. typical of wetlands).

The eastern portion of the project site exhibited a greater number of retained mature trees than the western portion of the project site. Observed tree species included Douglas fir (*Pseudotsuga menziesii*), big leaf maple (*Acer macrophyllum*), Oregon oak (*Quercus garryana*), black cottonwood, locust (*Robinia pseudoacacia*), domestic apple (*Pyrus* spp.). Outside the managed yard areas the understory included a variety of shrubs, herbs, and grasses. Observed species included Himalayan blackberry (*Rubus procerus*), evergreen blackberry (*Rubus laciniatus*), Pacific blackberry (*Rubus ursinus*), Scot's broom (*Cytisus scoparius*), rose (*Rosa* spp.), snowberry (*Symphoricarpos albus*), Oregon grape (*Berberis nervosa*), English ivy (*Hedera helix*), bracken fern (*Pteridium aquilium*), daisy (*Bellis* spp.), Canadian thistle (*Cirsium arvensis*), bull thistle (*Cirsium vulgare*), smooth cats ear (*Hypochaeris glabra*), hairy cats ear (*Hypochaeris radicata*), sheep sorrel (*Rumex acetosella*), dandelion (*Taraxacum officinale*), bluegrass (*Poa* spp.), velvet grass (*Holcus lanatus*), orchardgrass (*Dactylis glomerata*), fescue (*Festuca* spp.), and vernalgrass (*Anthoxanthum odoratum*). These areas were generally identified as non-hydrophytic in character (i.e. typical of uplands).

As noted above the majority of the project site appeared to drain moderately well to well. In addition, no portion of the project site was observed to exhibit characteristics typically associated with a stream.

- **Offsite Vegetation and Hydrology**

The plant communities identified within the project site were generally similar to the plant communities within the adjacent offsite parcels. However, the area offsite to the south and southeast (within Fort Lewis) was dominated by an upland forest plant community that had been less impacted by urban development.

As with the onsite plant communities within the eastern portion of the project site Oregon white oak trees were a dominant species within the areas offsite to the northeast, east, southeast, and south. Oregon white oak trees were also a dominant species within the area offsite to the northwest of the project site along the 146th Street/Thorne Lane Corridor leading to Interstate 5.

A depressional area identified offsite to the north of the northwestern portion of the project site was dominated by plant species more typically associated with seasonal wetland hydrology. This depression has been mapped as Emerson Lake and identified as a City of Lakewood Category 2 Wetland. Seasonal surface water hydrology within Emerson Lake has been identified through prior assessments as controlled by an outlet culvert directing seasonal surface water to the west into a depression generally associated with parcel 0219222038. From parcel 0219222038 seasonal surface water appeared to continue via a series of open depressions and stormwater utilities to the west eventually passing under the Interstate 5 Corridor and then entering American Lake.

- **Wildlife Observations**

The onsite reconnaissance assessment of wildlife species presence was also completed as a part of the onsite assessment of wetland, drainage corridor, and critical habitat characteristics. It is unlikely based upon the existing site conditions, coupled with adjacent land uses, that species which require large areas of undisturbed habitat would exist onsite.

Onsite reconnaissance assessment was completed during summer and early fall of 2008. In addition, Habitat Technologies had completed a wide variety of prior site assessments within adjacent areas. Avian species directly and indirectly observed, or that would be expected to be present based on habitat types, included brown creeper (*Certhia familiaris*), song sparrow (*Melospiza melodia*), American crow (*Corvus brachynchos*), American robin (*Turdus migratorius*), dark eyed junco (*Junco hyemalis*), black capped chickadee (*Parus atricapillus*), bushtit (*Psaltriparus minimus*), house finch (*Carpodacus mexicanus*), common raven (*Corvus corax*), rock dove (*Columbia livia*), mourning dove (*Zenaida macroura*), Northern flicker (*Colaptes auratus*), hairy woodpecker (*Picoides villosus*), Steller's jay (*Cyanocitta stelleri*), rufous-sided towhee (*Pipilo erythrophthalmus*), red winged blackbird (*Agelaius phoeniceus*), Brewer's blackbird (*Euphagus cyanocephalus*), marsh wren (*Cistothorus palustris*), house sparrow (*Passer domesticus*), tree swallow (*Tachycineta bicolor*), violet green swallow (*Tachycineta thalassina*), barn swallow (*Hirundo rustica*), purple finch (*Carpodacus purpureus*), American goldfinch (*Carduelis tristis*), red-breasted nuthatch (*Sitta Canadensis*), golden-

crowned kinglet (*Regulus satrapa*), purple finch (*Carpodacus purpureus*), evening grosbeak (*Hesperiphona vespertina*), and rufous hummingbird (*Selasphorus rufus*). Many of these avian species would be expected to feed throughout the project site and would also be expected to nest within the habitats provided by the project site.

