

# FORT LAWTON ARMY RESERVE CENTER Redevelopment Plan

September 18, 2008





## ACKNOWLEDGEMENTS

The Fort Lawton Redevelopment Plan was prepared by the City of Seattle Office of Housing, in association with elected leaders, the Seattle Housing Authority, other City departments and housing providers, and consultant staff.

### **City of Seattle**

Greg Nickels, Mayor

### **Seattle City Council**

Jean Godden  
Richard Conlin  
Bruce Harrell  
Jan Drago  
Tom Rasmussen  
Nick Licata  
Tim Burgess  
Richard McIver  
Sally Clark

### **Office of Housing**

Adrienne Quinn, Director  
Mark Ellerbrook  
Chris Jowell

### **Office of Intergovernmental Relations**

Linda Cannon

### **Office of Neighborhoods**

Christa Dumpys

### **Parks and Recreation Department**

Kevin Stoops

### **Council Staff**

Traci Ratzliff  
Sara Belz

### **United States Army Reserve**

Scott Mckean, BRAC Coordinator

### **Seattle Housing Authority**

Tom Tierney, Director  
Brian Sullivan  
Al Levine  
Stephanie Van Dyke

### **NOI Housing Providers**

### **Archdiocesan Housing Authority**

Bill Hallerman, Director of  
Special Ministries  
John Hickman, Director of Finance  
and Operations

### **YWCA of Seattle-King County-Snohomish County**

Sue Sherbrooke, Chief Executive  
Jeanice Hardy, Seattle Housing & Integrated  
Services Regional Director

### **United Indians of All Tribes**

Eric Jordan, Planning and Development Lead

### **Alesek Institute**

Elizabeth Tail, Executive Vice President and  
Chief Operating Officer

### **Habitat for Humanity Seattle/South King County**

Martin Kooistra, Chief Executive Officer  
Tom Gaylord, Site Development Manager

### **Consultant Team**

#### **EDAW**

Brian Douglas Scott  
Rob Lloyd  
Nancy Bird  
Michael Schuler  
Lauren Hauck  
Cales Givens  
Jim Keany  
Amberlynn Pauley

#### **GGLO**

Chris Libby  
Don Vehige  
Kent Scott  
Steve Fischer (Illustrations)

#### **Bay Area Economics**

Janet Smith-Heimer  
Simon Alejandrino

#### **Gardner-Johnson**

Matthew Gardner  
Sterling Hamilton

#### **Nelson\Nygaard Consulting Associates**

Tom Brennan  
Becca Aue

#### **BRH Consulting Engineers**

Max Craddock  
Jay Decker

#### **Stratum Group**

Dan McShane



## EXECUTIVE SUMMARY

### INTRODUCTION

After more than 100 years in military service, the Fort Lawton Army Reserve Center (Fort Lawton) was declared surplus as part of the 2005 Base Realignment and Closure actions as accepted by Congress and the President. This Redevelopment Plan provides a vision for the future use and redevelopment of the site, and meets the City of Seattle's obligations to the Department of Defense. The Department of Defense has named the City as the Local Redevelopment Authority, which in turn identified the Seattle Housing Authority as the lead developer.

The future uses envisioned for the Fort Lawton site include: wildlife habitat and open space; market-rate for-sale housing; self-help housing for first-time homeowners; and homeless housing and related support services for families and seniors.

### SITE LOCATION AND CONTEXT

Located in the Magnolia neighborhood of Seattle, the Fort Lawton property abuts Discovery Park – which is nearly 550 acres – on the west and south, and a primarily residential neighborhood of single-family homes to the north and east. The Fort Lawton property consists of approximately 45 acres, including 11 buildings and a military cemetery. The federal government plans to retain approximately 16 acres of the site that contains the newest building and supporting parking and the military cemetery. The Department of Veterans Affairs (VA) plans to take over the use of the retained building on the site for clinical and administrative uses. Texas Way West runs through the remaining approximately 29 acres of the site, from West Government Way in the southeast to 40th Avenue West in the northwest, and provides access to the remaining ten existing structures.

### OVERVIEW OF THE PROCESS AND REDEVELOPMENT TEAM

Under the BRAC program, portions of surplus military bases may be conveyed at no cost for housing or services for homeless people, and conveyed at a reduced or no cost for other federally designated public uses. As the Local Redevelopment Authority, the City is responsible for soliciting and evaluating Notices of Interest (NOIs) from agencies or organizations requesting properties for a specific federally qualified use.

The City provided a notice of the availability of property at Fort Lawton and held a workshop for homeless assistance providers and other eligible recipients of public benefit property transfers in September 2006. In January 2007, the City received five NOIs. The mayor appointed a technical advisory group which

advised City staff, who in turn recommended the following NOI program to Mayor Greg Nickels:

- Seattle Housing Authority – Master developer
- Archdiocesan Housing Authority (AHA) – Developer and service provider, housing for homeless seniors and families
- Young Women’s Christian Association (YWCA) of Seattle-King County-Snohomish County – Service provider, homeless family housing
- United Indians of All Tribes Foundation – Referral and service provider for homeless seniors
- Habitat for Humanity Seattle/South King County – Self-help housing
- Seattle Parks and Recreation Department – Property owner, open space for Discovery Park, neighborhood park and wildlife habitat

Upon approval by the mayor, these NOIs were integrated into the redevelopment planning process and are included in the plan discussed in detail in Chapter 5. The City also developed a Homeless Assistance Submission that further supports the housing program of this Redevelopment Plan.

The Fort Lawton BRAC public involvement process began in September of 2006 and continued through September 2008, with 18 community meetings, four City Council committee meetings, and two City Council public hearings.

### PROJECT VISION

The vision for the redevelopment of the Fort Lawton site (described in Chapter 2) is intended to accomplish the following: result in a plan for a model community that is livable, diverse, environmentally sustainable, and fits into the surrounding neighborhood; reflect community involvement, City needs, and financial viability; and meet the requirements of the U.S. Department of Housing and Urban Development (HUD) and the Department of Defense. The uses envisioned for the site include:

- wildlife habitat and open space;
- market-rate for-sale housing;
- self-help housing for first-time homeowners; and
- homeless housing and supportive services for families and seniors, including veterans and Native American seniors.

At the same time, the City expects the resulting plan to be sensitive to wildlife, blend with Discovery Park, and be reflective of Native American values.

### EXISTING CONDITIONS

Fort Lawton is located near the northwestern corner of Seattle’s Magnolia neighborhood, on a site overlooking the Lake Washington Ship Canal and the Salmon Bay estuary. Along its western and southern edges, Fort Lawton abuts the 534-acre Discovery Park. To the north and east of the site, it borders on a residential neighborhood containing primarily single-family homes, with several

apartment buildings to the south. The primary means of accessing the site is via Texas Way West, which runs through the property, from West Government Way at the site's southeast corner to 40th Avenue West at its northwest corner. A number of office buildings, utility buildings, and associated parking lots are currently located on the site.

## ENVIRONMENTAL RESOURCES

The environmental constraints for the site (described in Chapter 3) include steep slopes at the northern and eastern edges of the property. A wildlife corridor study done in 2006 identified a wetland on the north slope. In addition, there is a large great blue heron rookery in Kiwanis Ravine near the site.

The project site is located on Magnolia Bluff, at an elevation of approximately 100 to 165 feet above mean sea level. The site generally slopes downward from its greatest elevation, at its southwest corner, to the north and northeast. However, construction of building pads, parking lots, and streets has resulted in grading of much of the site and the construction of a number of retaining walls.

The Fort Lawton site has two large areas of unmaintained natural vegetation, the north bluff area and a southern mixed-conifer forest adjacent to the Fort Lawton Cemetery. These areas comprise the majority of wildlife habitat on the site. The north bluff area and the southern mixed coniferous forest both currently have excellent habitat value for many migratory and resident bird species.

The great blue heron rookery in the Kiwanis Memorial Preserve Park (east of the Fort Lawton property) is of particular concern for this site. The Kiwanis Memorial Preserve Park is home to a breeding colony of approximately 40 nesting pairs of great blue herons, birds that use a variety of forest and aquatic habitats over the area, including forested patches of the Fort Lawton site. Several bald eagles have nested near the Salmon Bay shoreline or in Discovery Park, although no nests occur on the Fort Lawton site.

The site is located within the traditional territory of the Duwamish Indians, but archaeological investigation on the Fort Lawton site itself has uncovered no evidence of occupation.

## LEGAL AND STRUCTURAL

The Fort Lawton site is in the process of being designated for multifamily residential use under the Seattle Comprehensive Plan (2007). The site is currently zoned SF 7200 (single-family residential with a minimum lot size of 7,200 square feet).

Planned residential developments may be permitted in single-family zones as a Council-approved conditional use. Planned residential developments

allow reuse of existing structures and provide additional housing flexibility by permitting townhouse units if they are 100 feet or more from property lines that abut or are directly across the street from property zoned single family.

Existing buildings at Fort Lawton include Harvey Hall and Leisy Hall – both two-story office buildings – and eight smaller maintenance buildings. Only Harvey and Leisy Halls were potentially useful for the anticipated Redevelopment Plan, but during the planning process, these buildings were also deemed inappropriate for the planned future uses.

Fort Lawton is currently served by utilities, which also supply the residential neighborhood to the east and enter the site from 36th Avenue West. This infrastructure – sewer, stormwater, water, natural gas, and electricity – was evaluated during this process and deemed adequate for all planned uses.

### **PARKS, RECREATION, AND OPEN SPACE**

The project site is located adjacent to Discovery Park and a number of other recreational parks and facilities. However, because of local topography and street patterns, access to a number of these parks requires a moderate walk.

Discovery Park is immediately to the west and south of the project site on land that was previously part of Fort Lawton. Kiwanis Ravine Overlook is located adjacent to the site on 36th Avenue West. Kiwanis Memorial Preserve Park is an open space area designated as heron habitat; the only publicly accessible portion is a pedestrian bridge that crosses the park. Commodore Park lies adjacent to the Lake Washington Ship Canal and provides panoramic views of the canal and the Hiram M. Chittenden Locks. The Daybreak Star Cultural Center is located on the northern edge of Discovery Park.

### **TRANSPORTATION**

The primary access to Fort Lawton is via the intersection of West Government Way, Texas Way West, and 36th Avenue West. The segregation of access to Fort Lawton and the adjacent neighborhood to the east has created a poorly designed five-way intersection. Vehicular access is also possible, albeit less directly, via Texas Way West and 40th Avenue West, which connects to residential areas to the north and West Commodore Way. Texas Way West, a two-lane road, provides the sole access through Fort Lawton. Outside the site, West Government Way is an arterial street that provides convenient access. 36th Avenue West, directly parallel to Texas Way West to the east, is a residential street with chicanes to calm traffic and no curbs.

Three King County Metro bus routes serve Fort Lawton, and the site is well connected to the existing bicycle network, but pedestrian access within and around Fort Lawton is challenged by grades and design aimed at restricting pedestrian access.



## HOUSING MARKET

Magnolia is a well-established residential neighborhood with limited housing supply and very little new residential construction. The Fort Lawton property represents one of the few opportunities for larger scale development of multiple single-family units. Magnolia is a primarily single-family neighborhood with approximately 6,000 units of single-family housing and a total residential unit count of 8,803. The majority of the apartments built in Magnolia are located near more central retail areas and transportation corridors. Magnolia homes have an average size of 2,600 square feet. Home sales to the south and east of the Fort Lawton site ranged between \$500,000 and \$800,000. Properties located to the north of the project site saw prices above \$800,000, with some sales reaching over one million dollars due primarily to the proximity to, or location along, the waterfront.

Based on analysis of market demand, homes sized between 2,000 and 2,800 square feet appear to be the most characteristic of the existing neighborhood. Smaller lot single-family homes represent a desirable product that is currently not met by housing in the Magnolia neighborhood, and thus may have a meaningful pent-up demand. Finally, a mix of luxury and smaller townhomes appear viable.

## REDEVELOPMENT PLANNING PROCESS

During the spring and summer of 2008, the City worked with the Seattle Housing Authority, the NOI housing providers, and a multi-disciplinary consultant team to develop this plan in close communication with the Magnolia community, other government agencies, and interested stakeholders. Throughout the process, decisions were based on community input, federal BRAC requirements, and City policy (including housing, parks, planning and development, and transportation). As information was collected and analyzed and decisions were made, these were shared with the community at subsequent community meetings, which took place every two to four weeks between March and July of 2008. Participants in those meetings were of mixed opinions on many subjects. Workshop topics (described in Chapter 4) included: goals and guiding principles; redevelopment program elements; issue options; redevelopment plan alternatives; a Draft Concept Plan; and the proposed Redevelopment Plan.

Goals and guiding principles include aspirations related to community, housing, circulation, and open space/environment.

Redevelopment program elements include housing and open space. The homeless housing program includes senior housing to be developed and managed by the Archdiocesan Housing Authority and served by the YWCA and the United Indians of All Tribes Foundation, as well as self-help home ownership housing to be developed by Habitat for Humanity. The market-rate housing program includes single-family homes on small lots, modest-sized single-family

homes, and townhomes of various sizes. The open space program includes recreational open space and wildlife habitat.

Issue options include access from the south, internal circulation, the treatment of 36th Avenue West, park and open space concepts, and alternative sites for the senior housing building.

The Redevelopment Plan alternatives explored options for housing configurations and densities, site access, street configurations, parks, greenways, stormwater, and the relationship to the future VA property. These alternatives were analyzed for transportation context and traffic impact.

The Draft Concept Plan synthesized the alternatives based on public input, updated background information, and official decision-making. The proposed Redevelopment Plan – presented in Chapter 5 – is a further refinement of the Draft Concept Plan.

## **FORT LAWTON REDEVELOPMENT PLAN**

The proposed Redevelopment Plan is for a new mixed-income neighborhood that will be laid out on a north-south street grid following the pattern of the adjacent Kiwanis Ravine neighborhood. There will be between 108 and 125 market-rate units; a 55-unit building for homeless seniors; 30 units for homeless families; and six self-help homeownership units to be developed by Habitat for Humanity.

The current artificially plateaued and mostly paved site will be regraded to slope gently from south to north to blend in with the surrounding neighborhood and natural areas in a more seamless manner. All existing forested areas and most interior trees will be retained and enhanced, with the addition of a diverse mixture of new street trees.

The addition of two new parks, two pocket parks, and a new north-south 37th Avenue West greenway with swales and natural landscaping will further enhance the community. Careful treatment of the 36th Avenue West streetscape will blend the new community into the existing neighborhood while enhancing the existing landscaped buffer aesthetically and providing avian habitat.

## **CIRCULATION**

Key circulation issues for the new Fort Lawton neighborhood include site access, internal circulation, and street connections to the existing Kiwanis Ravine neighborhood.

The Redevelopment Plan makes little change to the north access via Texas Way West, 40th Avenue West, and ultimately Commodore Way.

South access to the new Fort Lawton neighborhood will be via Texas Way West. The plan reduces 36th Avenue West south of West Fort Street to a local

access loop serving only the homes on that block. As such, the redundancies of Texas Way West and 36th Avenue West will be eliminated, allowing tree planting, reduction of pavement, and an improved avian habitat linkage between Discovery Park and Kiwanis Ravine.

Texas Way West becomes the primary access road for the existing and new neighborhoods. A new intersection, created at the curve of Texas Way West, slopes down to connect 36th Avenue West just south of the existing Harvey Hall.

A north-south street grid will organize the site, continuing the pattern of the existing Kiwanis Ravine neighborhood. A new central north-south street – 37th Avenue West – will unify the new neighborhood and allow for the dispersal of local north-south traffic. East-west streets will be connected to the existing neighborhood at three points – Lawton Lane West, West Lawton Street, and West McCord Place.

## OPEN AND GREEN SPACE

The Redevelopment Plan protects existing forested areas and many existing trees. It would also enhance the landscaped buffer along 36th Avenue West as a natural habitat. The plan proposes the addition of two new parks, two pocket parks, and scores of new street trees to the site. This plan calls for conveyance of major forested areas and open space on the site to the City of Seattle Parks and Recreation Department as a BRAC public benefit conveyance.

The Redevelopment Plan includes a neighborhood park at a location central to both existing and new housing, as well as a greenway that will serve as a central pedestrian spine and corridor for natural stormwater treatment. A north-south greenway will line the length of the east side of the new 37th Avenue West from Texas Way West all the way north to Lawton Lane West. A central neighborhood park of about 25,000 square feet (5/8 acre) will be situated along West McCord Place, between 36th Avenue West and the new 37th Avenue West. A second park will be situated along the curve of Texas Way West to the north, providing a public viewpoint and a potential location for a naturalized stormwater pond.

The Redevelopment Plan protects a maximum number of existing trees. A few interior trees will be lost, but this loss will be offset by the planting of numerous new trees selected to create greater species variety in the area.

The Fort Lawton site is bordered by forest to the south, west, and north. As such, the key neighborhood interface is on the east edge of the site along 36th Avenue West. The Redevelopment Plan places new single-family houses along 36th Avenue West but allows vehicular access and garages along a rear alley. Much of the tree canopy will be retained, perforated periodically by paired walkways serving the new houses. This approach strikes a balance between

creating a friendly, two-sided residential street, and preserving existing trees for their character, screening effect, and potential habitat value.

### Housing Program

This Redevelopment Plan envisions a mixed-income neighborhood including between 108 and 125 market-rate units, 85 units for the homeless, and six units for Habitat for Humanity.

Unit Type	Single-Family Focus	Townhouse Focus
Large Single Family	14	6
Mid-sized Single Family	15	10
Small Single Family	50	50
Large Townhomes	17	42
Smaller Townhomes	12	17
<b>Total Market Rate Units</b>	<b>108</b>	<b>125</b>
<b>Total Self-Help Townhomes</b>	<b>6</b>	<b>6</b>
AHA Townhomes	30	30
AHA Senior Studios	55	55
Total Homeless Units	85	85
<b>Total Units</b>	<b>199</b>	<b>216</b>

The proposed unit mix of the Redevelopment Plan focuses on product types in the middle-income range, with a few large single-family homes, and no stacked flats proposed. Market-rate units include detached single-family homes of various sizes as well as duplex townhouses. The Redevelopment Plan includes six Habitat for Humanity self-help home ownership units, as well as 30 AHA family homes in duplex townhouses, and 55 senior studio units in a single building located on the parcel that is west of Texas Way West.

## **PUBLIC BENEFIT CONVEYANCES**

Following the redevelopment program described above, a total of 9.49 acres of the Fort Lawton site will be requested for public benefit conveyance for open space, homeless housing, and self-help homeownership housing, as described in Chapter 6.

Specifically, the City of Seattle requests a minimum of 6.66 acres of currently forested areas as public benefit conveyances for parks, open space, and wildlife habitat. An additional .57 acres is requested for a central neighborhood park. The City of Seattle requests that approximately 2.01 acres of the Fort Lawton site be conveyed to the City of Seattle for development of homeless housing. Finally, Habitat for Humanity Seattle/South King County requests that 0.25 acres of the Fort Lawton site be conveyed to Habitat for Humanity for six units, averaging 1,850 square feet per unit, of self-help homeownership housing in duplex townhomes.