Mammal species observed directly and indirectly, or that would be expected within the project site based on habitat types, included black tailed deer (*Odocoileus hemionus*), coyote (*Canis latrans*), eastern gray squirrel (*Sciurus carolinensis*), Townsend chipmunk (*Eutamias townsendi*), eastern cottontail (*Sylvilagus floridanus*), striped skunk (*Mephitis mephitis*), opossum (*Didelphis virginianus*), Townsend mole (*Scapanus townsendii*), deer mouse (*Peromyscus maniculatus*), voles (*Microtus* spp.), Norway rat (*Rattus norvegicus*), shrew (*Sorex* spp.), and bats (*Myotis* spp.). Western gray squirrels have been documented within the Oregon white oak forest areas offsite to the southeast.

The project site also provided habitats for Pacific treefrog (*Hyla regilla*) and common garter snake (*Thamnophis sirtalis*). The project site did **not** provide direct habitats for fish species.

The occurrence and utilization of available habitats by wildlife species within the adjacent parcels would be expected to be similar to that of the project site.

Movement Corridors

The project site and adjacent areas have been greatly modified by prior and ongoing urban land use actions. As such, the project site did not appear to provide a corridor for the seasonal movement of mammals. The project site does appear to provide limited habitats for the seasonal movement of a few migratory avian species.

State Priority Species

Game Species: A limited number of species identified by the State of Washington as "Priority Species" potentially may utilize the project site and immediately adjacent habitats. A few of these species are identified as "game species" and are regulated by the State of Washington through recreational hunting bag limits, harvest seasons, and harvest area restrictions. One identified onsite game species was black-tailed deer.

State Candidate: State Candidate species are presently under review by the State of Washington Department of Fish and Wildlife (WDFW) for possible listing as endangered, threatened, or sensitive. No State

Candidate species were identified during the assessment to utilize the habitats provided within and adjacent to the project site.

State Monitored: State Monitored species are native to Washington but require habitat that has limited availability, are indicators of environmental quality, require further assessment, have unresolved taxonomy, may be competing with other species of concern, or have significant popular appeal. Two State Monitored species – great blue heron (*Ardea herodias*) and merlin (*Falco columbarius*) - may potentially use the habitats provided within and adjacent to the project site.

State Threatened: State Threatened species are defined as any wildlife species native to the state of Washington that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats. The project site did not provide critical habitats for State Threatened species. However, a single listed threatened species – bald eagle (*Haliaeetus leucocephalus*) – has been documented to nest and feed along the various drainages and lakes within this portion of Pierce County. As such, this species may occasionally overfly the project site.

An additional listed State Threatened species - Western gray squirrel – may have historically used the habitats within the project site and have been documented offsite to the southwest. However, throughout much of its historic range this species has been impacted by urbanization and traffic, and replaced with the often more aggressive introduced eastern gray squirrel. Predation by domestic dogs and cats has also been identified as limiting Western gray squirrel utilization of more urbanized areas.

Federally Listed Species

No Federal listed endangered or threatened species, or critical habitats for such listed species, were observed within the project site. However, a single recently de-listed threatened species – bald eagle – has been documented to nest and feed along the various drainages and lakes within this portion of Pierce County. As such, this species may occasionally overfly the project site.

FINDINGS AND CONCLUSIONS

Onsite reconnaissance level assessment was completed between August and October 2008. This assessment followed the methodologies and procedures defined in the 1987 Manual, the Wash. Manual, the WDNR Forest Practice Rules, and City of Lakewood Title 14A – Environmental Protection. This assessment also generally followed the guidelines provided by the U.S. Fish and Wildlife Service for the preparation of *Biological Evaluations*.

ONSITE

1. This reconnaissance level assessment identified **one (1)** area within the central portion of the project site (generally within the northern portions of parcels 0219221045 and 0219221044) that exhibited field characteristics generally associated with a “wetland.” However, no specific field data were collected confirm that this area met all three of the established criteria for designation as a wetland as a part of this reconnaissance level assessment. As a part of prior permitting associated with an adjacent parcel this depressional area was identified as a City of Lakewood Category 2 Wetland and an associated 100-foot buffer had been previously established within parcel 0219221014.
2. This reconnaissance level assessment identified that no area within or immediately adjacent to the project site exhibit characteristics of a “stream.”
3. This reconnaissance level assessment identified a scattering of mature Oregon white oak trees generally throughout the eastern portion of the project site. The City of Lakewood, as well as a number of other resource and permitting agencies, has identified “Oregon oak woodlands” as a priority habitat.

The areas of mature Oregon white oak trees within the project site met the criteria established by the City of Lakewood for designation as “priority Oregon white oak woodlands.”

Priority Oregon White Oak Woodland means forested areas of pure oak, or of oak/conifer associations 1 acre or larger, and all oak trees located within, where oak canopy coverage of the area is at least 25%. Stands of oaks less than 1 acre in size may also be considered priority habitat when found to be particularly valuable to fish and wildlife (i.e. they contain many cavities, have a large diameter at breast height (dbh), are used by priority species, or have a large canopy) (City of Lakewood 14A.165.010).

OFFSITE

1. This reconnaissance level assessment did not identify any potential wetlands or streams immediately offsite to the west, south, east, or northeast of the project site. **One (1) potential wetland** was identified to the north of the northwestern corner of the project site (the word "potential" is used since this reconnaissance level assessment did not include the collection of specific field data to verify the presence of all three wetland criteria). This potential wetland had been identified in prior assessments and resource mapping as Emerson Lake, a City of Lakewood Category 2 Wetland. However, the standard City of Lakewood buffer of 100 feet for this Category 2 Wetland did not appear to encroach onto the project site or the 146th Street SW Corridor.

A second potential wetland area was identified to the northwest of the northwestern corner of the project site. This offsite wetland appeared to meet the criteria for designation as a City of Lakewood Category 2 Wetland and also appeared to receive seasonal hydrological support from Emerson Lake. As with Emerson Lake the standard City of Lakewood buffer of 100 feet for this Category 2 Wetland did not appear to encroach onto the project site or the 146th Street SW Corridor. However, this offsite wetland extends toward the west and may become an important planning elements depending upon proposed future revisions to the 146th Street SW/Thorne Lane Corridor connection to Interstate 5.

2. This reconnaissance level assessment identified a scattering of mature Oregon white oak trees generally throughout the offsite areas to the northeast, east, and south of the project site. As with the onsite areas that included mature Oregon white oak trees within the project site these areas also met the criteria established by the City of Lakewood for designation as "priority Oregon white oak woodlands."

A scattering of Oregon white oak trees within the area offsite to the northwest of the northwestern corner of the project site was also identified to meet the criteria established by the City of Lakewood for designation as "priority Oregon white oak woodlands." While not onsite, the presence of this priority habitat would appear to affect potential development along the 146th Street SW/Throne Lane Corridor connection to Interstate 5.

REGULATORY CONSIDERATION

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The proposed alteration of lands defined by various federal, state, and local authority rules and regulations as "wetlands," "drainage corridors," or "critical habitats" raises environmental concerns that are generally addressed in the development review process. These concerns center on the development's potential adverse impacts to the structure, function, value, and size of these areas. Such adverse impacts may include: a reduction in wildlife habitats, reduced surface water quality, reduced water retention, a reduced ground water recharge rate, reduced plant species diversity, and the reduction in the function and value of other associated physical and biological characteristics.

U.S. ARMY CORPS OF ENGINEERS - Section 404

Section 404 of the Clean Water Act (33 U.S.C. 1344) prohibits the discharge of dredged or fill material into "Waters of the United States" without a permit from the Corps of Engineers (Corps). The Corps has jurisdiction over freshwater systems waterward from the ordinary high water line of a water body or waterward from the upland boundary of the adjacent wetland. The definition of fill materials includes the replacement of aquatic areas with dry land, grading which changes the surface contour of a wetland, and mechanized land clearing in wetlands. For the purposes of Section 404 permitting the Corps makes the final determination as to whether an area meets the wetland definition and would be subject to regulation under the Corps program. Applications to the Corps for permitting actions must follow the 1987 Manual wetland delineation format.

Currently the Corps has two specific types of permits which apply to wetland fill proposals. These two types are a series of specific **Nationwide Permits** and the **Individual Permit**. The Nationwide Permit process identifies specific categories of work that can be undertaken following a set of specific conditions applicable to each Nationwide Permit number. The Corps requires an **Individual Permit** where proposed activities within an identified jurisdictional wetland area cannot be authorized under one of the Nationwide Permits. Within the Individual Permit process the Corps undertakes a much more in-depth review of the proposed project and the proposed impacts. The Corps must evaluate whether the benefits derived from the project outweigh the foreseeable environmental impacts of the project's completion.

All projects that proceed forward using either one of the Nationwide Permits or the Individual Permit process must also comply with the provisions of the Endangered Species Act. As defined by a recent U.S. Supreme Court decisions the Corps of Engineers does **not** typically regulated "isolated" wetlands pursuant to Section 404 of the Clean Water Act. Under this decision "isolated" wetlands do not exhibit a continuous surface water connection to other, downstream aquatic system.

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Proposed action undertaken through either of the Corps of Engineers processes (Nationwide, Individual, or isolated) are also subject to the provisions of the Washington State Department of Ecology *Water Quality Certification Process*. Projects that may be exempt from Corps of Engineers Section 404 jurisdiction may still require review by the Washington State Department of Ecology to ensure consistency with State water quality protection provisions.

CITY OF LAKEWOOD – CHAPTER 14A

The City of Lakewood regulates activities in and around identified wetlands and fish and wildlife habitat areas pursuant to Chapter 14A. The purpose of Chapter 14A is to identify wetlands, critical fish and wildlife habitat species, and habitats and establish habitat protection procedures and mitigation practices that are designed to achieve no “net loss” of species and habitats due to new development or other regulated activities.