## **IMPLEMENTATION STRATEGY**

The Redevelopment Plan for Fort Lawton requires a sophisticated financing model and phasing strategy to achieve its objective of an environmentally sustainable, mixed-income neighborhood. This is described in Chapter 7.

# Executive Summary

Existing Fort Lawton Aerial Photo



Proposed Fort Lawton Redevelopment Plan







# TABLE OF CONTENTS

## Acknowledgements

## Executive Summary..... ES-1

## 1.0 Introduction and Purpose..... 1-1

- 1.1 Purpose and Need ..... 1-1
- 1.2 History of the Site ..... 1-2
- 1.3 Plan, Policy, and Program Guidance ..... 1-3
- 1.4 Site Location and Context..... 1-4
- 1.5 Local Redevelopment Authority ..... 1-5
- 1.6 Overview of the NOI Process and Redevelopment Program..... 1-6
- 1.7 Public Involvement and Plan Development Process..... 1-8

## 2.0 Project Vision..... 2-1

- 2.1 Project Challenge and Vision..... 2-1
- 2.2 Goals and Principles..... 2-2

## 3.0 Existing Conditions ..... 3-1

- 3.1 Overview ..... 3-1
- 3.2 Environmental Resources..... 3-2
  - Topography and Soils* ..... 3-2
  - Vegetation* ..... 3-4
  - Wildlife* ..... 3-6
  - Cultural and Historic Resources* ..... 3-8
- 3.3 Land Use ..... 3-10
  - Comprehensive Plan and Development Code* ..... 3-10
  - Design Standards* ..... 3-12
  - Neighborhood Integration* ..... 3-12
- 3.4 Existing Facilities ..... 3-13
  - Existing Structures*..... 3-13
  - Infrastructure*..... 3-14
- 3.5 Parks, Recreation, and Open Space ..... 3-16
- 3.6 Transportation..... 3-18
  - Access and Circulation* ..... 3-18
  - Transit*..... 3-18
  - Non-Motorized Transportation*..... 3-20

3.7 Housing Market.....	3-22
<i>Building Types</i> .....	3-22
<i>Apartment Locations</i> .....	3-22
<i>Building Size</i> .....	3-22
<i>Home Sale Prices</i> .....	3-22

## **4.0 Redevelopment Planning Process .....4-1**

4.1 Community Workshop Goals and Guiding Principles .....	4-3
4.2 Program Elements .....	4-5
<i>Mixed-Income Community</i> .....	4-5
<i>Homeless Housing Program</i> .....	4-5
<i>Market Rate Housing Program</i> .....	4-7
<i>Unit Mix</i> .....	4-10
<i>Open Space Program</i> .....	4-10
4.3 Issue Options.....	4-13
<i>Access from the South</i> .....	4-13
<i>Internal Circulation</i> .....	4-16
<i>36th Avenue West Treatment</i> .....	4-18
<i>Park and Open Space Concepts</i> .....	4-20
<i>Senior Housing Building Site</i> .....	4-22
4.4 Site Plan Development .....	4-23
<i>Redevelopment Plan Alternatives</i> .....	4-23
<i>Alternative 1 - East / West</i> .....	4-24
<i>Alternative 2 - North / South</i> .....	4-26
<i>Alternative 3 - Hybrid</i> .....	4-28
<i>Transportation Context</i> .....	4-30
<i>Public Response</i> .....	4-32
4.5 Draft Concept Plan .....	4-34
<i>Housing Mix</i> .....	4-34
<i>Circulation</i> .....	4-36
<i>Open Space</i> .....	4-36
<i>Reuse of Existing Buildings</i> .....	4-37
<i>Neighborhood Interface</i> .....	4-38
<i>Housing Distribution</i> .....	4-40
4.6 Community Feedback.....	4-41
<i>Housing Mix</i> .....	4-41
<i>Street Connectivity</i> .....	4-41
<i>Traffic</i> .....	4-41
<i>Wildlife Habitat</i> .....	4-41
<i>Interior Parks and Greenways</i> .....	4-42

4.7 Impacts .....	4-43
<i>Community-Expressed Goals</i> .....	4-43
<i>Guiding Principles</i> .....	4-43
<b>5.0 Fort Lawton Redevelopment Plan .....</b>	<b>5-1</b>
5.1 Overall Redevelopment Plan.....	5-2
5.2 Circulation.....	5-4
<i>Site Access</i> .....	5-4
<i>Internal Circulation</i> .....	5-5
<i>36th Avenue West Connections</i> .....	5-5
5.3 Open and Green Space.....	5-6
<i>Forested Habitat Areas</i> .....	5-6
<i>Internal Parks and Greenways</i> .....	5-6
<i>Existing and New Trees</i> .....	5-8
<i>Neighborhood Interface</i> .....	5-8
5.4 Housing Program.....	5-10
<i>Market-Rate Housing</i> .....	5-10
<i>Self-Help Housing</i> .....	5-11
<i>Homeless Housing</i> .....	5-11
<b>6.0 Public Benefit Conveyances.....</b>	<b>6-1</b>
6.1 Notices of Interest Received and Selected .....	6-1
6.2 Site Plan Discussion.....	6-2
6.3 Conveyance Requests.....	6-2
<i>Parks</i> .....	6-4
<i>Homeless</i> .....	6-4
<i>Habitat for Humanity Seattle/South King County</i> .....	6-4
6.4 Personal Property Necessary to Support Redevelopment.....	6-6
<b>7.0 Implementation Strategy .....</b>	<b>7-1</b>
7.1 Financing Model .....	7-1
<i>Expenses</i> .....	7-2
<i>Income</i> .....	7-2
<i>Sources of Available Funding</i> .....	7-2
<i>Homeless Housing</i> .....	7-2
<i>Self-Help Homeownership Housing</i> .....	7-4
7.2 Implementation Action Plan .....	7-5
<i>City Plans and Entitlement</i> .....	7-5
<i>Policy / Zoning Changes</i> .....	7-5
<i>Local Permitting and Approvals</i> .....	7-5

*Environmental Review* ..... 7-6  
*Other Federal / State Regulations and Approvals* ..... 7-6  
7.3 Phasing ..... 7-7

**8.0 References ..... 8-1**

**APPENDICES**

- Appendix A: City of Seattle Resolution No. 30883*
- Appendix B: Fort Lawton Public Meetings Matrix*
- Appendix C: Topography and Soils*
- Appendix D: Existing Facilities Study*
- Appendix E: Infrastructure Study*
- Appendix F: Transportation Study*
- Appendix G: Market Demand Study*
- Appendix H: Financial Model*

## Acronyms

ADA	Americans with Disabilities Act
AHA	Archdiocesan Housing Authority
BRAC	Base Realignment and Closure
BRH	Bush, Roed and Hitchings, Inc.
CAPER	Consolidated Plan Annual Performance and Evaluation Report
CDBG	Community Development Block Grant
CFR	Code of Federal Regulations
CHPD	Cluster Housing Planned Development
DOD	U.S. Department of Defense
DPA	down payment assistance
DPD	Seattle Department of Planning and Development
DS	determination of significance
EA	environmental assessment
EIS	environmental impact statement
ESA	Endangered Species Act
FLARC	Fort Lawton Army Reserve Center
FONSI	finding of no significant impact
GIS	geographic information system
HFP	King County Housing Finance Program
HOF	Housing Opportunity Fund
HTF	Washington State Housing Trust Fund
HUD	U.S. Department of Housing & Urban Development
LIHTC	Low Income Housing Tax Credits
LRA	Local Redevelopment Authority
MDNS	mitigated determination of non-significance
MUP	Master Use Permit
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOI	Notice of Interest
NRHP	National Register of Historic Places
OEA	Office of Economic Adjustment
OH	Seattle Office of Housing
OMS	Organizational Maintenance Shop
PRD	Planned Residential Development
PSE	Puget Sound Energy
PUDA	Property Use and Development Agreement
RAHP	Regional Affordable Housing Program
ROW	right-of-way
SEPA	State Environmental Policy Act
SF	square foot
SHA	Seattle Housing Authority
SHP	Supportive Housing Program
SMC	Seattle Municipal Code
TAG	technical advisory group
USACE	U.S. Army Corps of Engineers

USARC U.S. Army Reserve Center  
VA Department of Veterans Affairs  
WDFW Washington State Department of Fish and Wildlife  
YWCA Young Women's Christian Association

# CHAPTER 1

## Introduction and Purpose

### 1.1 PURPOSE AND NEED

The Fort Lawton Army Reserve Center (Fort Lawton) in the Magnolia neighborhood of Seattle, Washington, is planned for closure by September 2011 under the U.S. Department of Defense (DOD) 2005 Base Realignment and Closure (BRAC) actions as accepted by Congress and the President. This Fort Lawton Redevelopment Plan (Redevelopment Plan), or BRAC plan as it is sometimes referred to, provides a vision for the future use and redevelopment of the site as well as to meet the City of Seattle's obligations to the Department of Defense.

The closing of Fort Lawton presents both opportunities and challenges for the City of Seattle (the City) and the Magnolia neighborhood. To ensure a well-orchestrated and collaborative planning process, the DOD named the City as the Local Redevelopment Authority (LRA) for Fort Lawton, and the LRA identified the Seattle Housing Authority (SHA) as the lead developer. The City and SHA have a strong, positive history of building well-integrated and environmentally sensitive new neighborhoods in Seattle; this Redevelopment Plan conveys the vision and plan for one more.

Under the BRAC program, all or portions of surplus military facilities may be conveyed for housing or services for homeless people, or for other federally designated public uses. As documented in this Redevelopment Plan, the future uses envisioned for the Fort Lawton site include the following: (1) wildlife habitat and open space; (2) market-rate for-sale housing; (3) self-help housing for first-time homeowners; and (4) homeless housing and related support services for families and seniors. The City of Seattle has prepared this plan to address the multiple and diverse issues associated with the proposed redevelopment program for the Fort Lawton site, including the environmental resources in the vicinity, the concerns and needs of the surrounding neighborhood, balancing the needs of the homeless with economic and other development needs of the community, and the myriad components of the overall planning process that culminated in the preparation of the Redevelopment Plan.

## 1.2 HISTORY OF THE SITE

In 1897, the Seattle Chamber of Commerce and local citizens donated 703 acres of the community's spectacular Magnolia Bluff to the United States Army for use as a base to defend Seattle and northern Puget Sound. The facility was converted to infantry use five years later.

Fort Lawton was in active military use as a staging center and prisoner of war camp through two world wars, the Korean War, and into Vietnam. For a time during World War II, the Fort included 450 buildings, housing 20,000 soldiers. More than one million soldiers deployed from Fort Lawton during that war, and as many as 10,000 a day were transported to Korea in the early 1950s.

In 1968, the Army decided to surplus much of the Fort Lawton site, and Senator Henry M. Jackson sponsored legislation to transfer the site at no cost to the City of Seattle. This is now Discovery Park, the City's largest park.

Native Americans, led by Bernie Whitebear, asserted their rights to the land after it was transferred by the DOD and successfully negotiated with the City for a 20-acre site to create the Daybreak Star Cultural Center, described by the United Indians of All Tribes as "an urban base for Native Americans in the Seattle area."

While most of the Fort was given to the City, the DOD retained approximately 45 acres as an Army Reserve Center. In 1997, the Army built a new Fort Lawton Army Reserve Center (FLARC) building. Fort Lawton continues in active use today.



### 1.3 PLAN, POLICY, AND PROGRAM GUIDANCE

In creating the Redevelopment Plan for Fort Lawton, the City and its stakeholders considered not only the adjacent neighborhood but the overall Seattle region and were also mindful that redevelopment of the site must serve today's residents as well as future generations. In achieving these objectives, the City of Seattle and its partners balanced a number of local, state, and federal requirements and policy objectives, including the following:

- Base Redevelopment and Realignment Manual (DOD)
- Housing and Urban Development Guidebook on Military Base Reuse and Homeless Assistance (HUD)
- City of Seattle Comprehensive Plan and Municipal Code
- City of Seattle Consolidated Plan and Consolidated Plan Annual Performance and Evaluation Report (CAPER)
- 10-Year Plan to End Homelessness and One Night Count of Homeless People in Seattle-King County
- Great Blue Heron Management Plan

**NOTE:** All policies and documents referenced in this plan are available on the Fort Lawton website ([www.seattle.gov/neighborhoods/fortlawton/brac](http://www.seattle.gov/neighborhoods/fortlawton/brac)).

## 1.4 SITE LOCATION AND CONTEXT

Located in the Magnolia neighborhood of Seattle, the Fort Lawton property abuts Discovery Park – which is nearly 550 acres – on the west and south, and a primarily residential neighborhood of single-family homes to the north and east (Figure 1.4-1). The Fort Lawton property consists of slightly more than approximately 45 acres, including 11 buildings and a military cemetery. The federal government plans to retain approximately 16 acres of the site that contains the existing FLARC building and supporting parking and the military cemetery. The Department of Veterans Affairs (VA) plans to take over the use of the FLARC building on the site for clinical and administrative uses.

Texas Way West runs through the remaining approximately 29 acres of the site, from West Government Way in the southeast to 40th Avenue West in the northwest, and provides access to the remaining 10 existing structures.

Figure 1.4-1: Fort Lawton Project Site Vicinity Map



## 1.5 LOCAL REDEVELOPMENT AUTHORITY

The DOD recognizes a Local Redevelopment Authority (LRA) as the entity responsible for creating a redevelopment plan for military facilities in a BRAC process. The DOD considers the LRA's plan before transferring any property for redevelopment to nonfederal entities. This provides one local point of contact for the DOD as well as efficient property transfer and community consensus for redevelopment plans. The process is governed by the DOD's Base Redevelopment and Realignment Manual and the associated sections of the Code of Federal Regulations (CFR) that are referenced by the manual and the Department of Housing and Urban Development (HUD) and its CFR sections. The Office of Economic Adjustment (OEA) recognizes the LRA to manage the public process for the preparation of a redevelopment plan; to serve as the single point of contact for the DOD and the local community; and ultimately to deliver a plan that balances the unmet needs of the homeless with other community economic redevelopment needs and the needs of HUD and DOD.

Mayor Greg Nickels submitted and the Seattle City Council approved a resolution in June 2006 for the City to request to be named the LRA for the Fort Lawton Army Reserve Center. The City was officially named the LRA on July 10, 2006 (refer to Appendix A for Resolution No. 30883).

As the LRA, the City is charged with creating a redevelopment plan for the Fort Lawton site that balances the needs of the homeless with economic and other development needs of the community.

As the LRA, the City should:

- conduct outreach to homeless assistance providers and other eligible recipients of public benefit property transfers, including the announcement of availability of surplus property for homeless and public benefit conveyance;
- provide leadership and build consensus for the redevelopment plan;
- consult with the military department on personal property disposal; and
- serve as the single point of contact for the community.

## 1.6 OVERVIEW OF THE NOI PROCESS AND REDEVELOPMENT PROGRAM

Under the BRAC program, portions of surplus military bases may be conveyed at no cost for housing or services for homeless people, and conveyed at a reduced or no cost for other federally designated public uses. As the LRA, the City is responsible for soliciting and evaluating Notices of Interest (NOIs) from agencies or organizations requesting properties for a specific federally qualified use. “Public benefit conveyances” can be made for uses such as public health, self-help housing, homeless housing, or open space. A complete list of all public benefit conveyances is provided in Chapter 6. Specifically, the LRA must do the following:

- announce the availability of surplus property for homeless and public benefit conveyances;
- give applicants at least 90 days and no more than 180 days to submit Notices of Interest;
- consider all Notices of Interest; and
- review applications and determine those to be included in the redevelopment plan.

The City provided notice on September 12, 2006, of the availability of property at Fort Lawton and held a workshop on September 26, 2006, for homeless assistance providers and other eligible recipients of public benefit property transfers. On January 10, 2007, the City received five Notices of Interest, which are summarized below.

- United Indians of All Tribes Foundation (Lead Developer) – Included market-rate housing, homeless housing, community space, and open space. The application included a proposal from the Archdiocesan Housing Authority (AHA) to operate homeless housing.
- Seattle Housing Authority (Lead Developer) – Included market-rate housing, homeless housing, and open space. The proposal included an application from the Young Women’s Christian Association (YWCA) of Seattle-King County-Snohomish County to operate homeless housing and Habitat for Humanity Seattle/South King County.
- Downtown Emergency Service Center – Included homeless housing only.
- Seattle Parks and Recreation Department – Included open space to be incorporated into Discovery Park.
- Seattle Veterans Museum – Included space for Seattle Veterans Museum.

The mayor appointed a technical advisory group (TAG) comprised of local citizens with expertise in land use planning, financing, housing for the homeless, as well as residents of the Magnolia neighborhood to advise him on the Fort Lawton redevelopment, including review of the NOIs. It is important to note that

while the LRA can only select or approve NOIs from those submitted, the LRA, together with the applicant, can modify a specific NOI. The TAG completed their review in early 2007, providing guidance to the City interdepartmental staff who recommended the following NOI program to the mayor:

- Seattle Housing Authority – Master developer
- Archdiocesan Housing Authority – Developer and service provider, housing for homeless seniors and families
- YWCA of King County – Service provider, homeless family housing
- United Indians of All Tribes Foundation – Referral and service provider for homeless seniors
- Seattle Parks and Recreation Department – Property owner, open space for Discovery Park



Fort Lawton Entry

Upon approval by the mayor, these NOIs were integrated into the redevelopment planning process and are included in the plan discussed in detail in Chapter 5. The City also developed a Homeless Assistance Submission that further supports the housing program of this Redevelopment Plan. The Homeless Assistance Submission includes an outline of the need of the homeless in Seattle as well as

a discussion of the policies designed to address homelessness. The Homeless Assistance Submission is submitted to DOD and HUD with this Redevelopment Plan and is available at [www.seattle.gov/neighborhoods/fortlawton/brac](http://www.seattle.gov/neighborhoods/fortlawton/brac).

## 1.7 PUBLIC INVOLVEMENT AND PLAN DEVELOPMENT PROCESS

Adjacent to the largest park in the city (Discovery Park), bounded by a residential neighborhood and sensitive heron habitat, and with views of Puget Sound, Fort Lawton's future redevelopment matters to the entire city of Seattle. Uses on the site must be internally compatible and blend with these bordering uses. Therefore, the public involvement component was designed to engage the public throughout the Fort Lawton Redevelopment Plan process.



July 12, 2008, Fort Lawton Community Workshop

The Fort Lawton BRAC public involvement process began in September 2006 with a workshop and tour of the site for those organizations interested in the NOI process for surplus property. The general public was welcome and was among those attending the workshop. To ensure the general public had opportunities to understand the BRAC process and what would be happening at Fort Lawton, two meetings were held following this workshop.