- **Designation of Critical Fish and Wildlife Habitat Areas (14A.154.020)**

The City of Lakewood has identified that critical fish and wildlife habitat areas are those areas identified either by known point locations of specific species (such as a nest or den) or by habitat areas or both. Such critical fish and wildlife habitat areas include:

- a) **Federal and State-Listed Species and their Associated Habitats.** Areas which have a primary association with federally or state listed endangered, threatened, or sensitive species of fish or wildlife (specified in 50 CFR 17.11, 50 CFR 17.12, WAC 232-12-014 and WAC 232-12-297) and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. Endangered, threatened, or sensitive species found in Lakewood are listed in Appendix B.
- b) **Habitats and Species of Local Importance, including the following:**
 - (1) Areas with which state listed monitor or candidate species or federally listed candidate species have a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.
 - (2) Documented habitat areas or outstanding potential habitat areas for fish and wildlife species. These areas include specific habitat types which are infrequent in occurrence in Pierce County and Lakewood, and may provide specific habitats with which endangered, threatened, sensitive, candidate, or monitor species have a primary association,

such as breeding habitat, winter range, and movement corridors. These areas include the following:

- (a) Priority Oregon White Oak Woodlands
- (b) Prairies
- (c) Old growth forests
- (d) Caves
- (e) Cliffs
- (f) Snag-rich areas
- (g) Rivers and streams with critical fisheries as specifically set forth in 14A.154.050 B.;
- (h) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;
- (i) Waters of the state, including all water bodies classified by the Washington Department of Natural Resources (DNR) water typing classification system as detailed in WAC 222-16-030, together with associated riparian areas;
- (j) Lakes, ponds, streams, and rivers planted with game fish by a governmental entity or tribal entity;
- (k) State natural area preserves and natural resource conservation areas.

- **Designation of Wetlands (14A.162.020)**

Within the City of Lakewood "wetlands" shall be rated using the latest adopted version of the *Washington State Wetland Rating System for Western Washington* published by the Washington State Department of Ecology. The State Wetland Rating System provides the detailed criteria for establishing wetland categories. Wetlands are generally designated as follows:

Category 1 wetlands are those that 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or 4) provide a high level of functions. Generally, these wetlands are not common and make up a small percentage of the wetlands in the region. The following are considered Category 1 wetlands:

- Bogs
- Mature and Old-growth Forested Wetlands
- Wetlands That Perform Many Functions Very Well- Wetlands scoring 70 points or more (out of 100) using the *Washington State Wetland Rating System for Western Washington*, Ecology Publication # 04-06-025.

Category 2 wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category 1 wetlands, but still need a relatively high level of protection. Category 2 wetlands in western Washington include 1) Wetlands That Perform Functions Well and 2) Wetlands scoring between 51-69 points (out of 100) using the *Washington State Wetland Rating System for Western Washington*. Wetlands scoring 51-69 points were judged to perform most functions relatively well, or performed one group of functions very well and the other two moderately well.

Category 3 wetlands are wetlands with a moderate level of functions (scores between 30 -50 points) using the *Washington State Wetland Rating System for Western Washington*. Category 3 wetlands usually have been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category 2 wetlands.

Category 4 wetlands have the lowest levels of functions (scores less than 30 points) and are often heavily disturbed. These are wetlands that we should be able to replace, and in some cases be able to improve. These wetlands may provide some important functions.

Wetland buffer widths shall be determined according to the following table:

<u>Wetland Category</u>	<u>Buffer Width</u>
1	200 feet
2	100 feet
3	75 feet
4	50 feet

Wetland buffer widths may be modified by averaging, reducing, or increasing.

1. Buffer width averaging may be allowed only where the applicant demonstrates the following:
 - a. Buffer encroachment is unavoidable.
 - b. A habitat assessment has been submitted which demonstrates that the site does not provide habitat for any endangered, threatened, or sensitive fish or animal species; or,
 - c. For wetlands and/or required buffers associated with documented habitat for endangered, threatened, or sensitive fish, or wildlife species, a habitat assessment report has been submitted that demonstrates that the buffer modification will not result in an adverse impact to the species of study.

- d. The wetland contains variations in sensitivity due to existing physical characteristics; and
 - e. Width averaging will not adversely impact the wetland or critical fish and wildlife habitat; and
 - f. The total buffer area after averaging is no less than the buffer area prior to averaging; and
 - g. The minimum buffer width will not be less than twenty-five percent of the widths established above.
 - h. The averaging is accomplished within the project boundaries.
 - i. Buffer width averaging shall only be permitted where it is shown that there is no feasible alternatives to the site design that could be accomplished without buffer averaging.
2. Buffer width reduction may be allowed only where the applicant demonstrates the following circumstances. Such reduction shall not result in greater than a thirty-five percent (35%) reduction in the buffer width established in 14A.162.080.A. and shall result in a buffer no less than 30 feet in any case.
- a. The proposed buffer area is extensively vegetated and has less than fifteen percent slopes, and the reduction will not result in adverse impacts to the wetland; or
 - b. The project includes a buffer enhancement plan, as part of the mitigation required by Section 14A.162.100. The buffer enhancement plan shall use plant species which are indigenous to the project area, and shall substantiate that an enhanced buffer will improve the functional attributes of the buffer to provide additional protection for wetland functional values; or
 - c. The acreage included in the buffer would substantially exceed the size of the wetland and the reduction will not result in adverse impacts to the wetland or the project includes a buffer enhancement plan which ensures that the reduction will not result in adverse impacts to the wetland.

RECOMMENDATIONS

Prior to specific site planning it is the recommendation of Habitat Technologies that a formal delineation of onsite and potentially offsite wetlands and drainage corridors be completed. The formal delineation would include onsite data collection, the identification of wetland and drainage corridor boundaries, and the categorization of such areas consistent with City of Lakewood Chapter 14A.

In addition, it is the recommendation of Habitat Technologies that a formal assessment of potential habitats – primarily Oregon white oak woodland habitats – be completed within and immediately adjacent to the project site. The formal assessment of these habitats would include a tree survey and an assessment of species specific utilization of these habitats consistent with City of Lakewood Chapter 14A.

Thank you for allowing Habitat Technologies the opportunity to assist with your project planning efforts. Please contact us at 253-845-5119 with any questions or need for additional assistance.

Sincerely,

Bryan W. Peck
Wetland Biologist

Thomas D. Deming
Certified Professional Wetland Scientist

16
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FIGURES

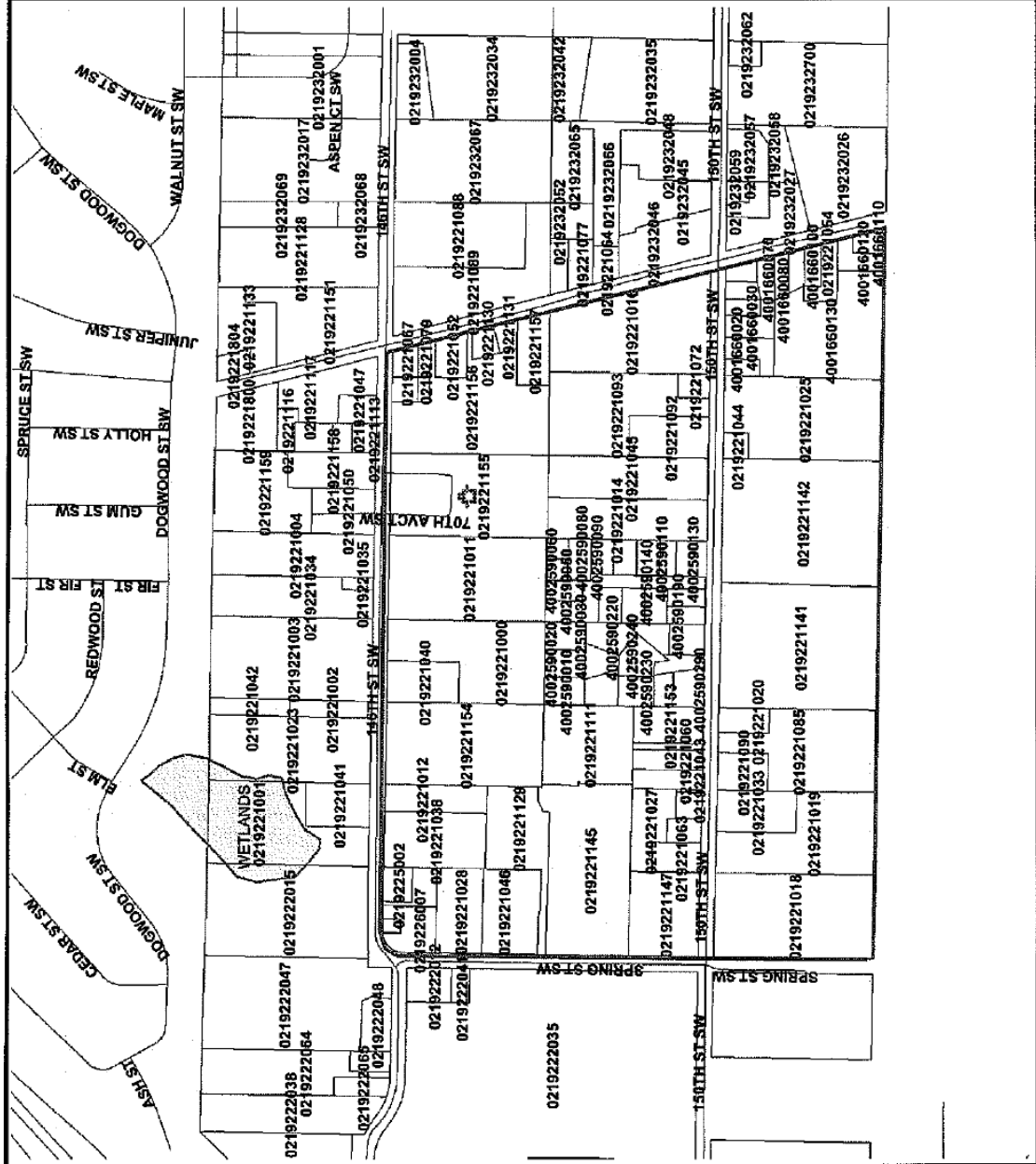
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The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped, may be present. This is not a survey. The orthophotos and other data may not align perfectly with the habitat data. The habitat data is for informational purposes only and is not intended to be used for any other purpose. The data is provided AS IS and WITH ALL FAULTS. The County and Habitat Technologies make no warranty of fitness for a particular purpose.