In 2007 and 2008, 15 meetings were held beginning in February 2007 and ending in July 2008 (Appendix B). The early meetings discussed the BRAC process and the NOIs received by the City for Fort Lawton property. The remaining meetings in 2008 focused on how the LRA would incorporate selected NOIs in this Redevelopment Plan.

It was important for the City to engage the public throughout the redevelopment planning process to produce a plan with stakeholders that could be supported by the community. In support of the defined vision for the redevelopment program (neighborhood integrity and community connectedness, social responsibility, and environmental stewardship, as described in more detail in Chapter 2),

the LRA, its consultants, and the lead developer (SHA) held six Saturday workshops. They focused first on defining a vision for the redevelopment of Fort Lawton. The second focus was on understanding and shaping the plan components through informational exchanges with the consultants working on the Redevelopment Plan and engaged stakeholders.

To address community questions on homeless housing and services, the LRA held an informational meeting on homeless housing. Following this meeting, the LRA held a series of three community meetings on detailed aspects of the selected homeless providers' programs that could later be incorporated into a Community Relations Plan between the community and the homeless providers.





# CHAPTER 2

## Project Vision

### 2.1 PROJECT CHALLENGE AND VISION

The vision for the redevelopment of the Fort Lawton site is intended to accomplish the following: meet the requirements of HUD and the DOD; reflect community involvement, City needs, and financial viability; and at the same time result in a plan for a model community that is livable, diverse, green, and that fits into the surrounding neighborhood. The uses envisioned for the site include:

- wildlife habitat and open space;
- market-rate for-sale housing;
- self-help housing for first-time homeowners; and
- homeless housing and supportive services for families and seniors, including veterans and Native American seniors.

At the same time, the City expects the resulting plan to be sensitive to wildlife, blend with Discovery Park, and be reflective of Native American values.

The vision for Fort Lawton is to create a mixed-income, environmentally sensitive community that affords families of varying income levels the opportunity to live in a diverse and sustainable neighborhood. This vision capitalizes on a number of the unique attributes of the Fort Lawton site, including its location adjacent to both Discovery Park and the city's largest blue heron rookery in Kiwanis Ravine. In addition, the Redevelopment Plan for Fort Lawton will respond to Seattle's commitment to the 10-Year Plan to End Homelessness while simultaneously reconnecting the site to the existing Magnolia community.

From this overarching vision, the City of Seattle, together with SHA and the local community, developed a set of topical vision statements to direct the redevelopment of the site.

### NEIGHBORHOOD INTEGRITY AND COMMUNITY CONNECTEDNESS

- Blend with the existing neighborhood and Discovery Park
- Enhance the quality of the existing neighborhood
- Reflect Native American values

### SOCIAL RESPONSIBILITY

- Create a mixed-income community and respond to Seattle’s needs for housing for homeless
- Provide diverse housing types
- Build a livable community designed to meet the needs of its residents and neighbors

### ENVIRONMENTAL STEWARDSHIP

- Create a community that respects the adjacent natural areas and is developed in an environmentally sustainable manner
- Protect and improve wildlife habitat on the site



## 2.2 GOALS AND PRINCIPLES

There are three sets of aspiration statements for the Fort Lawton project in this document. The first is the vision for the project, described above, which motivated the City to launch the project and guided City decision-making throughout. The second is a set of goals identified by participants in community workshops on March 29 and April 26, 2008. The third is a set of guiding principles, which were identified by the planning team (the City, SHA, consultants, and the community) to shape the site planning phase of the project. The guiding principles attempt to respond to the City’s vision, the community’s goals, and financial feasibility. The goals and guiding principles developed during the redevelopment planning process are listed in Chapter 4.

# CHAPTER 3

## Existing Conditions

### 3.1 OVERVIEW

Fort Lawton is located near the northwestern corner of Seattle's Magnolia neighborhood, on a site overlooking the Lake Washington Ship Canal and the Salmon Bay estuary. Along its western and southern edges, Fort Lawton abuts the 534-acre Discovery Park. To the north and east of the site, it borders on a residential neighborhood containing primarily single-family homes, with several apartment buildings to the south. The primary means of accessing the site is via Texas Way West, which runs through the property, from West Government Way at the site's southeast corner to 40th Avenue West at its northwest corner.

A number of office buildings, utility buildings, and associated parking lots are currently located on the site. Agencies that submitted NOIs considered reusing some of these buildings. In addition, the federal government plans to retain the recently constructed Fort Lawton U.S. Army Reserve Center (FLARC) building and a large, adjacent parking area, which cover an area of approximately 8.5 acres.

The Seattle City Council has begun the process of designating the entire site for multifamily housing in the City of Seattle Comprehensive Plan. The Redevelopment Plan makes a recommendation for specific rezoning.



Fort Lawton North Parking Lot

The environmental constraints for the site include steep slopes at the northern and eastern edges of the property. A wildlife corridor study done in 2006 identified a wetland on the north slope. In addition, there is a large blue heron rookery in Kiwanis Ravine near the site. The City protected this rookery through a Great Blue Heron Management Plan, incorporated in the Department of Planning and Development (DPD) Director's Rule 5-2007. Bald eagles previously nested in Discovery Park and have nested more recently in residential areas near the Army Reserve site.

## 3.2 ENVIRONMENTAL RESOURCES

### TOPOGRAPHY AND SOILS

The project site is located on Magnolia Bluff, at an elevation of approximately 100 to 165 feet above mean sea level. The site generally slopes downward from its greatest elevation, at its southwest corner, to the north and northeast. However, construction of building pads, parking lots, and streets has resulted in grading of much of the site and the construction of a number of retaining walls.

The site is located on mostly gentle slopes underlain by advance outwash deposits and pre-Fraser deposits (Figure 3.2-1). The advance outwash units include the Lawton Clay at the very northern end of the site, the Esperance Sand, and coarser grained advance outwash. Soils underlying the site consist primarily of sand and gravel with some silt units. The soils generally become coarser grained toward the south. Silt to clay soil becomes predominant near the north end. Fill soils of local derivation are likely present over parts of the site where past grading has taken place.

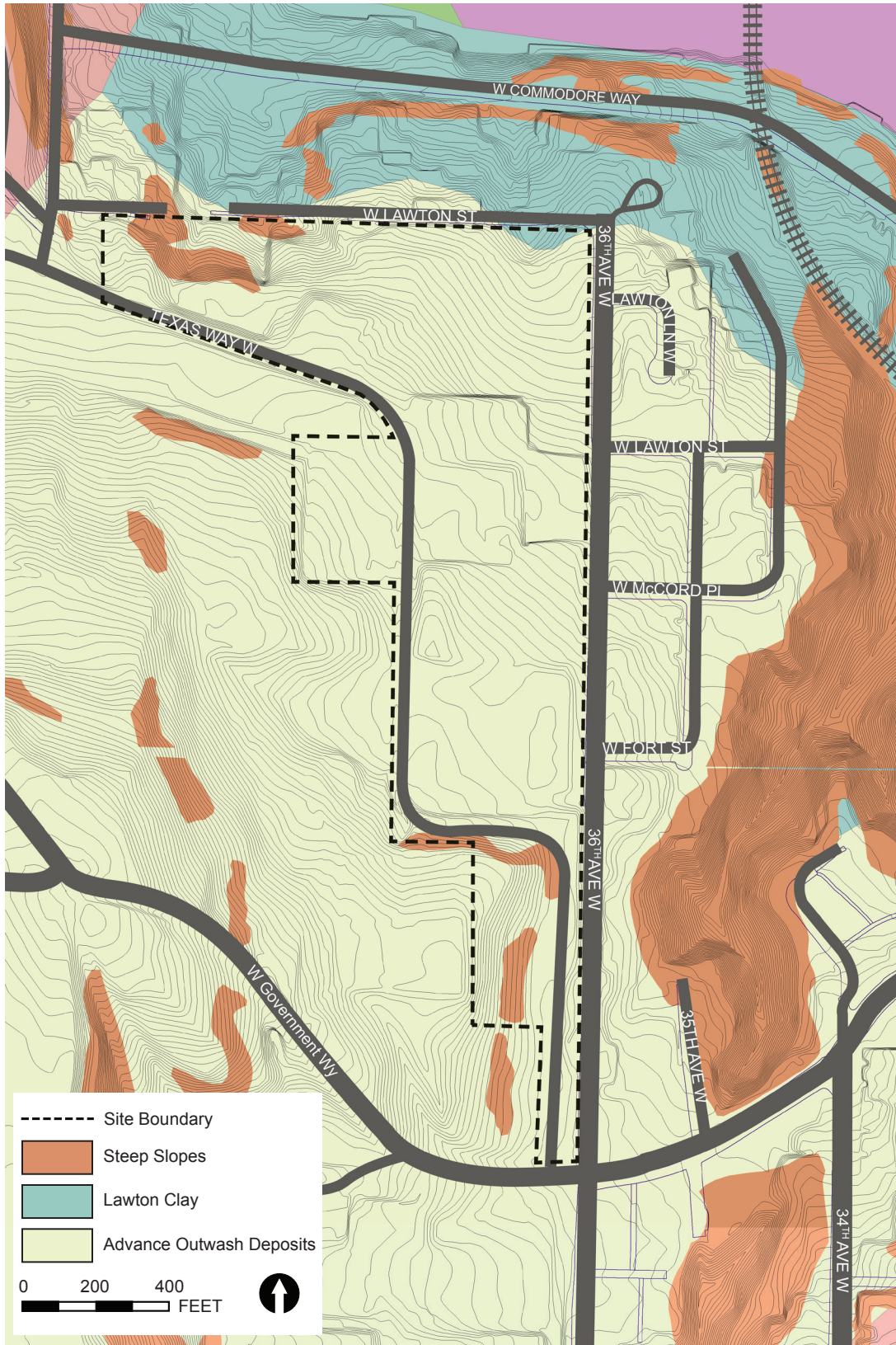
The slope along the north end of the site is potentially unstable. The slope is steep enough and the presence of seeps and springs are such that alteration of the slope conditions would likely lead to shallow surface soil failures or erosion on some portions of the slope unless engineer-designed mitigation measures are in place.

Soils underlying much of the site have been overridden by glacial ice. As such, the native soils have been over-consolidated and will support typical light building foundation loads. However, soil conditions across the site are likely variable as at least a portion of the site is located in an area transitioning between the Lawton Clay, Esperance Sand, and more generic glacial outwash and as past grading on the site has likely left areas underlain by fill. Larger buildings with heavier foundation loads may be subject to differential settlement unless site foundation designs specific to site soil conditions are developed.

Much of the site is currently covered with impervious surfaces, and water is directed into an existing stormwater system. Redevelopment of the site could potentially infiltrate more stormwater if low impact development techniques are used. If groundwater recharge is maintained at similar levels as is currently taking place at the site or at levels near natural conditions, no off-site impacts would be posed.

Additional information on topography and soils is presented in Appendix C.

Figure 3.2-1: Topography and Soils



## VEGETATION

The Fort Lawton site has two large areas of unmaintained natural vegetation, the north bluff area and the southern mixed-conifer forest adjacent to the Fort Lawton Cemetery (Figure 3.2-2). These areas comprise the majority of wildlife habitat on the site, and each area contains elements of structural complexity and specific habitat features that support wildlife. Additionally, individual trees of mixed ages are scattered throughout the site as landscaping between buildings and parking lots. Many of the landscape trees are native species such as big-leaf maples (*Acer macrophyllum*), although some black locusts (*Robinia pseudoacacia*) and other non-natives occur. A narrow “canopy corridor” of native trees currently exists along the eastern edge of the Fort Lawton site, adjacent to 36th Avenue West, and another between the FLARC parking area and Texas Way West. Trees in the 36th Avenue West corridor north of West Fort Street are young and planted among native shrubs; trees south of West Fort Street are much older and have no associated shrubs or understory. Trees near the FLARC parking area are young and have some associated native shrubs among them.

The north bluff area covers about 3.5 forested acres and borders West Lawton Street from 36th Avenue West to 40th Avenue West, along the northern property boundary. The forest in this area is dominated by mature deciduous trees, including big-leaf maples, red alders (*Alnus rubra*), and some hawthorns (*Crataegus sp.*). A few western red cedars (*Thuja plicata*) are present; however, there are few mature conifers, and they are not dominant in the canopy or subcanopy. Significant dead stems are present on many of the big-leaf maples, and there is an abundance of leaf litter and small woody debris on the forest floor. Some large woody debris is present as well. The understory is dominated by weedy and invasive vegetation, including English ivy (*Hedera helix*), bindweed (*Convolvulus arvensis*), Himalayan blackberry (*Rubus armeniacus*), herb-robert geranium (*Geranium robertianum*), Scotch broom (*Cytisus scoparius*), and patches of knotweed (*Polygonum sp.*). Invasive plant cover is significantly impacting native plant species’ growth and health, and reducing the overall plant diversity and habitat value of the site.

The southern mixed-coniferous forest is tucked between the Fort Lawton Cemetery and Texas Way West. This area is approximately 2 acres and is conterminous with forested patches of Discovery Park. Tree canopy species are primarily Douglas-fir (*Pseudotsuga menziesii*), big-leaf maple, red alder, Pacific madrone (*Arbutus menziesii*), and western red cedar. There are no snags or large woody debris, although some big-leaf maples have dead stems that support woodpecker foraging. The understory has some native species cover, including red elderberry (*Sambucus racemosa*), swordfern (*Polystichum munitum*), sapling western red cedar, and native woodland rose (*Rosa sp.*). Invasive plant species are a significant problem here as well and include ivy,

Figure 3.2-2: Vegetation



holly (*Ilex aquifolium*), cherry laurel (*Prunus laurocerasus*), and Himalayan blackberry. The forest floor in this area is much more shaded than in the north bluff, and conditions are more difficult for some invasive species due to low light, although ivy, holly, and laurel are abundant.

In both the north bluff and southern mixed coniferous forest, significant room for enhancement and habitat restoration exists. Many existing mature big-leaf maples are nearing the end of their natural lifespan. These maples are covered with ivy, which competes with trees for nutrients and light and can significantly weaken trees due to excess weight and exacerbation of wind damage. Native understory planting, invasive plant removal, and native tree planting, especially with conifers, would increase the health and habitat value of each forest patch.

### WILDLIFE

The north bluff area and the southern mixed coniferous forest both currently have excellent habitat value for many migratory and resident bird species. Most forest birds documented to use Discovery Park have good potential to use these forested areas. Many species of coniferous forest birds and mammals are likely to use the southern mixed coniferous forest for foraging and

nesting, taking advantage of the contiguous forest through the park. The southern mixed-coniferous forest has excellent value as a bridge between Discovery Park and Kiwanis Memorial Preserve Park, providing a forested path through neighborhoods. Piscivorous birds and raptors are likely to use the north bluff area frequently because of the open views of multiple habitats, including saltwater shoreline. The north bluff canopy trees provide excellent perching, foraging, and sunning opportunities for many species, with views of the canal and Salmon Bay shoreline where many piscivorous species forage. Bald eagles (*Haliaeetus leucocephalus*) and great blue heron (*Ardea herodias*) are likely to use these trees often to perch, view fishing grounds, and sun

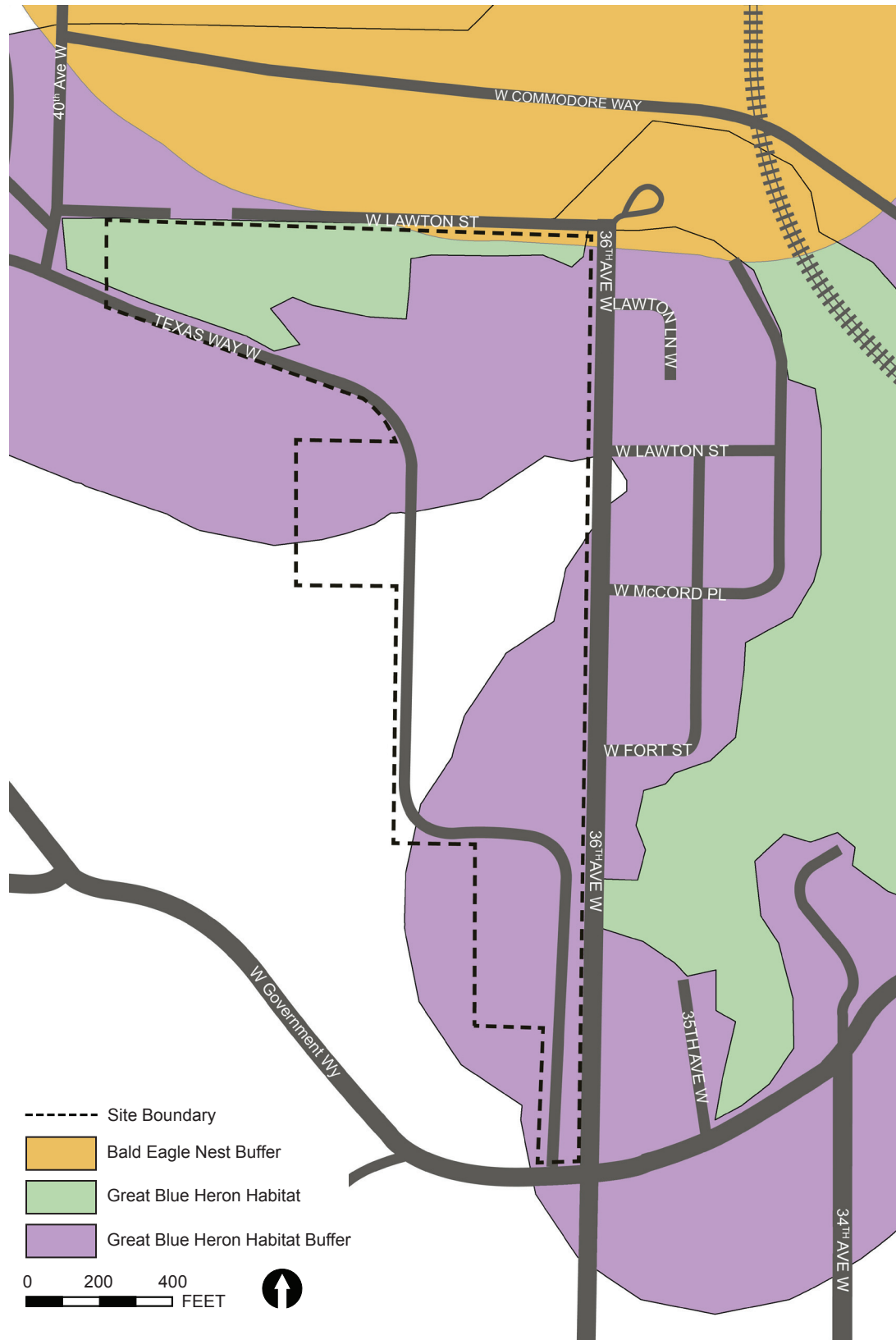
themselves. Big-leaf maples with portions of dead crown are abundant, and snags are plentiful throughout the site, providing habitat for woodpeckers and other cavity-nesting birds. Much of the standing dead wood has evidence of multiple woodpecker species use. Small mammals such as raccoons (*Procyon lotor*) and voles (*Microtus spp.*) may use the dense understory as cover from predators or as a travel corridor between various habitats. The north bluff area represents more than half of the forest cover within 800 feet of Salmon Bay, and is important to any species needing both aquatic resources and forested areas.