- Map Legend**
- Tax Parcels
 - Roads
 - Major Roads
 - Priority Habitat/Species

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0 275 550 ft.



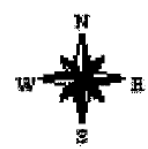
Habitat Technologies **Figure 3 PHS Mapping**



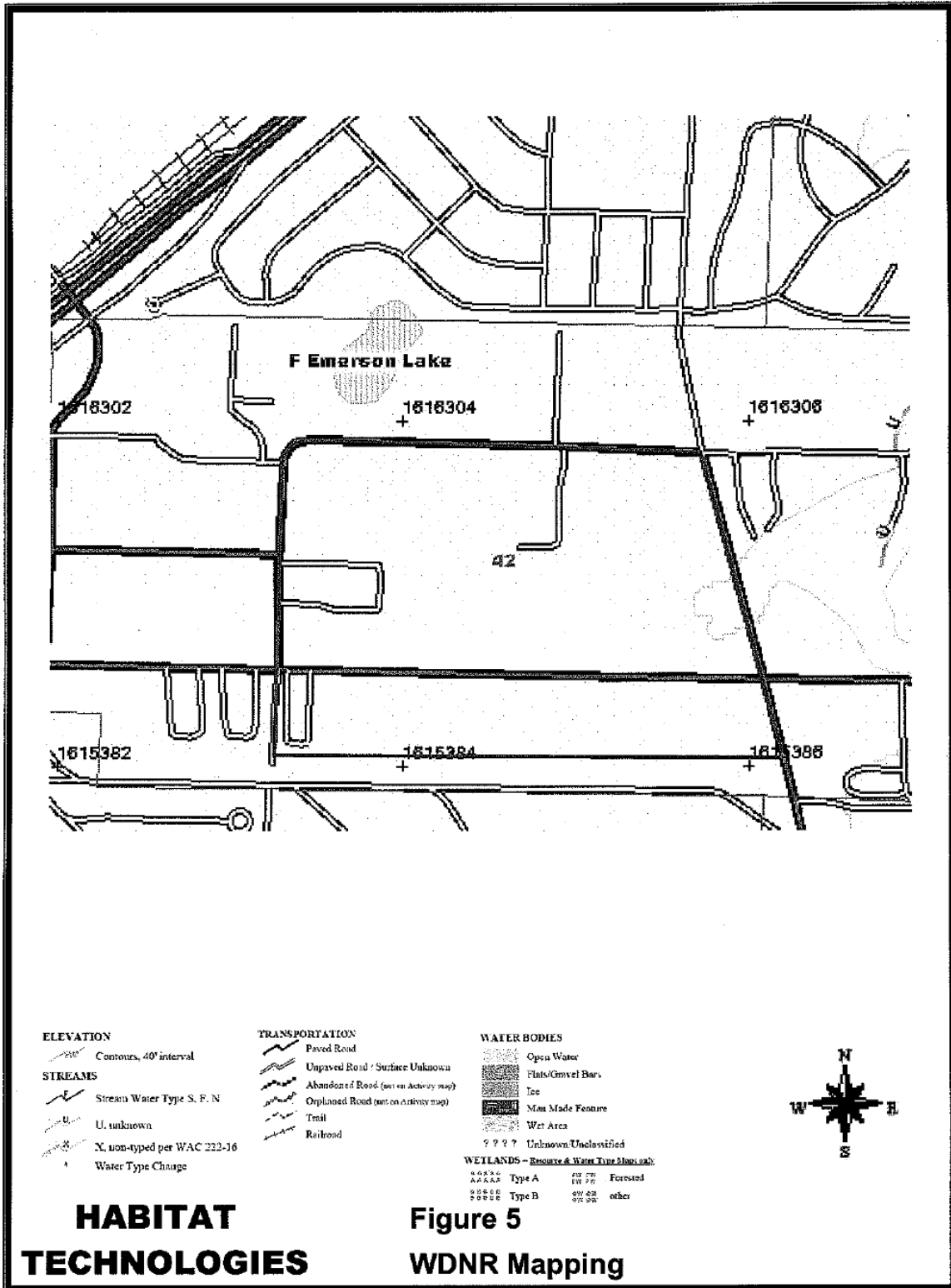
**HABITAT
TECHNOLOGIES**

**Figure 4
WDFW Mapping**

- PLSS Townships
- ⋯ PLSS Sections
- CITIES
- ◆ Major Cities
- Cities
- Towns
- ~ RIVERS (1:24,000)
- DNR Trans 24k
- ~ Paved Road
- ~ Unpaved Road
- ~ Road Surface Unknown
- ~ Trail
- ~ Railroad
- ~ Road Abandoned/Orphan



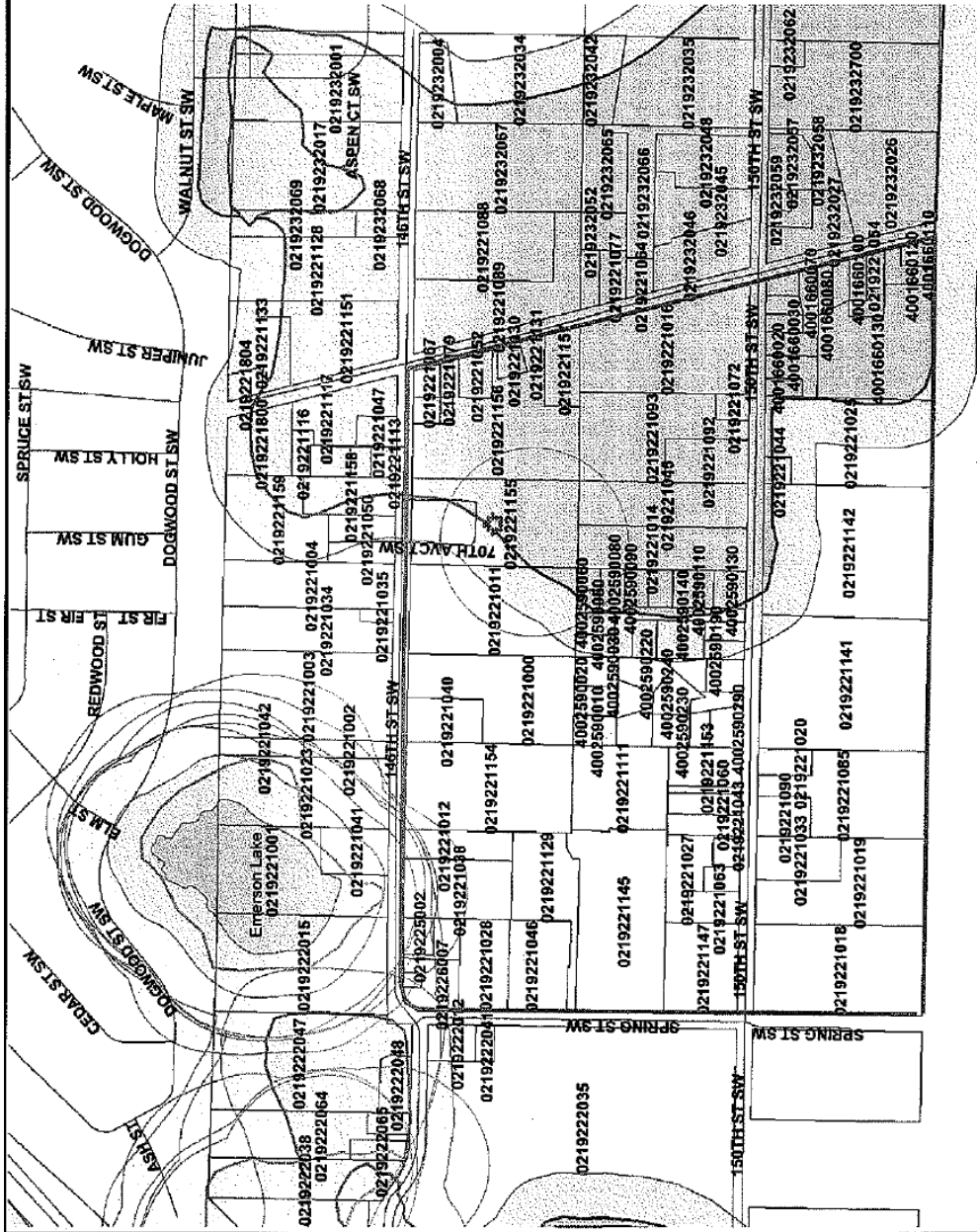
- WATERBODIES (1:24,000)
- COUNTY



The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped, may be present. This is not a survey. The orthographic and planimetric data were derived from aerial photography and ground truthing. The orthographic and planimetric data were not surveyed and are not guaranteed to be accurate. The data is provided AS IS and WITH ALL FAULTS. The County and Habitat Technologies make no warranty of fitness for a particular purpose.