A great blue heron rookery in the Kiwanis Memorial Preserve Park (east of the Fort Lawton property) is of particular concern for this site. The Kiwanis





Figure 3.2-3: Wildlife



Memorial Preserve Park is home to a breeding colony of approximately 40 nesting pairs of great blue herons, birds that use a variety of forest and aquatic habitats over the area, including forested patches of the Fort Lawton site. The great blue heron would benefit from protection and enhancement of an aerial tree canopy corridor extending from the north bluff area east to the Kiwanis Memorial Preserve Park and south through the length of the Kiwanis Ravine, looping back west at the southern portion, near Ohman Place, where significant canopy cover can lead through to Discovery Park. Retention of the southern mixed coniferous forest and improvement of the Texas Way/36th Avenue West access corridor may help to provide a contiguous aerial greenbelt that could support movement of great blue heron between Discovery Park and Kiwanis Memorial Preserve Park, and support other wildlife species that use canopy cover as well.

Several bald eagles have nested near the Salmon Bay shoreline or in Discovery Park, although no nests occur on the Fort Lawton site. Nest sites and winter roosts are mapped by the Washington State Department of Fish and Wildlife (WDFW), and these locations are protected by variable buffers ranging from 400 feet to ¼ mile, depending on site conditions and nest type. One bald eagle buffer extends for approximately 10 feet into the very northeast portion of the site, within the eastern portion of the north bluff area.

Great blue herons and bald eagles are both protected by the WDFW; habitat and buffers for both species are depicted in Figure 3.2-3.

## **CULTURAL AND HISTORIC RESOURCES**

### **Archaeological Resources**

The site is located within the traditional territory of the Duwamish Indians, and evidence found at several sites in the area indicates past tribal occupation (DOD n.d.). However, archaeological investigation on the Fort Lawton site has uncovered no evidence of occupation (DOD 1997). Previous construction and demolition activities have disturbed large portions of the site, making discovery and disturbance of archaeological resources highly unlikely.

### **Historic Resources**

Military use of the site began in 1898, when the Chamber of Commerce presented the Army with the land on which Fort Lawton would be established (DOD 1997). Fort Lawton was in active military use as a staging center and prisoner of war camp through two world wars, the Korean War, and into the conflict in Vietnam. During World War II, the Fort included 450 buildings, housing 20,000 soldiers. In 1968, the Army decided to surplus much of Fort Lawton, and Senator Henry M. Jackson sponsored legislation to return the site to the City of Seattle. Of the 700 acres originally given to the Army,



Top and Left Photos: Harvey Hall

Right Photo: Building 275 Smokestack

approximately 400 acres of land was transferred to the City in 1972. This is now Discovery Park, the City's largest park.

Portions of the project site have been occupied by buildings, including World War II-era barracks and warehouses as well as other facilities (USACE 2007). Most of these historical structures have since been demolished. Portions of Building 275, which includes the foundation of an incinerator and a 60-foot smokestack, date from circa 1900 and remain at the northern edge of the property. Previous investigation found that this building was not eligible for the National Register of Historic Places (NRHP) (DOD 1997). Harvey Hall, built in 1958, may be eligible for the NRHP based on its age but does not appear to meet other eligibility criteria.

### 3.3 LAND USE

#### COMPREHENSIVE PLAN AND DEVELOPMENT CODE

##### Zoning

The Fort Lawton site is in the process of being designated for multifamily residential use under the Seattle Comprehensive Plan (2007). The site is currently zoned SF 7200 (single-family residential with a minimum lot size of 7,200 square feet) (Figure 3.3-1). While single-family residences are the primary use in this zone, the Seattle Municipal Code (SMC) permits certain other uses outright, such as nursing homes with up to eight residents and adult family homes licensed by the state (SMC 23.44.006.G and H, respectively). Other sections of the SMC also identify exceptions for allowable uses. For example, SMC 23.44.028 *Structures unsuited to uses permitted outright*, describes the basis for allowing uses that are otherwise not permitted within existing structures (e.g., Harvey Hall). As stated, a use may be permitted if: (1) the structure design is not suitable for conversion to a use permitted outright, (2) the structure contains more than 4,000 square feet, and (3) the proposed use would provide a public benefit. If such structures were reused for multifamily housing, for example, the structure and associated site area would be subtracted from the area used to calculate allowable density for the remainder of the site (Hauger, pers. comm., May 8, 2008).

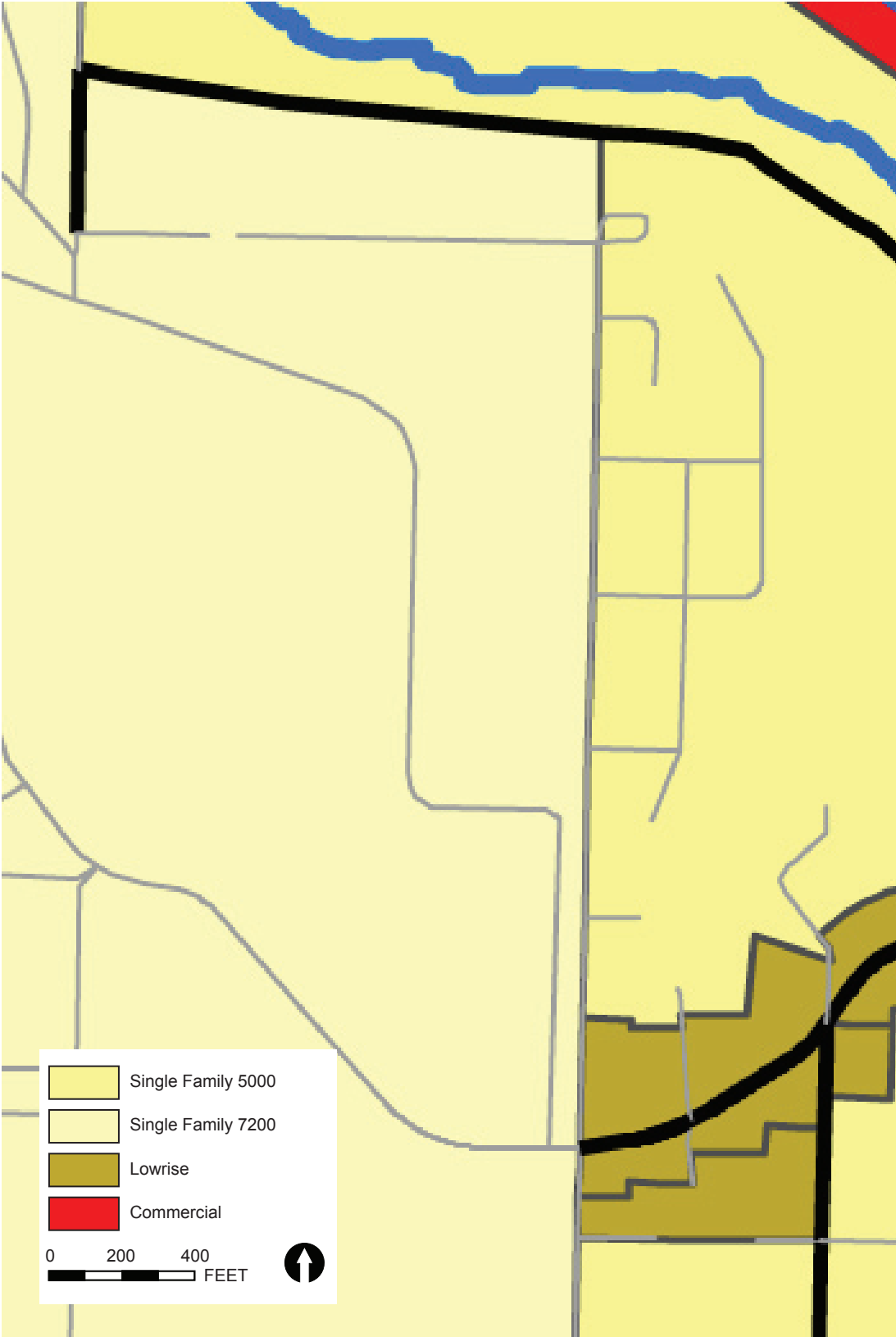
##### Subdivision Standards

Subdivision standards (SMC 23.22.052) generally require street dedication for adequate traffic and pedestrian circulation, unless the City determines that such needs and the public interest can be met through private easements. SMC 25.09.240 includes specific provisions for subdivisions with environmentally critical areas, including steep slopes, and excludes easements and/or fee simple property used for shared vehicular access from the area used to calculate the number of lots permitted. The administrative conditional use (SMC 25.09.260) process allows certain exceptions for subdivisions within environmentally critical areas. However, in this case, the areas proposed for development on the site exclude the steep slope areas.

##### Planned Residential Development

Planned residential developments (PRDs) (SMC 23.44.034) may be permitted in single-family zones as a Council-approved conditional use. PRDs allow reuse of existing structures (e.g., Harvey Hall), and provide additional housing flexibility by permitting townhouse units if they are 100 feet or more from property lines that abut or are directly across the street from property zoned single family. PRDs also may accommodate an increase in the maximum number of dwelling units by up to 20 percent if the PRD provides additional public benefits such as low-income housing and/or usable public open space. According to SMC

Figure 3.3-1: Zoning



23.44.034, “A PRD is intended to enhance and preserve natural features, encourage the construction of affordable housing, allow for development and design flexibility, and protect and prevent harm in environmentally critical areas.”

### **Number of Housing Units Allowed**

The City’s DPD has determined that the land area used to calculate the total number of housing units is based on the parcel prior to subdivision and right-of-way dedication, independent of the type of development proposed (Stave, pers. comm., June 30, 2008). This issue was considered and addressed in DPD Interpretation No. 05-004 for a Clustered Housing Planned Development (CHPD) and subsequently upheld by the Seattle Hearing Examiner and courts (Stave, pers. comm., June 30, 2008). In this plan, the number of housing units would be calculated for the site excluding the steep slope areas and existing structures (if applicable).

### **DESIGN STANDARDS**

SMC 23.22.100 provides design standards under the subdivision standards for streets and other pedestrian and vehicle access, blocks, lots, and utilities. The Hearing Examiner may authorize exceptions (SMC 23.22.106) based on hardship, topography, and other relevant conditions. Single-family development under the existing SF 7200 zoning designation would be required to comply with the standards of SMC 23.44. If townhouses are included in a PRD, they would need to meet L-1 (Lowrise 1) development standards (SMC 23.45).

### **NEIGHBORHOOD INTEGRATION**

Neighborhood integration is incorporated in various code provisions described above. These include standards for access requirements (SMC 23.22.052), environmentally critical areas, administrative conditional uses (SMC 25.09.260), and PRDs (SMC 23.44.034). PRDs require single-family houses along the edges adjacent to single-family property. DPD also has suggested other possible features for this site to promote neighborhood integration, such as aligning new streets with existing streets, providing pedestrian access to Discovery Park, and orienting new housing toward 36th Avenue West (Hauger, pers. comm., May 8, 2008).

### 3.4 EXISTING FACILITIES

#### EXISTING STRUCTURES

Existing buildings at Fort Lawton that are being considered in this Redevelopment Plan were evaluated for their overall condition, use, and characteristics. This facilities assessment addresses five of the seven major existing buildings at Fort Lawton (Figure 3.4-1). Drawings were used in the field to confirm current condition and layouts of the buildings. Each building's construction methods, square footage, exterior appearance, interior facets, and mechanical systems were addressed. Two buildings were not examined: the Fort Lawton USARC Building 240 is to be turned over to the Veterans Administration and is not part of the City's Redevelopment Plan, and documents for the Organizational Maintenance Shops (OMS) Building 245 were unavailable. Generally, all the buildings are in good condition.

#### Building 211, 214, and 222

These are relatively small maintenance, storage, and office buildings that are not appropriate for the expected new uses on the site.

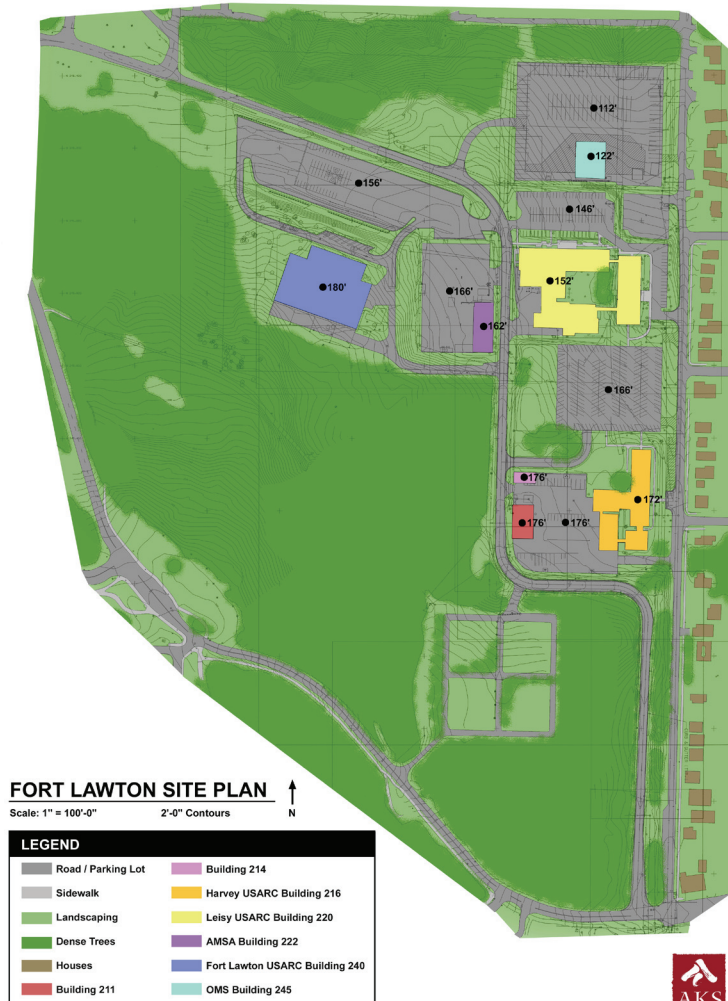
#### Harvey Hall - USARC Building 216

This building was built in 1952 and in 2003 an addition was added. It is a two-story concrete with brick masonry veneer and steel joist structure that contains offices, classrooms, storage, and an auditorium. It may contain asbestos. The 2003 building addition is a one-story pre-engineered metal structure with metal siding and a brick veneer wainscot.

#### Leisy Hall - USARC Building 220

This building was built in 1970 with a building addition added in 1976. It is a two-story precast concrete column and steel joist structure with precast concrete panels and contains offices, classrooms, storage, and assembly spaces. It may contain asbestos.

Figure 3.4-1: Existing Site Plan



## INFRASTRUCTURE

Fort Lawton is currently well served by utilities, which also supply the residential neighborhood to the east and enter the site from 36th Avenue West. The infrastructure on site is summarized below, with more detailed information provided in Appendix E.

### Sewer

Wastewater generated on site is carried north by a single 8-inch sewer line to a major stormwater/sewer trunk line on West Commodore Way. This trunk then carries wastewater to King County's West Point Sewage Treatment Plant. Analysis indicates that the existing on-site sewer system has a capacity of 2.0 million gallons per day, which far exceeds current demand, as well as any projected demand from this Redevelopment Plan.

### Stormwater

Stormwater collected from downspouts, roadside swales, and parking lot catchbasins flows into the City's combined stormwater/sewer system (USACE 2007). Large portions of the site are currently paved or built upon, so that stormwater quantities are relatively high compared to surrounding properties.

### Water

Water mains supply potable water to buildings on the site, to outdoor connections and irrigation systems, and to fire hydrants. A 12-inch water main running along 36th Avenue West serves the site and should provide a high level of service. However; there is no record of pressure or flow testing for water mains in the vicinity (BRH 2008).

### Natural Gas

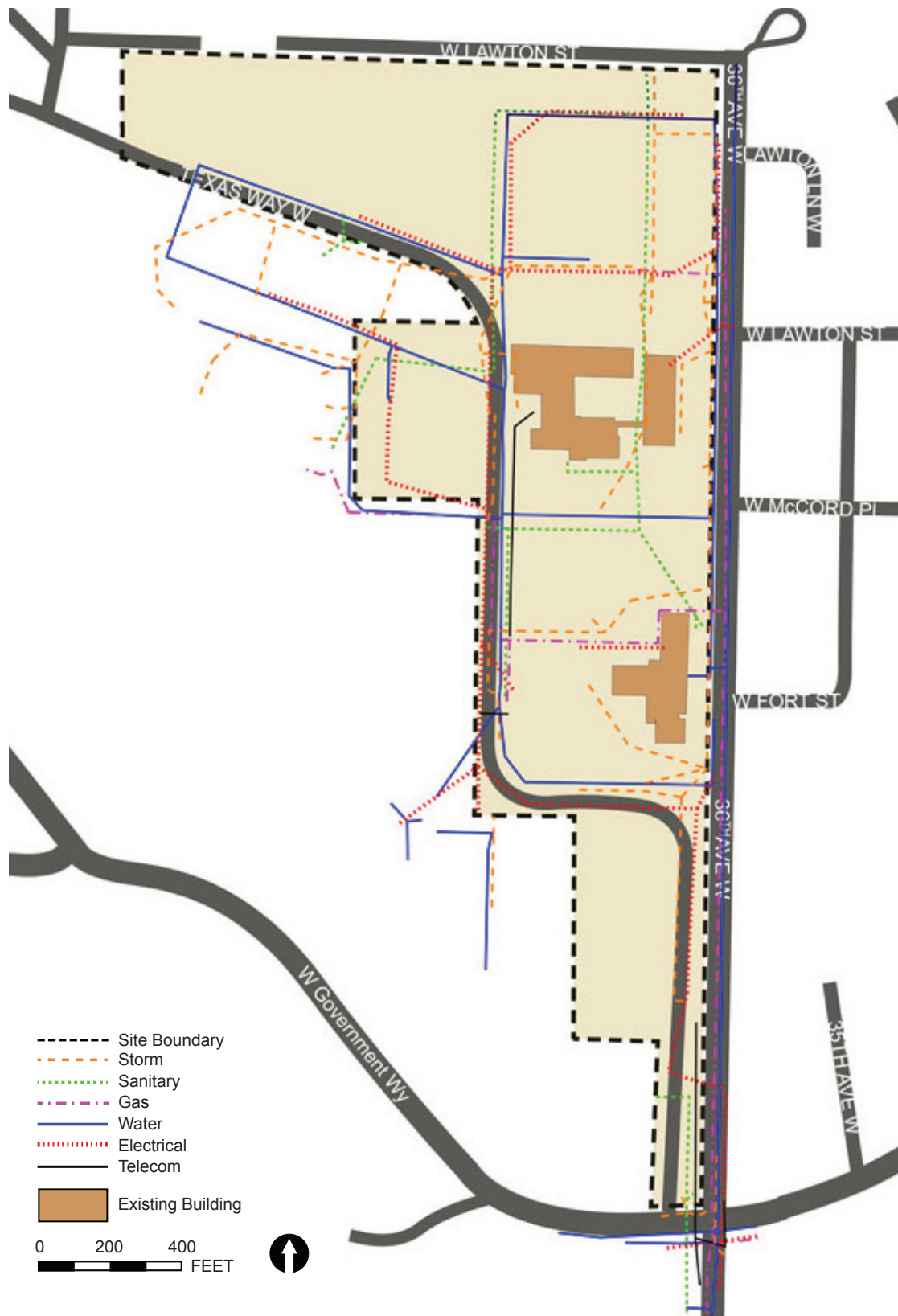
Gas service is provided by Puget Sound Energy (PSE) via a main located along 36th Avenue West. Service is currently provided to the FLARC building, Harvey Hall, and Building 250 (refer to Figure 3.4-2).

### Electricity

Fort Lawton is currently served by an electrical system that was installed when the FLARC building was constructed in 1999. According to Seattle City Light, existing buildings are supplied by a 26-kV primary underground system via three pulling vaults and four transformer vaults. Electrical service is provided via underground transmission lines from a Seattle City Light substation on the east side of 36th Avenue West.



Figure 3.4-2: Infrastructure



### 3.5 PARKS, RECREATION, AND OPEN SPACE

The project site is located in proximity to Discovery Park and a number of other recreational parks and facilities (Figure 3.5-1). However, because of local topography and street patterns, access to a number of these parks requires a moderate walk. Distances noted below are measured from the center of the project site.

Discovery Park is immediately to the west and south of the project site on land that was previously part of Fort Lawton. Most of Discovery Park consists of wooded areas and meadows accessed by trails, paths, and paved roads. Park facilities in the vicinity of the project site consist of picnic areas, a children's play area, and tennis courts located approximately 0.4 miles south of the project site. The Discovery Park Visitors Center is also approximately 0.4 miles south of the project site; it is used for Parks and Recreation Department programs and has rooms available for rent or use by the community. The Wolf Tree Nature Trail and additional picnic areas lie approximately 0.5 miles to the west of the project site. The primary access points to the park are from West Emerson Street on the south border of the park and from 40th Street West at the northern end. Primary access to the site is from the main Texas Way West entrance at the south end of the site. A continuous fence prevents direct access to Discovery Park from within the project site.

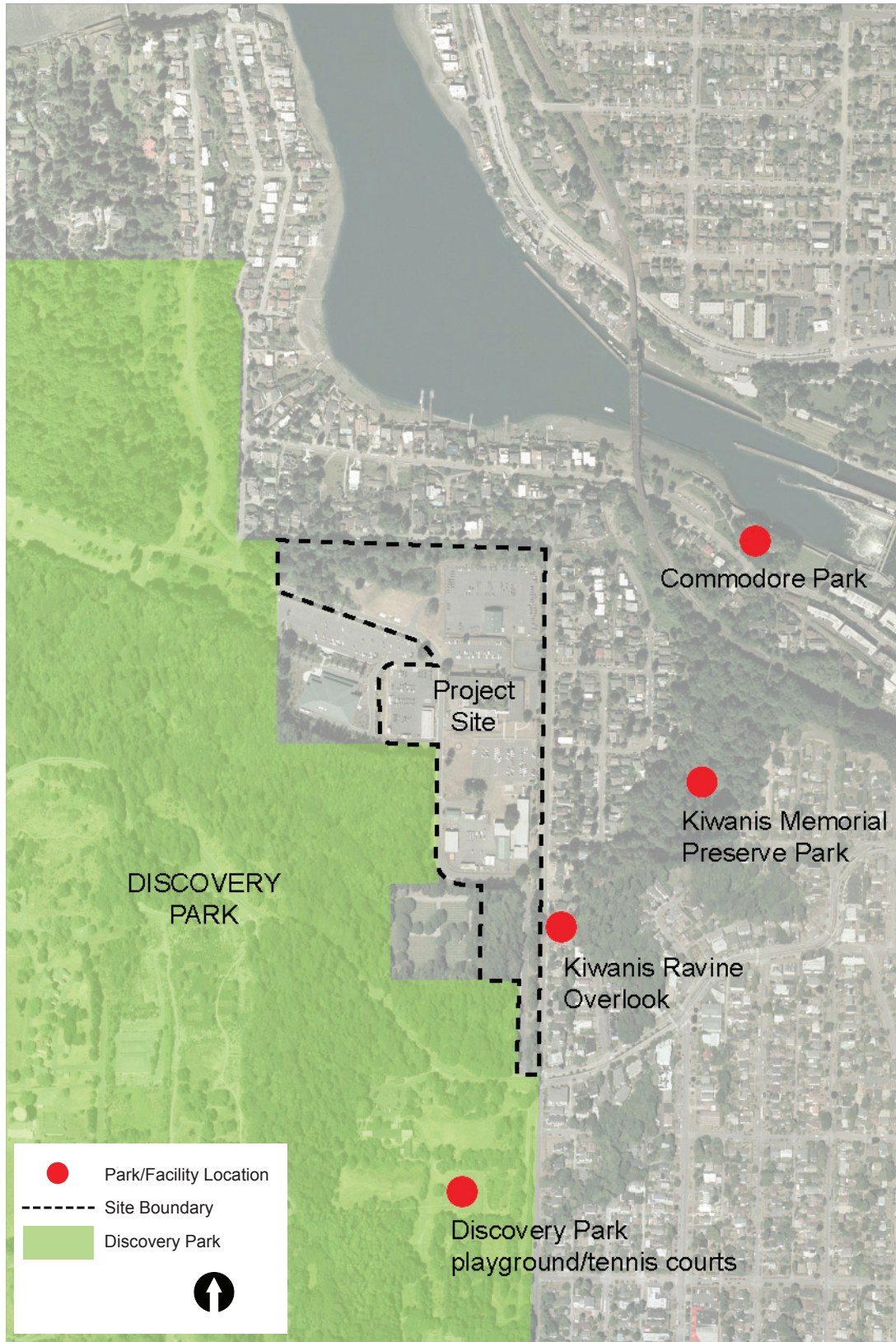
Kiwanis Ravine Overlook (approx. 0.3 acres) is located adjacent to the site on 36th Avenue West. This area contains views into the adjacent Kiwanis Memorial Preserve Park but no other park facilities.

Kiwanis Memorial Preserve Park (approx. 16.3 acres) is an open space area designated as heron habitat; the only publicly accessible portion is a pedestrian bridge that crosses the park. Although the park itself is near the project site, the pedestrian bridge is located approximately 0.8 miles away.

Commodore Park (3.9 acres) lies adjacent to the Lake Washington Ship Canal and provides panoramic views of the canal and the Hiram M. Chittenden Locks. Park facilities consist of Americans with Disabilities Act (ADA) compliant restrooms and paths as well as picnic areas. Although physically near, this park is approximately 0.8 miles from the project site by road.

The Daybreak Star Cultural Center (approx. 20 acres) is located on the northern edge of Discovery Park, approximately 0.7 miles from the project site. The center property includes views of Puget Sound and walking paths; the cultural center itself does not provide indoor facilities that are open to the general public, with the exception of the Indian Art Gallery. The center hosts a number of events and programs, including the annual Seafair Indian Days Pow Wow.

Figure 3.5-1: Parks, Recreation, and Open Space



## 3.6 TRANSPORTATION

### ACCESS AND CIRCULATION

The primary access to Fort Lawton is via the intersection of West Government Way, Texas Way West, and 36th Avenue West (Figure 3.6-1). The segregation of access to Fort Lawton and the adjacent neighborhood to the east has created a poorly designed five-way intersection. Vehicular access is also possible, albeit less directly, via Texas Way West and 40th Avenue West, which connects to residential areas to the north and West Commodore Way. Texas Way West, a two-lane road, provides the sole access through Fort Lawton. Outside the site, West Government Way is an arterial street that provides convenient access. 36th Avenue West, directly parallel to Texas Way West to the east, is a residential street with chicanes to calm traffic and no curbs.

No official traffic counts are available from the City of Seattle for major intersections surrounding the Fort Lawton site. Nelson\Nygaard conducted two spot counts during the PM peak hour (4:30-5:30 PM) in order to estimate traffic volumes at Texas Way West and West Government Way (these counts are not official or scientifically accurate and should not be used for design or decision-making purposes). Spot counts of peak hour traffic indicate daily volumes in the range of 1,600 to 2,000 vehicles (based on the assumption that PM peak hour represents 10 percent of daily traffic volume). Park uses accessed by West Government Way suggest that dramatic variations in traffic volumes occur based on day and time of year.

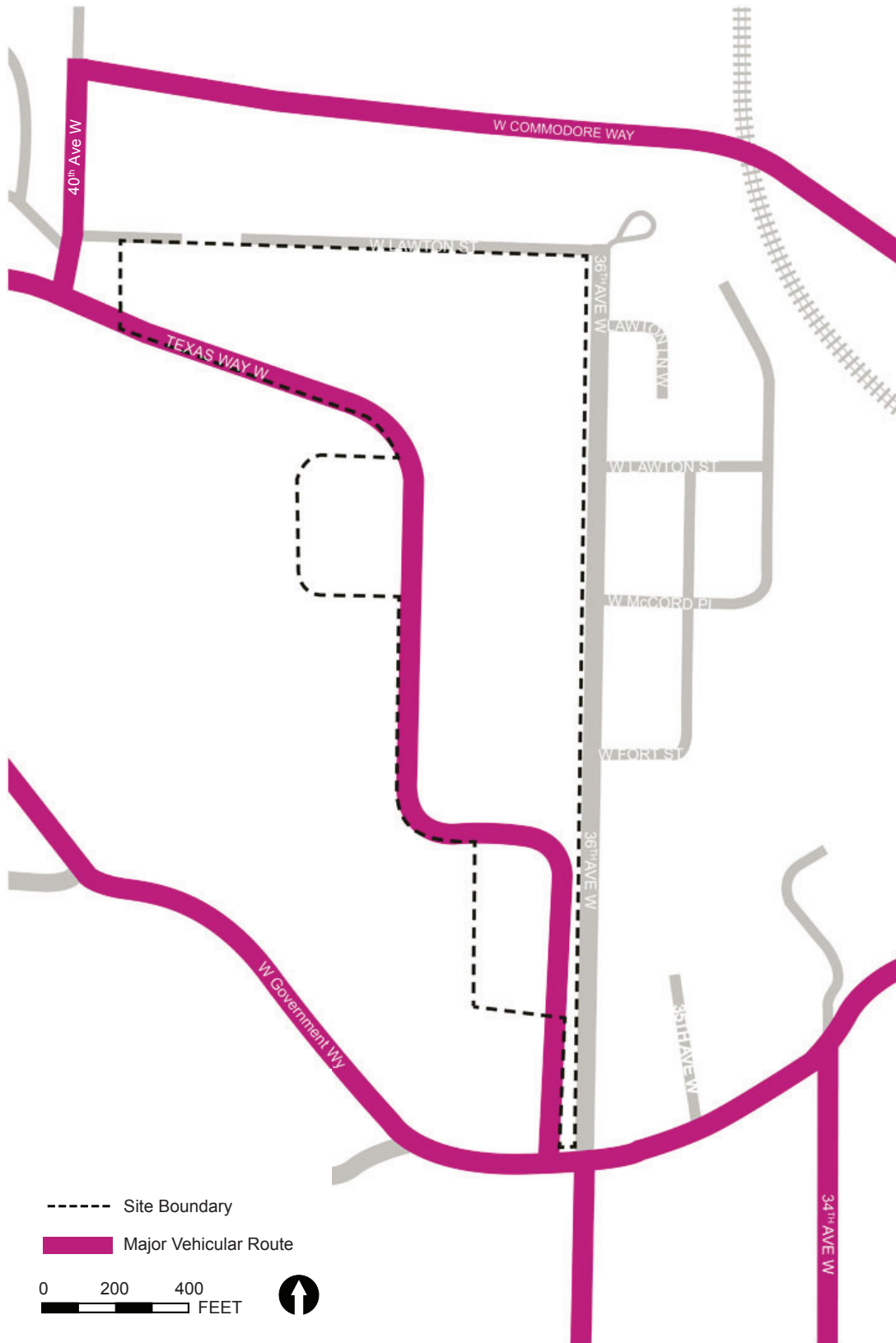
### TRANSIT

Three King County Metro bus routes serve Fort Lawton (Figure 3.6-2):

- Route 19 (West Magnolia-Downtown) – Service is provided during weekday peak hours only. The closest stop is two blocks away at West Government Way and 34th Avenue West.
- Route 24 (West Magnolia-Downtown) – Service is provided seven days a week, with headways 12 to 30 minutes during peak, 30 minutes during nonpeak. The closest stop is two blocks away at West Government Way and 34th Avenue West.
- Route 33 (Discovery Park-Downtown) – Service is provided seven days a week, headways with 15 to 45 minutes during peak and 45 to 60 minutes during nonpeak. The route travels through Fort Lawton on Texas Way West.

All routes will connect to the Ballard-Uptown RapidRide bus rapid transit service on 15th Avenue West when RapidRide is implemented. Given the low-density character of the site and overall neighborhood, the quality of existing bus service is high.

Figure 3.6-1: Vehicular Transportation



## NON-MOTORIZED TRANSPORTATION

Fort Lawton is well connected to the existing bicycle network. Bicycle lanes on West Government Way and Gilman Avenue West and shared roadways on other streets connect the site to the rest of Magnolia and Seattle and integrate into the larger City network of bike lanes and trails. Steep grades leading up to the site and adjacent neighborhoods are a barrier to nonrecreational bicycling.

Pedestrian access within and around Fort Lawton is challenged by grades and design aimed at restricting pedestrian access. Sidewalks are intermittent on Texas Way West, and a fence limits access to and through the site from 36th Avenue West via a few widely spaced gates. Outside the site, 36th Avenue West has sidewalks only on the east side, while West Government Way has intermittent sidewalks. Walking in the area is still relatively comfortable because of low traffic volumes and connectivity with the Discovery Park trail system.

Additional information on transit is presented in Appendix F: Transportation Study.

Figure 3.6-2: Transit and Non-Motorized Transportation



### 3.7 HOUSING MARKET

Magnolia is a well-established residential neighborhood with limited housing supply and very little new residential construction. The Fort Lawton property represents one of the few opportunities for larger scale development of multiple single-family units.

#### BUILDING TYPES

Magnolia is a primarily single-family neighborhood with approximately 6,000 units of single-family housing and a total residential unit count of 8,803. Apartments make up the next largest land use with 1,577 units and represent 23 percent of the total land use makeup of the Magnolia neighborhood. Because of Magnolia's proximity to downtown, as well as its many waterfront view lots, condominiums and townhouses have not seen the same market acceptance as in other areas of Seattle such as Belltown and Capitol Hill. Condominiums and townhouses represent approximately 10 percent of the total unit makeup of the neighborhood, with condominium units making up just over 700 units of the neighborhood's residential stock and townhouses making up less than 200 units (Figures 3.7-1 and 3.7-2).

#### APARTMENT LOCATIONS

The majority of the apartments built in Magnolia are located near more central retail areas and transportation corridors. No apartment buildings have been built near the project site since before 1990. This again shows that as land values in Magnolia have seen increases in value, feasibility for apartments has begun to diminish.

#### BUILDING SIZE

Magnolia homes have an average size of 2,600 square feet. This is due to dated housing stock in an established neighborhood, as well as requirements from zoning. With only 27 percent of all of Magnolia's housing stock at less than 2,000 square feet, small lot single-family units may represent a market segment that may not contain the supply with which to meet its demand.

#### HOME SALE PRICES

Home sales to the south and east of the Fort Lawton site ranged between \$500,000 and \$800,000. Properties located to the north of the project site saw prices above \$800,000, with some sales reaching over one million dollars due primarily to the proximity to, or location along, the waterfront. Because of its proximity to downtown and ample waterfront property, Magnolia will continue to see home prices that are above those of the Seattle market area.

Based on analysis of market demand, Gardner-Johnson has identified homes sized between 2,000 and 2,800 square feet as most characteristic of the existing neighborhood. Smaller lot single-family homes represent a desirable



product that is currently not met by housing in the Magnolia neighborhood, and thus may have a meaningful pent-up demand. Finally, a limited number of smaller townhomes and luxury townhomes appears viable, but it is hard to predict due to historically low demand for such products. Additional information on market demand is presented in Appendix G.