Map Legend

- Tax Parcels
- CWI Wetlands Delineation
- Hydro - Centerlines
- Roads
- Major Roads
- Oak Presence
- Potential F+W Habitat Conservation Areas
- CWI Wetlands
- Hydro - Surface
- Boundaries



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 0 275 550 ft.

Habitat Technologies **Figure 6 Pierce County Mapping**

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APPENDIX E

PUBLIC PARTICIPATION

The City, in collaboration with the consulting team, held an open house at Woodbrook Middle School on February 24, 2009, to provide the public with a project update and an opportunity to comment and ask questions. The meeting was publicized through the media, advertising on the City's Web site, and through direct mailings to residents, property owners, and interested stakeholders in the study area.

Open House Format

The open house included six stations with information about the project, including:

- How Did We Get Here?
- What Are We Doing Now?
- What's in the Future?
- Examples of Future Development.
- Current Uses in the Area Zoned for Business Park.
- What Happens to the People Living Here?

Attendees were provided with a frequently-asked questions sheet, a zoning handout, pending mobile home legislation information, and a comment form. Staff were available at each station to answer both general and site-specific questions

Meeting Summary

The open house was held from 5 to 7 pm. Approximately 36 people attended the open house. Only four written comment forms were received. In summary, the main issues raised by residents were concerns surrounding sidewalks, the potential requirement to hook up to the sewer line, and possible future relocation. A couple of residents had concerns about the City taking land for redevelopment and, after speaking with staff about the planning process, felt comforted and reassured that development in the IBP zone can only occur through a willing buyer-seller transaction. Below is a list of written comments received at the event:

What are your comments or questions about this project?

- What is the development timeframe for this project? What environmental impact will this have on the existing housing already there?
- I would really like to see road improvements and sidewalks as soon as possible! Corner of 146th and Murray Road is very, very dangerous. Kids are walking home along 150th on the edge of the road. Where will all the low income renters (including seniors and the disabled) live after all of this housing is removed? I guess we'll all have to move to Orting or Arizona.
- Excellent public forum to bring forth comment.
- School impacts should be made known to the community (places more voices behind the need to possibly relocate the school).

- Traffic is heavy now. What will happen when new businesses locate here? Streets need upgrade for safety.
- Some houses may be close to the street or within the right-of-way.

What are your concerns about how this project affects you?

- I work and live in his neighborhood. The need for affordable housing is great and the Woodbrook area is one of the last areas in Lakewood to accommodate low-middle income families.
- How long can I stay in my house (until Cross Base Highway goes in or business buys the parcel from the landlord)? I want to improve this little house and stay here, but the landlord will sell it as soon as he can get a profit (a large profit) from a business/warehouse/whatever.
- Having a school in an industrial park doesn't have "curb appeal."
- We would like to seek different options for Woodbrook Middle School.

Are there any other comments you'd like to share with us?

- I would like to see the sidewalks and bus stops installed immediately. We have a lot of public transit riders and pedestrians in our neighborhood.
- The area around the horse properties is lovely. The Cross Base Highway will change all that. I will be glad when Tillicum and Woodbrook are on a real sewer system and American Lake, as well as the Puget Sound, is much cleaner and safer. Any area allowed to develop without sidewalks will eventually be a slum area.
- Continue to keep Clover Park School District in the loop in regards to the Woodbrook project and Tillicum redevelopment. Thank you.
- Sidewalks are a need (puddles are a problem for pedestrians). The sidewalks on 150th would be desirable along other streets too. Cars speed through.

APPENDIX F

Photos of comparable development (from February 2009 public workshop)

Examples of Future Development

- Business/industrial parks typically include an attractive main entry (Tinker Industrial Park, Oklahoma)



- Entry roads are screened from adjacent uses (Meridian Campus, Lacey)



Examples of Future Development

- Commerce Place Industrial Park (300 acres) contains a mix of business park and light industrial uses (Meridian Campus, Lacey)



- Spring Air Mattress Factory (foreground) has a 160,000 sf building on six acres.
- Small “incubator” space with van loading (background, left) (Meridian Campus, Lacey)



Examples of Future Development

- Mutual Materials, a 20,000 sf building on ten acres, requires outdoor storage. (Commerce Place Industrial Park, Lacey)



- Flexible (“flex”) space can be used for office, business or manufacturing uses. (Commerce Place Industrial Park, Lacey)



Examples of Future Development

- Flex space can accommodate phased development on adjacent parcels. (Lakewood Corporate Center)



- Flex space can have both “dock high” and drive-in truck access (Commerce Place Industrial Park, Lacey)



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