Figure 3.7-1: Building Types

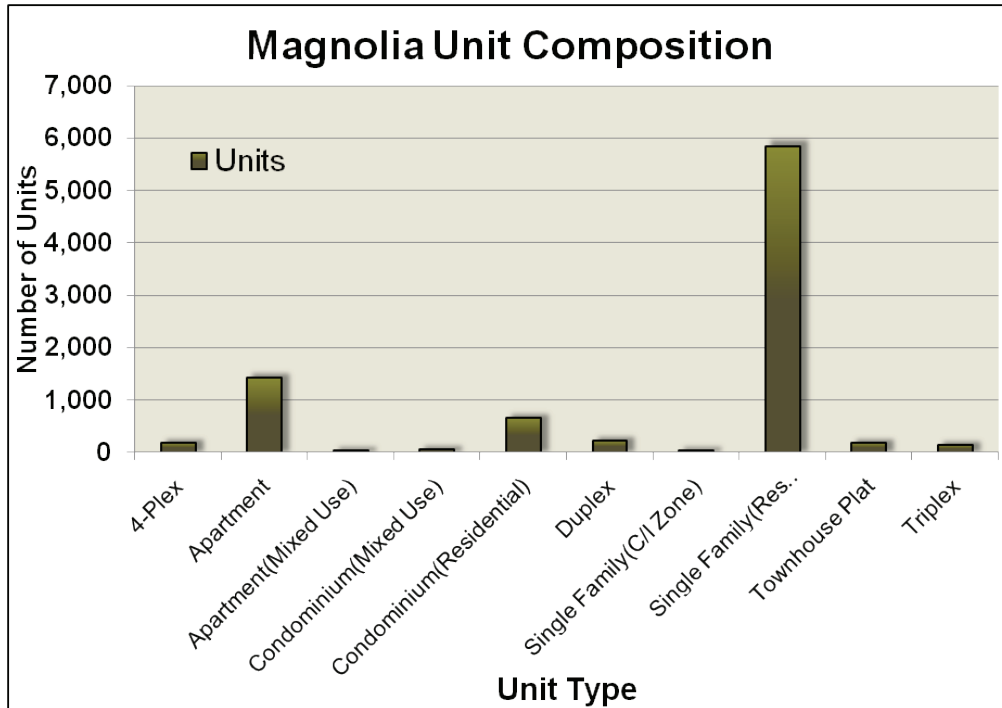
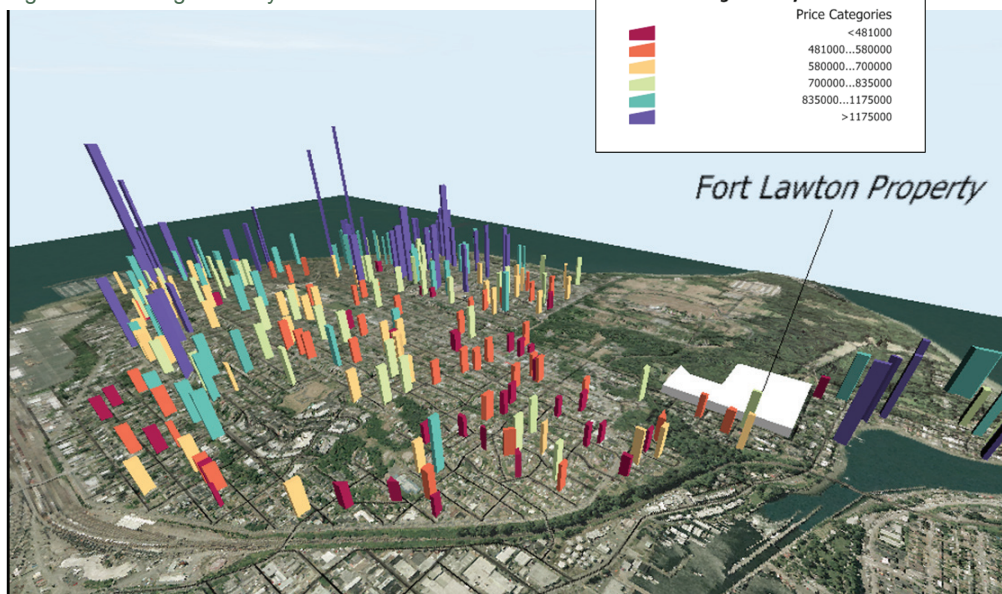


Figure 3.7-2: Single-Family Home Sale Prices

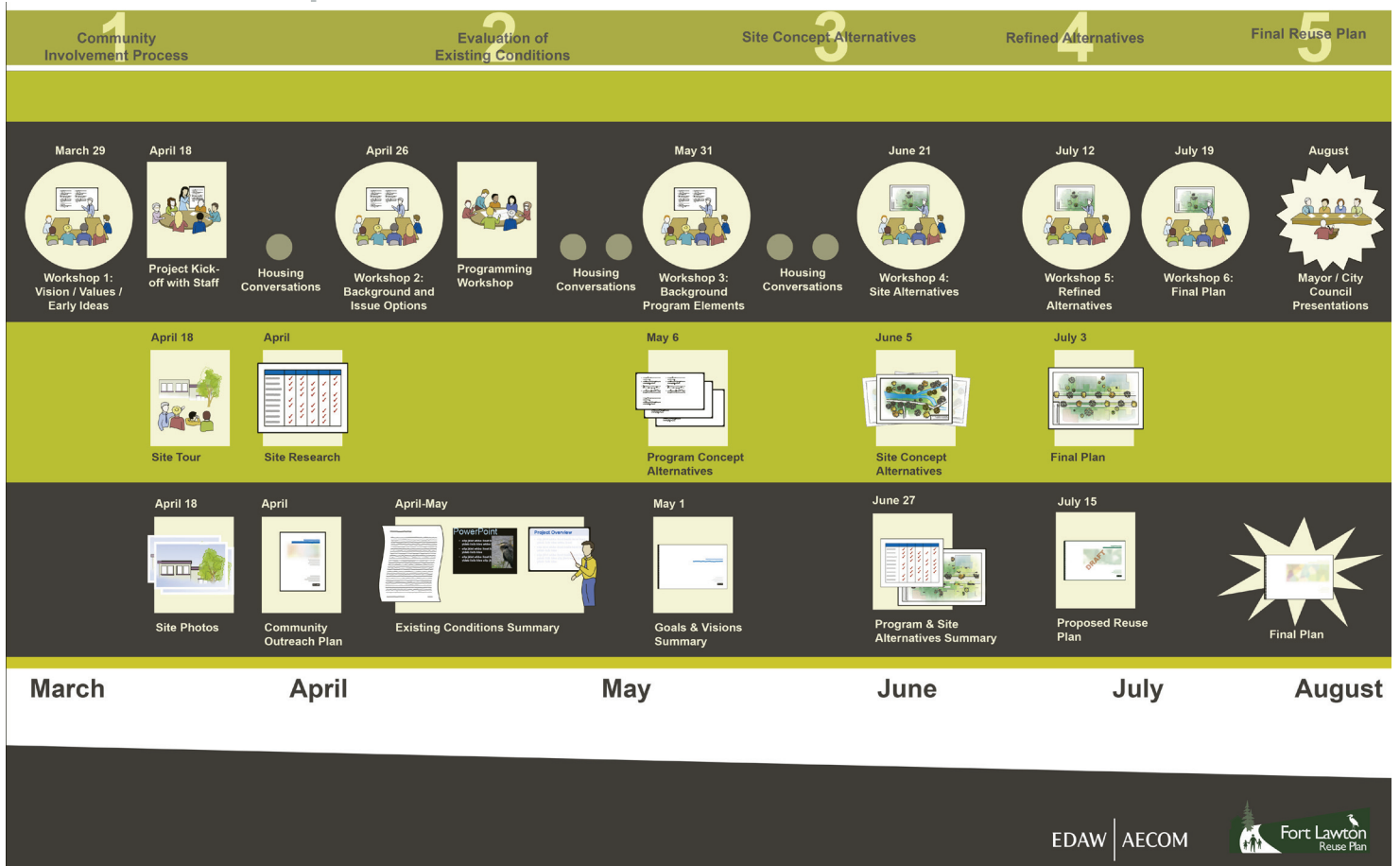




# CHAPTER 4

## Redevelopment Planning Process

In contrast to many BRAC redevelopment sites, Fort Lawton is a relatively small parcel that is located within an established residential neighborhood. The approximately 29-acre site is situated between Discovery Park and a largely single-family residential portion of Seattle's Magnolia neighborhood. As such, the City of Seattle understands that the vision of redeveloping the base as a mixed-income neighborhood is of keen interest to the Magnolia community and especially to the site's neighbors. In this context, the City embarked on the highly interactive, iterative, and public process of preparing this Redevelopment Plan.



Planning Process Graphic

During the spring and summer of 2008, the City worked with the Seattle Housing Authority (SHA), the Archdiocesan Housing Authority (AHA), the YWCA of Seattle-King County-Snohomish County, the United Indians of All Tribes Foundation, Habitat for Humanity Seattle/South King County, and a multi-disciplinary consultant team to develop this plan in close communication with the Magnolia community, other government agencies, and interested stakeholders. This process (as illustrated in the diagram on the previous page) helped shape project goal setting, analysis of the site and background issues, program elements and plan alternatives, and refinement of the proposed Redevelopment Plan.

Throughout the process, decisions were based on community input, federal BRAC requirements, and City policy (including housing, parks, planning and development, and transportation). As information was collected and analyzed and decisions were made, these were shared with the community at subsequent community meetings, which took place every two to four weeks between March and July 2008. Participants in those meetings were of mixed opinions on many subjects, and the following narrative attempts to characterize feedback received during each step of the planning process as expressed through verbal input at meetings, written notes on formal comment sheets, and e-mail.

## 4.1 COMMUNITY WORKSHOP GOALS AND GUIDING PRINCIPLES

On March 29 and April 26, 2008, the first two community workshops on the redevelopment process focused on identifying community values and goals related to the redevelopment of Fort Lawton. Participants were asked what they wanted from the redevelopment and what characteristics a new neighborhood might have.

There was considerable debate from participants in the March 29, 2008, workshop about development of a mixed-income neighborhood in this location. Some participants, however, expressed strong support for the concept. Workshop participants were asked to place dots adjacent to various value and goal statements that best reflected their own opinions. The following represents a summary of those statements receiving the highest scores in this workshop.

### COMMUNITY WORKSHOP GOALS

#### Community

- Reflect neighborhood **character**
- Maintain home **property values** in this community
- Keep current **zoning**
- Enhance neighborhood **quality and values**
- Ensure a **family-safe** environment

#### Housing

- Optimize **residential mix**
- **Mix incomes** in a natural way
- Offer **diverse housing** choices for incomes, ages, and family sizes
- **Limit** total development
- **Blend** new development with existing neighborhood

#### Circulation

- Minimize neighborhood **traffic**
- Improve entry to **Discovery Park**
- Offer multiple circulation **choices**
- Create pedestrian-**friendly and safe** streets
- Minimize impact of the **Veterans Affairs** building and traffic

#### Open Space / Environment

- Protect existing **forested areas**
- Improve **wildlife corridors** between Kiwanis Ravine and Discovery Park
- Increase **trails** into Discovery Park
- Improve **trees, vegetation, and habitat** across the site
- Repair site **topography** and natural **drainage**
- Create a **green and environmentally** sensitive community

In the ensuing weeks, the planning team (the City, SHA, and consultants) considered these community-expressed goals in light of other background analyses, City policy and objectives, community design principles, and financial feasibility analysis. To shape the specific program options and Redevelopment Plan alternatives, the planning team identified the following guiding principles for the project.

## GUIDING PRINCIPLES

### Community

- **Blend / integrate** new development with the adjacent neighborhood and Discovery Park
- **Enhance neighborhood quality** and values through a master planning approach
- Create a **safe** community
- Maintain / enhance **property values** with good master planning
- **Plan for impacts** on the community (schools, police, traffic, etc.)

### Housing

- Provide a **diversity of housing options** including a mix of market-rate, affordable, self-help, and homeless housing
- **Blend new housing into the fabric** of the surrounding community; avoid “Urban Village” character
- **Blend self-help and homeless housing** into community in a natural way.
- **Reuse existing buildings** if feasible
- Build “**built green**” homes

### Circulation

- Create **pedestrian-friendly and safe** streets
- **Minimize negative traffic impacts** (from new homes or FLARC) on existing neighborhood streets
- Improve the West Government Way **entry to Discovery Park**
- Improve **public transit** service
- Increase connections to **local pedestrian and bike trails** (e.g., Discovery Park)

### Open Space / Environment

- Create a **green and environmentally sensitive** community, including minimizing carbon footprint
- Provide **adequate parks and open spaces** for new community residents  
Balance clustered housing with open space
- Protect existing **specimen trees**, forested areas, and **wildlife habitat** areas
- **Improve wildlife corridor** connections between Kiwanis Ravine and Discovery Park
- Repair site **topography and natural drainage**

## 4.2 REDEVELOPMENT PROGRAM ELEMENTS

By the time the initial program phase of the process started, the City had completed an initial stakeholder process and determined that it was interested in mixed-income residential development for the site. The City also concluded that commercial or industrial uses for the site were not appropriate in this residential neighborhood and that no City departments had use for the various existing buildings on the site (see the Homeless Assistance Submission). These decisions were compatible with the current residential zoning and with various City policies (such as for parks and transportation). As such, the planning team included residential uses and open space during the redevelopment planning process. The only exceptions to this were potential ancillary uses, such as community rooms or centers.

The City's BRAC process also identified SHA as the master developer, with AHA, YWCA, United Indians of All Tribes Foundation, and Habitat for Humanity as the developers and operators of the homeless and self-help housing on the site. Specific numbers of units and services to be provided were not clear at the outset of this phase of planning, but became clearer as the process evolved. The following sections describe the housing program for this site.

### MIXED-INCOME COMMUNITY

In keeping with comprehensive plan goals and City housing policy, the redevelopment planning process sought to create a neighborhood with a balance of affordable and market-rate housing. A combination of market demand, City housing goals, and neighborhood compatibility drove decisions about the total number of housing units appropriate for the site. The total number of self-help and homeless units was determined as a balance between housing needs, financial feasibility, and the desire to create a stable, mixed-income neighborhood that will blend appropriately with surrounding residential neighborhoods and the adjacent park.

### HOMELESS HOUSING PROGRAM

After receiving NOI submittals (including one from SHA), SHA was chosen as the master developer of the Fort Lawton redevelopment site. From the NOIs submitted, the LRA selected three homeless service and housing providers to develop homeless housing serving both elderly homeless individuals and homeless families. Specifically, the AHA and United Indians of All Tribes Foundation were selected to develop approximately 55 units of housing for homeless seniors, with a focus on Native American elders. The AHA and YWCA were selected to develop 30 units of housing for homeless families. After careful analysis of the existing buildings, costs to convert the existing office buildings into housing and the programmatic needs for the homeless housing, it was determined that neither of the significant existing buildings were suitable

for redevelopment as homeless housing. Accordingly, the LRA and homeless housing providers are requesting property to develop a 55-unit building for homeless seniors and property to develop 30 duplex-style units for homeless families. Additionally, the homeless housing providers and LRA are requesting the commercial kitchen equipment and other equipment as described in Chapter 7. Refer to the City's Homeless Assistance Submission for additional detail.

### **AHA Senior Housing**

The AHA will develop and maintain a facility for homeless elderly residents. The United Indians of All Tribes Foundation will recruit and provide services for elderly Native Americans in this facility. AHA senior housing will provide studio living spaces with bathrooms for single residents over 55 years of age. Residents will share common spaces including a commercial kitchen, dining facilities, and community space, and offices for service providers. These studio units can best be incorporated into a single three-story structure composed of stacked studio apartments. This building will also require parking for social service providers, cooking and maintenance staff, and some parking for residents. The facility will also include open space appropriate to the needs of the residents. Because of economies of scale in construction, maintenance, and ongoing operation, this facility will be designed to house 55 residents. For site planning purposes, such a facility will need a bit more than 1 acre.

### **AHA Family Housing**

The AHA will also develop and maintain a number of residences for homeless families. YWCA will provide case management services to these residents. AHA family housing provides housing for families of various sizes. Units range from two to four bedrooms. AHA and YWCA envision these as townhouse-style duplexes, with small private yards and access to some sort of community open space. For efficiency of support services, AHA and YWCA try to develop housing in 10-unit increments. The plan includes 30 family housing units.

### **Self-Help Housing**

The City of Seattle also received a NOI for self-help housing from the local chapter of Habitat for Humanity. Residents of Habitat for Humanity housing trend toward larger family sizes. Accordingly, units will be a mixture of three, four, and five bedrooms. These would also likely be developed as duplex townhomes. The number of Habitat for Humanity units will be determined as a balance between providing for affordable homeownership, and the need for market-rate units to create neighborhood balance and support land development costs. Currently, analysis of these factors indicates that Habitat for Humanity will develop approximately six units.



## MARKET-RATE HOUSING PROGRAM

### Demographics

Gardner-Johnson, LLC conducted a residential market analysis for the Fort Lawton site (see Appendix G). As an established neighborhood with solid housing stock and good access to downtown, Magnolia has enjoyed substantially rising residential property values in recent years. The predominant residential type in Magnolia is single-family homes with some apartments. While multifamily housing is present in the area and continues to be constructed, Magnolia does not have a large enough mixed-use commercial center to attract a major amenity-driven multifamily housing market. View properties in Magnolia can demand premium prices comparable to Seattle's most expensive homes, but most of the neighborhood is made up of middle to upper-middle priced homes.

Buyers at the Fort Lawton site will most likely be people who value the adjacent park, access to views, and the Magnolia neighborhood, but are also comfortable with the diversity of a mixed-income neighborhood. Judging by the success of market-rate housing in Seattle HOPE VI projects (e.g., High Point and Rainier Vista), there are many buyers in Seattle looking for the opportunity to purchase quality new housing in an economically diverse neighborhood. The market-rate housing program represents a desire to develop housing that will appeal to a broad and reasonably safe section of the market rather than focusing on the highest-end segment represented in portions of the adjacent existing neighborhood.

### Housing Types

Market research identified five types of market-rate housing that could be considered for the site. The types and their general characteristics follow. Illustrations are for general reference, and match those used to communicate these housing types in the community meetings.



**Stacked Flats (apartments or condominiums).** Multifamily units from 350 to 1,200 square feet were considered, but market analysts felt that Seattle has many more desirable locations for this type of housing in the private market. As such, redevelopment planning only considered stacked flat units for the AHA senior housing (350 square foot studios).



**Townhouses** in the 900 to 1,700 square foot range were seen as a modest potential market for the Fort Lawton site. There are some but not many townhouses and/or duplexes in the area, and little sales data are available. This was seen as a modest risk product for market-rate housing at Fort Lawton, and as the most likely development style for both the Habitat for Humanity and AHA family housing.



**Small-Lot Single-Family Homes** in the 1,500 to 1,800 square foot range were seen as a highly desirable and underrepresented housing type in this area, with a buyer profile likely to be comfortable with a mixed-income neighborhood. As such, this type of housing was identified as the lowest risk product for new housing.



**Single-Family homes** in the 2,000 to 2,500 square foot range are most similar to much of the existing neighborhood adjacent to Fort Lawton, and likely a low-risk product, but with less pent-up demand than the small-lot product described above.



**Larger Single-Family Homes** in the 2,500 to 2,800 square foot range reflect many of the view homes in the area, and are likely to sell well in prime locations, with moderate risk. Market analysts felt that buyers of premium homes larger than this might not be attracted to a mixed-income neighborhood, and did not recommend a large percentage of this product.

### **UNIT MIX**

The proposed unit mix for the redevelopment program focuses on product types in the middle range, with a few large single-family and no stacked flats proposed. Through an iterative process of market and pro-forma analysis, SHA identified a range of unit counts in each category for site planning purposes. These mixes were identified for site planning purposes and financial feasibility analysis. They are based on 2008 market information. The proposed mix of units presented in Chapter 5 will vary to some extent based on market conditions at the time of development.

### **OPEN SPACE PROGRAM**

The open space program for Fort Lawton includes new recreational open space, preserved areas of wildlife habitat, and improved areas of existing forest and natural areas.

### **Recreational Open Space**

Given the adjacency of Discovery Park, the Seattle Parks and Recreation Department has identified portions of the Fort Lawton site as a priority for expansion of Discovery Park. With a mixture of forested and open areas, a network of trails, and large lawn areas, Discovery Park has citywide significance, serving citizens' passive recreational and open space needs.

### Wildlife Habitat

The Fort Lawton site is situated between the forests of Discovery Park to the west, the Kiwanis Ravine greenbelt to the east, and the Salmon Bay estuary to the north. Forested areas of the site are not primary wildlife habitat but have been identified as habitat corridors connecting larger forested open space tracts for great blue herons and other species. Their proximity to Salmon Bay, which is a fishing grounds for resident herons, gives them additional importance for wildlife. As identified in the *Environmental Resources* section of this plan, forested areas of the site are City-designated habitat of various types, placing some restrictions and limitations on any new development (see Chapter 3).

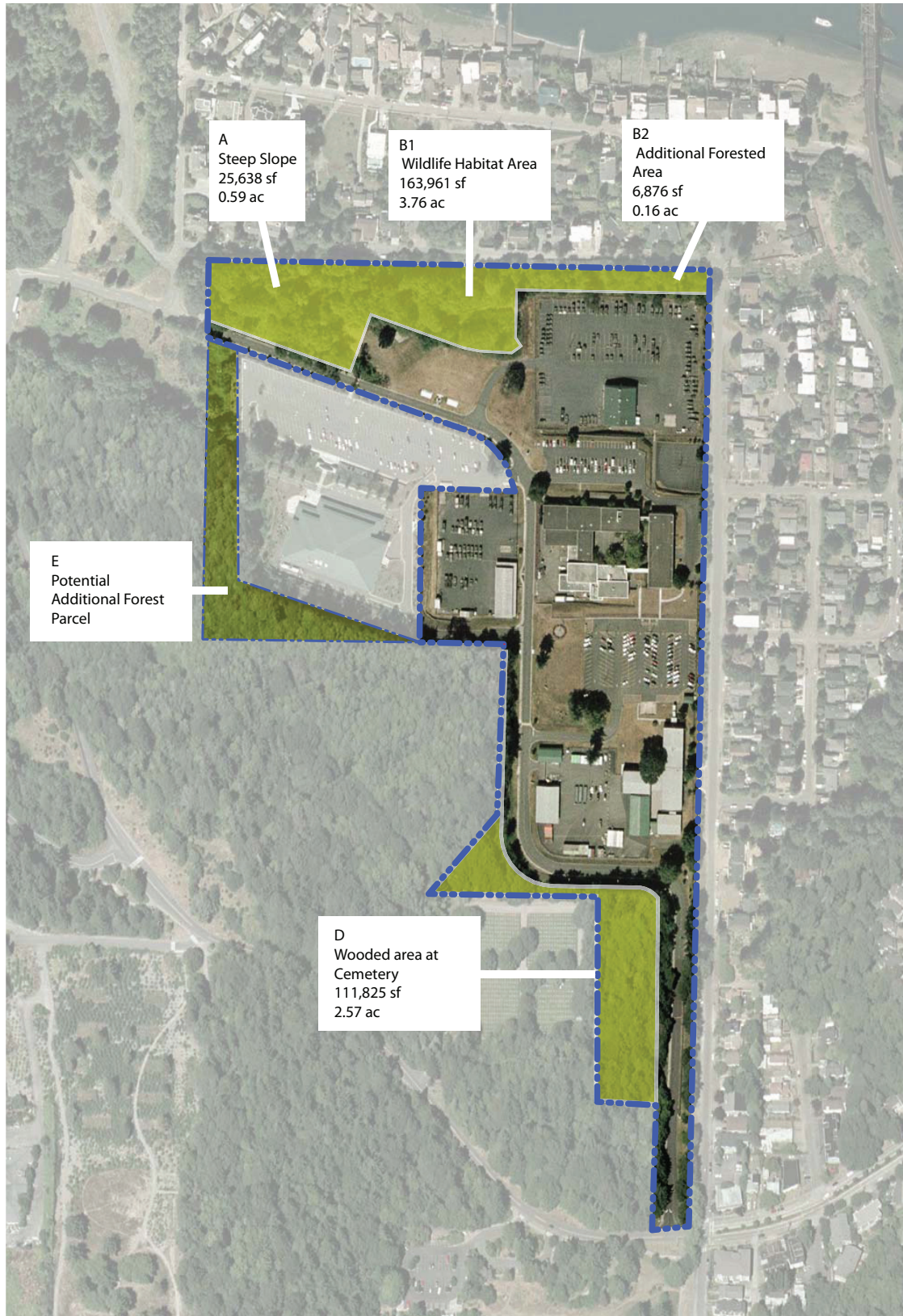
The Seattle Parks and Recreation Department is interested in acquisition of forested areas at the north, west, and south of the project site with existing and potentially enhanced habitat value in keeping with their goals of enhancing overall urban wildlife habitat networks.

In addition to its habitat value, the north bluff area generally contains steeper slopes and would be difficult and costly to develop. Therefore, the planning team decided that all existing forested areas should be designated as permanent open space, and eventually transferred to Parks and Recreation Department ownership. Figure 4.2-1 illustrates the location and acreages of forested parcels of the site.

There is a forested area to the south and west of the building being retained for use by the Department of Veterans Affairs (shown as E on Figure 4.2-1). The LRA is interested in any and all of this land that is not needed by the VA for its planned functions in this building.

The forested area at the south end of the site is located between Texas Way West and the Fort Lawton Cemetery. The property boundary between the site and the cemetery is not definitively known, but all parties agree that the southern area of the site should remain as wooded habitat and stay in public ownership whether the owner is the City or the federal government.

Figure 4.2-1: Forested Areas



### 4.3 ISSUE OPTIONS

At the community workshop on May 31, 2008, the planning team asked the community for input on a variety of issue options for the Redevelopment Plan for Fort Lawton. These included access from the south end of the site, internal circulation, the treatment of 36th Avenue West, park and open space concepts, and the location of the senior housing building on the site. These issue options and a synopsis of community feedback are described below.

#### ACCESS FROM THE SOUTH

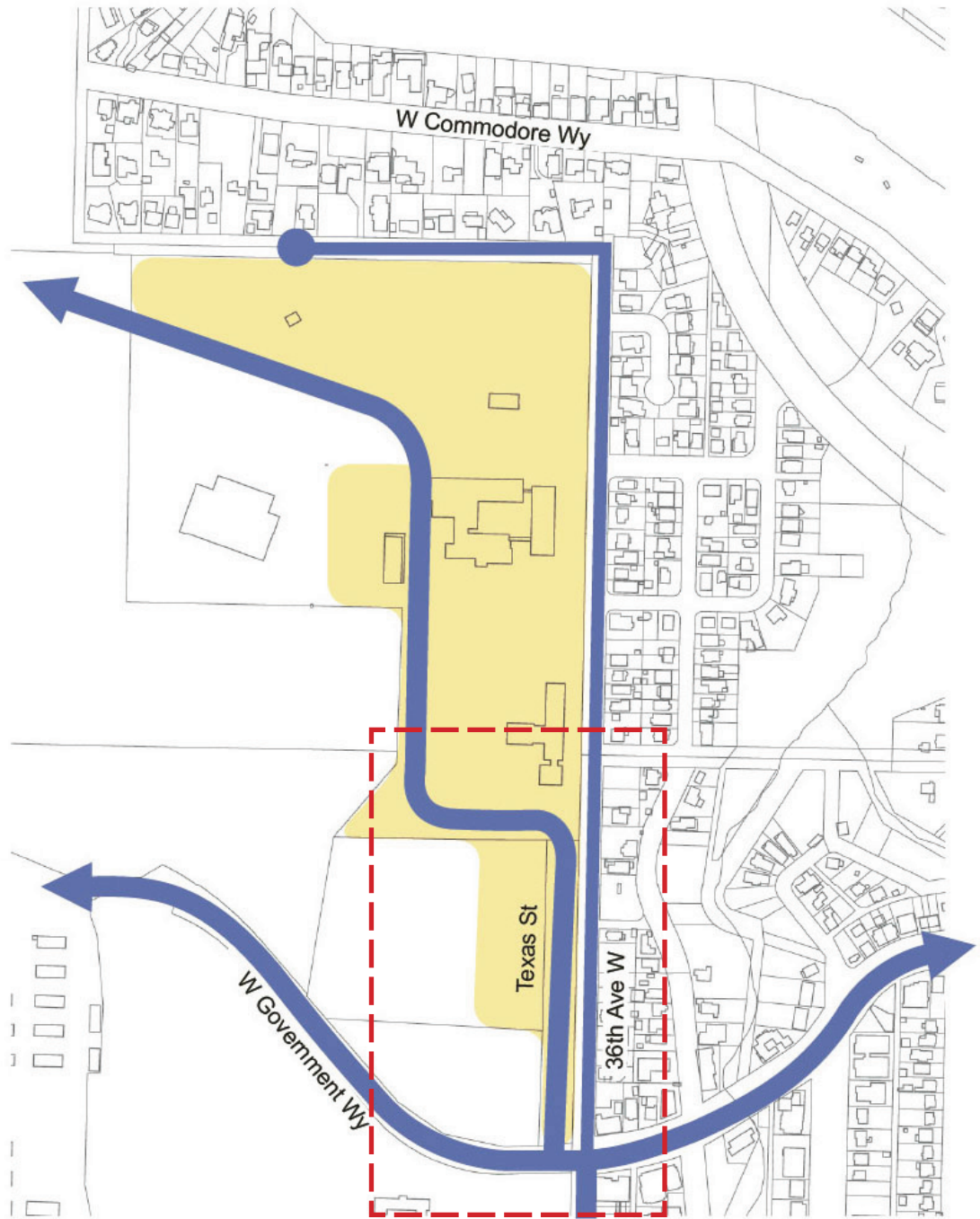
Fort Lawton's location at the north end of Magnolia at the top of the bluff and adjacent to Discovery Park limits the number of access routes to the site and surrounding neighborhood. Access is available from the north via 40th Avenue West and West Commodore Way, but this is not the most direct route to most Seattle locations. As such, the area is primarily accessed from the south, via West Government Way (from the east) or 36th Avenue West (from the south). Currently, Fort Lawton's southern entrance is Texas Way West, while the only entrance to the Kiwanis Ravine neighborhood is on 36th Avenue West. These roads run parallel to each other, separated only by approximately 30 feet.

This configuration creates two challenges. First, it creates an awkward five-way intersection at West Government Way. Second, the amount of pavement at the intersection of the forested Kiwanis Ravine and the forested area adjacent to the Fort Lawton Cemetery and Discovery Park creates an impediment for wildlife movement. Additionally, in the March and April 2008 community workshops, neighbors expressed concern about the existing and potential future increased speed of vehicles traveling on 36th Avenue West.

To respond to these concerns, the consultant team explored possibilities and presented three options at the community meeting on May 31, 2008. These included keeping both streets in use as they are now, closing Texas Way West and using 36th Avenue West as the sole access route, and making Texas Way West the primary access while making the southern end of 36th Avenue West just a driveway for homes located in that area. These concepts are illustrated in the following diagrams, along with advantages and disadvantages of each option.

After lively discussion, participants at the May 31 community meeting overwhelmingly expressed a preference for the third option (Texas Way West as the primary access).

Existing Site Access: see graphics on following page





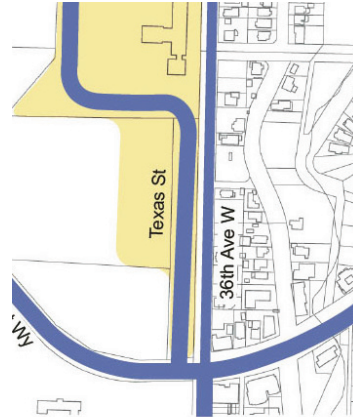
### TEXAS WAY AND 36TH AVE WEST (EXISTING CONDITION)

#### PROS

- Familiar access to site
- Reduces potential traffic volume along 36th Avenue West
- Minimizes site disturbance

#### CONS

- Cumbersome intersections at West Government Way
- Continues to fragment wildlife habitats
- Duplication of roadways



### 36TH AVENUE ONLY

#### PROS

- Improves 36th Avenue West/West Government Way intersection
- Adds buffer to habitat west of Texas Way West
- Reduces pavement area
- Reduces stormwater runoff

#### CONS

- Increases traffic volumes on 36th Avenue West



### TEXAS WAY WITH 36TH AVENUE DRIVEWAYS

#### PROS

- Familiar access to site
- Restores habitat connections from Kiwanis Ravine to Discovery Park
- Reduces traffic volumes on southern segment of 36th Avenue West
- Reduces pavement area
- Reduces stormwater runoff

#### CONS

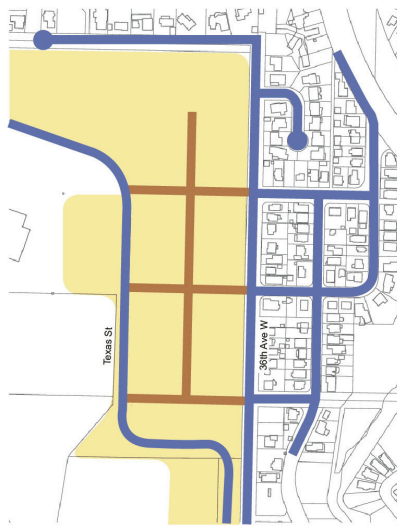
- Potential safety impacts associated with driveways off of Texas Way West



## INTERNAL CIRCULATION

At the March and April 2008 community workshops, a majority of participants expressed concern about increased traffic with the new development at Fort Lawton, as well as encroachment into their established neighborhood by people and activities new to the neighborhood. Many also expressed strong fondness for the landscaped buffer that lines much of the west edge of 36th Avenue West, as well as concern that new streets connecting to 36th Avenue West would damage this buffer and cause loss of trees.

To explore this issue, the consultant team presented four options at the May 31, 2008, community workshop, including extending the existing street grid to



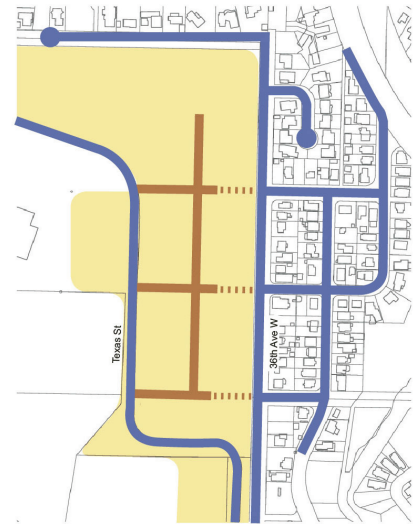
### CONNECTED NEIGHBORHOOD

#### PROS

- Improves pedestrian and vehicular flow throughout neighborhood and site
- Integrates the neighborhood
- Provides opportunities for street improvements for the existing neighborhood
- Provides existing neighborhood with an additional exit to the north

#### CONS

- May increase traffic and pedestrian flow in existing neighborhood



### PEDESTRIAN CONNECTIONS ONLY

#### PROS

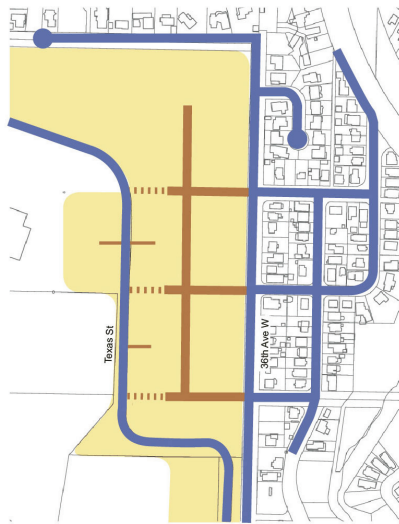
- Increases pedestrian connectivity
- Reduces traffic flow through existing neighborhood

#### CONS

- Reduces overall neighborhood connectivity
- Benefits of improvements would occur only on Fort Lawton site
- May result in traffic bottlenecks at primary access points

connect with the new development; limiting connections to pedestrian access only; connecting streets to 36th Avenue West; but allowing only pedestrian connections to Texas Way West; and creating separate cul-de-sacs at each of the terraced levels of the site.

Some participants at the May 31 community workshop supported each of these options, but a large majority favored the second option, with only pedestrian connections between the existing and new neighborhoods.



### PEDESTRIAN CONNECTIONS TO VA

#### PROS

- Separates residential and FLARC uses
- Improves pedestrian and vehicular flow
- Integrates the residential neighborhood
- Provides opportunities for street improvements for the existing neighborhood

#### CONS

- May increase traffic and pedestrian flow in existing neighborhood



### SEPARATE NEIGHBORHOODS

#### PROS

- Reduces traffic flow through existing neighborhood

#### CONS

- Reduces overall neighborhood connectivity
- Benefits of improvements would occur only on Fort Lawton site
- No new connections to Discovery Park for existing residents
- May result in traffic bottlenecks at primary access points

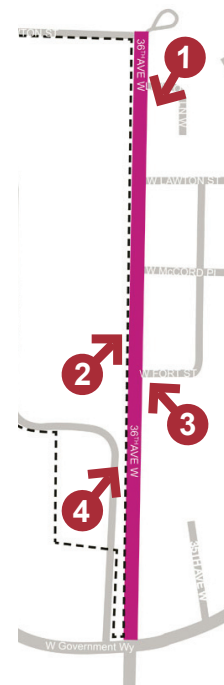
### 36TH AVENUE WEST TREATMENT

Another important issue for the adjacent neighbors is the treatment of the west side of 36th Avenue West, especially with regard to the landscaped buffer that many neighbors helped to create. The existing conditions are illustrated below.

As described in Chapter 3, the existing landscaped buffer provides excellent screening between the Kiwanis Ravine neighborhood and the Army Reserve base. As a long-term proposition, however, the buffer has a number of limitations. The fast-growing Douglas-firs are too densely planted for long-term health. There is little species variety. In short, for long-term heron habitat enhancement, this buffer should be thinned and diversified.

The consultant team presented three options for this street front: (1) retaining and expanding the buffer while removing the Fort Lawton driveways; (2) extending the berm with a sidewalk and bioswale in a “green street” concept; and (3) modifying this street edge into more of a traditional neighborhood street with coniferous trees, ground plantings, and a sidewalk. These are illustrated and described below.

Discussion on this program element evolved over the course of the public workshops; most workshop participants expressed interest in the green street concept.



### RETAINING AND EXPANDING EVERGREEN BUFFER

- 36th Avenue West with completed berm / buffer
- Backyards of new homes face berm / buffer on 36th Avenue West



### GREEN STREET

- 36th Avenue West narrowed
- Extended berm and bioswale with pedestrian and bike trail
- Backyards of new homes face berm / buffer on 36th Avenue West



### TRADITIONAL NEIGHBORHOOD STREET

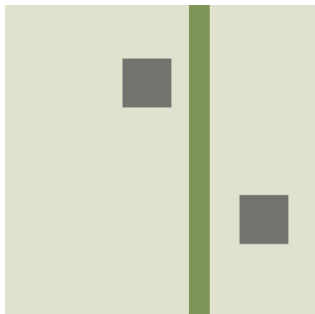
- 36th Avenue West improvements
- Traditional street with sidewalks and consistent street trees
- New homes face 36th Avenue West



## PARK AND OPEN SPACE CONCEPTS

The consultant team discussed various approaches to park and open space elements of the redevelopment, illustrated below.

### Visual Buffer



Size: varies

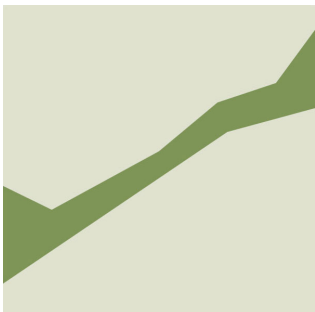
Users: Adjacent residents

Use opportunities:

- Privacy buffer
- Habitat



### Greenway



Size: 1+ acre

Users: All residents

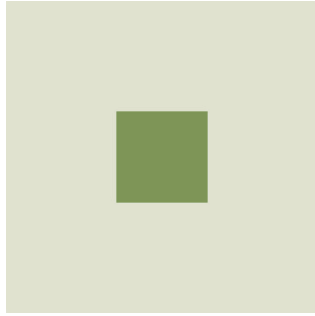
Use opportunities:

- Habitat corridor
- Pedestrian trail
- Bike trail
- Interpretive displays
- Discovery park connections



Workshop participants were quite mixed in their evaluation of these concepts, but slightly favored central/neighborhood parks and visual buffers. Preferred uses included public viewpoints, P-patches, and wildlife habitat.

### Central / Neighborhood



Size: Central Green = 1 acre  
Neighborhood Park = 0.5 acre

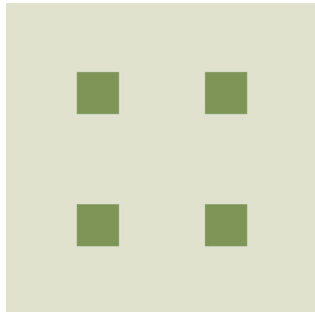
Users: All residents

Multiple uses:

- Informal play field for younger children
- Playground equipment
- Picnic areas
- Small P-patch



### Dispersed Parks



Size: 1,000 – 8,000 sq. ft.

Users: All residents

Individual site opportunities:

- Tot lot
- P-patch
- Passive natural open space
- Interpretive site
- Viewpoint park



### SENIOR HOUSING BUILDING SITE

Workshop participants also discussed options, illustrated at right, for the location of the AHA senior housing building. Options included:

- A** Reusing Harvey Hall as senior housing
- B** Locating a new senior building in the existing Harvey Hall parking lot
- C** Locating a new building in the area west of Texas Way West, adjacent to the current FLARC (Future VA building)

Participants were split between whether to reuse Harvey Hall (A) for this use or to locate a new building in the west parcel of the site adjacent to the future VA building (C).



**A Reuse Harvey Hall**



**B Harvey Hall Parking Lot**



**C West Parcel by VA**



## 4.4 SITE PLAN DEVELOPMENT

Once community-expressed goals and the planning team guiding principles were identified, background and site information was analyzed, and issues and options were explored and discussed with the community, the process turned to site plan development. Alternating between community workshops and planning team work sessions, the proposed site plan was developed in a series of stages. Each new stage of development incorporated input from a range of stakeholders including the community, City staff and officials, and homeless housing providers. Proposals at each stage were checked against goals initially established for the redevelopment. The community was engaged through three community meetings that addressed the alternatives and proposed Redevelopment Plan.

## REDEVELOPMENT PLAN ALTERNATIVES

Having separately studied circulation, open space, reuse of existing buildings, neighborhood interface, and street layout, these elements were combined into three Redevelopment Plan alternatives that explored various combinations of these elements. The matrix below illustrates how the various components were intermixed.

At this point in the process, the City of Seattle and the SHA had narrowed the housing mix options to between 180 and 220 total units, including 66-100 units of permanent housing for the homeless, 20-40 units of self-help homeownership housing, and 100-120 market-rate units.

	<b>Alternative 1</b> “East-west”	<b>Alternative 2</b> “North-south”	<b>Alternative 3</b> “Hybrid”
<b>Senior Housing</b>	On West Parcel	In Harvey Hall	On West Parcel
<b>Family Housing</b>	Scattered	West Parcel	Scattered
<b>Harvey Hall</b>	Remove	Reuse	Remove
<b>Leisy Hall</b>	Reuse	Remove	Remove
<b>Total Units</b>	200	180	220
<b>South Access</b>	Via Texas Way	Via Texas Way and 36th	Via Texas Way
<b>Grid</b>	East-west	North-south	Hybrid
<b>North End</b>	East-west grid	North-south grid	East-west streets North-south swale and pedestrian
<b>Parks</b>	One Medium	One Smaller	Viewpoint Park
<b>Greenway</b>	Small East-west	North-south	Viewpoint Park
<b>Stormwater</b>	Vault	Pond	System
<b>VA Property</b>	No	No	Market-rate homes on Texas Way

Table 4.4-1: Description of the Redevelopment Plan Alternatives

The following figures illustrate the three initial alternatives. The alternatives were reviewed with stakeholders and the community, with the goal of combining the most successful aspects of each of the three alternatives into a single Draft Concept Plan. In addition to testing combinations of elements previously discussed, the three alternatives explore impacts of street layout on site connectivity, potential locations for open space, preservation of views, site grading requirements, and adaptability for desired housing mix.

### ALTERNATIVE 1 – EAST-WEST

#### Key Elements

- East-west grid structures the plan
- Texas Way West serves as the main access route
- Leisy Hall is reused
- A dispersed park system is created
- The south end of 36th Avenue West is limited to local access

#### Strengths

- Good connections to the adjoining neighborhood
- Convenient access to parks from all residences
- Pedestrian and vehicular connectivity is balanced
- Reuse of Leisy Hall provides a link to the past and reuses materials
- Improved wildlife connection between Discovery Park and Kiwanis Ravine

#### Weaknesses

- North-south traffic is concentrated on Texas Way West
- No clear neighborhood center is created
- Smaller blocks limit development flexibility
- Reuse of Leisy Hall puts a large building at the site's center

Figure 4.4-1: Alternative 1



**ALTERNATIVE 1**  
Site Plan Alternatives June 21, 2008



## **ALTERNATIVE 2 – NORTH-SOUTH**

### **Key Elements**

- A north-south grid structures the site plan
- Texas Way West and 36th Avenue West both remain as through-streets
- Harvey Hall is reused for senior studios
- Open space consists of two neighborhood parks and a green spine

### **Strengths**

- Clear central spine for open space & circulation
- North-south circulation distributed between Texas Way West and a new north-south street
- East-west circulation filtered by offset streets
- A highly flexible block layout is created
- Reuse of Harvey Hall provides historical references and reuse of materials
- Extension of existing street pattern
- Parks provide locations for stormwater ponds

### **Weaknesses**

- Longer blocks reduce the number of pedestrian connections
- The share of traffic on 36th Avenue West is greater
- More grading would be required to blend existing terraces

Figure 4.4-2: Alternative 2



**ALTERNATIVE 2**  
 Site Plan Alternatives June 21, 2008



### **ALTERNATIVE 3 - HYBRID**

#### **Key Elements**

- A hybrid grid based on topography structures the site plan
- Access to 36th Avenue West is limited
- A central neighborhood park is located to provide water views to the north.

#### **Strengths**

- The central park provides a clear heart for the community
- Strong connections between the neighborhood and Discovery Park
- An overlook park provides shared access to views
- Grading is minimized
- Best potential to maintain existing internal trees
- Improved wildlife connection between Discovery Park and Kiwanis Ravine

#### **Weaknesses**

- The major park is internal to the redevelopment and distant from the neighborhood
- Limited space is available for locating a stormwater pond

Figure 4.4-3: Alternative 3



**ALTERNATIVE 3**  
Site Plan Alternatives June 21, 2008



## TRANSPORTATION CONTEXT

Several guiding principles related to site circulation and transportation were employed by the design team in the development of three site layout alternatives. The following section provides a brief comparative analysis of how the three alternatives meet the following principles.

*Create pedestrian friendly and safe streets.* Site Alternative 2 creates four-point intersections at 36th Avenue West, organizing the street grid in a traditional pattern well understood by motorists. This, combined with added sidewalks on the west side of 36th Avenue West, would help to eliminate the “blank wall” conditions that exist today and encourage drivers to speed, as speed is a significant factor in fatality accidents. All of the options make use of alleyways, contributing to pedestrian safety by eliminating driveway crossings on street sidewalks.

*Minimize negative traffic impact (from new homes or VA) on existing neighborhood streets.* All site alternatives encourage traffic accessing the VA and the Fort Lawton redevelopment site onto Texas Way West. Only Alternative 2, which maintains the current configuration of parallel Texas Way West and 36th Avenue West, would be likely to draw significant additional traffic through the neighborhood to the east.

Alternative 3 provides the best internal site access, via a continuous north-south street designed for low-speed traffic, pedestrians, and bicycles. Internal circulation could be further strengthened by making east-west streets continuous between 36th Avenue West and Texas Way West. By contrast, Alternatives 1 and 2 provide much more limited connectivity to the north portion of the site, separating those homes from other parts of the development and forcing even local circulation trips to use Texas Way West and 36th Avenue West collector streets.

*Improve Government Way entry to Discovery Park.* The current five-point configuration of West Government Way, Texas Way West, and 36th Avenue West creates an inefficient intersection. While current low volumes minimize safety or traffic issues related to the design, future growth in traffic could increase conflicts, most likely caused by simultaneous turn movements from Texas Way West and 36th Avenue West. The proposed site alternatives use two treatments of Texas Way West and 36th Avenue West.

Alternatives 1 and 3: North-south traffic accessing the site would be concentrated on Texas Way West; access to 36th Avenue West would be provided at a new intersection at the sharp bend in Texas Way West.

Alternative 2: Texas Way West and 36th Avenue West would be maintained in their current configuration in this alternative.

From a traffic operations perspective, the consolidation of all north-south traffic onto Texas Way West would be optimal. This would also minimize traffic impacts on existing homes located to the east of 36th Avenue West.



*Improve public transit service.* The projected increases in residential units and employee and visitor activity at the VA facility are not likely to merit additional service based solely on King County Metro service expansion standards. However, the overall site plan and uses may merit further investment in transit service frequency during off-peak times and extension of service hours. In addition, the City is in conversation with King County Metro regarding increasing transit service to the site.

*Increase connections to local and pedestrian trails.* All site designs would improve access for neighborhoods east of the site to Discovery Park. No new off-site trail connections are proposed; however, the addition of east-west streets and greenways included at some level in all alternatives would provide pedestrians safe and comfortable access to trails from Texas Way West. Improved sidewalks on Texas Way West south of the site should be a priority as well, providing better pedestrian access to trailheads in the vicinity of Texas Way West and West Government Way.

**Traffic Generation**

The three site alternatives have varying mixes of planned housing. Adjusted estimates from the Institute of Transportation Engineers Trip Generation Manual were used to estimate the net change in traffic volumes at build out compared to current conditions. The following table shows the net new vehicle trips (all types) that would be generated under each alternative due to housing development, planned use of the Fort Lawton Army Reserve Center, and the removal of existing military housing in Discovery Park (as part of a separate project, the former military Capehart housing site is being transferred to the City and incorporated into Discovery Park). Combined activities would lead to a net increase of 80 to 115 vehicle trips per PM peak hour. This equates to an additional 1.5 to 2 cars per minute passing through the intersection at Texas Way West/36th Avenue West and West Government Way during this period.

Table 4.4-2: Projected Change in Traffic Volume, by Alternative

	Daily Housing Trips	PM Peak Hour Housing Trips	New Daily VA Trips	New PM Peak Hour VA Trips	Capehart Daily Trips	Capehart Peak Hour Trips	Net New PM Peak Hour Trips
<b>Alternative 1 200 units</b>	1,070	110	350	35	-380	-50	<b>95</b>
<b>Alternative 2 180 units</b>	1,000	95	350	35	-380	-50	<b>80</b>
<b>Alternative 3 220 units</b>	1,160	125	350	35	-380	-50	<b>115</b>

Traffic Projections based on trip generation estimates from Institute of Transportation Engineers Trip Generation Manual

## **PUBLIC RESPONSE**

At the community workshop on June 21, 2008, participants voiced a variety of reactions to various elements of these alternatives. Themes included the following:

### **Street Connectivity**

During planning team meetings following the May 31, 2008, workshop, the City clarified its intention to connect the streets of the Fort Lawton site to the surrounding Kiwanis Ravine neighborhood street grid in the name of good urban design. As such, each of the alternatives was shown with streets in the new development connected to 36th Avenue West and the adjoining neighborhood grid.

Many of those who preferred to be separated from the proposed mixed-income site were disappointed with the City's decision on connectivity. Other voices expressed favor for neighborhood integration and the greater social benefit of interconnected streets. Many residents favored multiple pedestrian connections, but more limited vehicular connections.

### **Texas Way West Configuration**

Comments focused on two major topics. First, many expressed interest in using the redevelopment as an opportunity to improve the five-way intersection at Texas Way West/36th Avenue West/West Government Way, both for safety, and to create a more appropriate entrance to Discovery Park. Others were interested in the details of how 36th Avenue West would interface with Texas Way West if 36th Avenue West were closed at the connection with the Kiwanis Ravine. While many favored reconfiguring 36th Avenue West, others felt it could create difficulties for residents living north of the break. Most felt that more detailed analysis was needed to determine the optimal configuration if 36th Avenue West were broken.

### **Housing Mix & Location**

This was the first time in the process that community members saw site plans with individual residential lots identified. Perhaps the strongest reaction in the community meeting was to the overall number of units. Several people said there were simply too many units, and that there should be more open space. Others said that there were too many low-income units. Reaction was generally favorable to the idea of locating the larger senior building in the western portion of the site. A few participants expressed support for the housing concepts shown.

### Street Layout

Generally, participants liked Alternatives 2 and 3 more than Alternative 1 because they interpreted a predominantly north-south circulation system as likely to put less traffic onto 36th Avenue West. But, again, many were still concerned with any vehicular connectivity with 36th Avenue West.

### Open Space

Many participant comments expressed interest in preserving the wooded, natural character of the neighborhood, both for ecological and aesthetic reasons. Participants were strongly in favor of maintaining the existing forested areas. Residents favored transfer of these areas to Seattle Parks and Recreation Department to ensure that they are retained as open space. Others suggested that landscaping on the site should focus on native plantings. Trail connections to Discovery Park were favored, but others wanted to maintain controlled access to the park.

Participants generally liked the option of locating the major park to capture northerly views. Others advocated placing parks so they could better be shared with the existing neighborhood. Participants were divided in their support of a naturalized stormwater pond.

## 4.5 DRAFT CONCEPT PLAN

The next step in the planning process was the preparation of a Draft Concept Plan based on an iterative process that considered the City vision, community-expressed goals, guiding principles, the best features of previous issue and site plan alternatives, community feedback, updated background information, and official decision-making (Figure 4.5-1). The Draft Concept Plan that was presented to the community on July 12 was primarily a synthesis of Alternatives 2 and 3 that were presented at the previous workshop. Key issues discussed on July 12 are presented here, as well as modifications to the plan. The proposed Redevelopment Plan is presented in Chapter 5.

### HOUSING MIX

Working with the City’s goals for homeless housing and increasingly detailed market analysis, the planning team refined the housing program to a fairly narrow range, as shown below. The two scenarios shown here represent a range of 199 to 216 total housing units as potential build-out under the Draft Concept Plan. Both show six self-help homeownership units and 85 homeless units. The difference in total units is the mix of townhomes versus single-family homes in the market-rate housing. The “single-family emphasis” scenario shows 79 single-family houses and 29 townhomes, for a total of 108 market-rate units. The “townhouse-emphasis” scenario shows 66 single-family houses and 59 townhomes, for a total of 125 market-rate units.

Table 4.5-1: Housing Mix Scenarios Under the Draft Concept Plan

Unit Type	Single-Family Focus	Townhouse Focus
Large Single Family	14	6
Mid-sized Single Family	15	10
Small Single Family	50	50
Large Townhomes	17	42
Smaller Townhomes	12	17
Total Market-Rate Units	108	125
Total Self-Help Townhomes	6	6
AHA Townhomes	30	30
AHA Senior Studios	55	55
Total Homeless Units	85	85
Total Units	199	216

Figure 4.5-1: Draft Concept Plan (under the Townhouse-Focus Scenario)



**Draft Concept Plan**  
July 11, 2008



## CIRCULATION

Key circulation issues include site access, internal circulation, and street connections to the existing neighborhood.

*Site Access* from the south is via Texas Way West. A new intersection is created at the curve of Texas Way West, with a new section of roadway sloping down to 36th Avenue West.

*Internal Circulation.* A north-south street grid organizes the site, continuing the pattern of the existing residential neighborhood to the east. A central north-south street unifies the new neighborhood, and allows for dispersal of local north-south traffic.

*36th Avenue West Connections.* East-west streets in the proposed grid connect to the existing neighborhood streets at three points – Lawton Lane West, West Lawton Street, and West McCord Place. The new sections of West Lawton Street and West McCord Place are offset at the new 37th Avenue West to discourage cut-through traffic.

## OPEN SPACE

Open space includes forested habitat areas and internal parks and greenways. Forested areas of the site have been reserved for habitat preservation and restricted from housing development.

### Internal Parks and Greenways

The Draft Concept Plan includes a north-south greenway along the new 37th Avenue West and a central neighborhood park situated along West McCord Street, between 36th Avenue West and the new 37th Avenue West. An additional park is situated along the curve of Texas Way West, providing a public viewpoint, and a potential location for a naturalized stormwater pond.

### Existing and New Trees

Street networks and building locations were laid out to protect existing trees as much as possible. A small pocket park is proposed along the new 37th Avenue West just south of the new central neighborhood park, which will preserve the oak tree adjacent to Harvey Hall. An appropriate mixture of native species for new street trees is planned for all of the new streets, producing a significant net gain in trees on the site.



Harvey Hall Oak

## REUSE OF EXISTING BUILDINGS

Most structures on the Fort Lawton redevelopment site were built for storage or vehicle repair purposes. Two structures containing administrative and training facilities were considered for possible reuse as part of the Draft Concept Plan. Evaluation of the existing structures is provided in Chapter 2 and in the Appendix D of this plan. Reuse potential of the two structures is described below.

### Harvey Hall

Harvey Hall is located at the southeast corner of the site, adjacent to the existing residential neighborhood. Because of its narrow floorplate, it was not considered viable for market-rate flat or townhome development, although this brick and concrete structure was initially considered viable for reuse as AHA senior housing. However, after careful study, it was determined that Harvey Hall would not be appropriate for use as homeless housing. Extensive modifications would be required to make the building viable for any residential use. The addition of windows, modification of floorplans, and creation of appropriate service spaces would all be necessary. Creating individual units with attached bathrooms would entail costly modifications to a building designed for office uses. In addition, the proximity of the structure to existing single-family homes does not allow for the transition in scale and use intensity encouraged by the Seattle Land Use Code. As a result, reuse of Harvey Hall was not compatible with overall site plan goals.



Harvey Hall

### Leisy Hall

Located at the center of the Fort Lawton site, this precast concrete structure has commanding northerly water views. Because of its views, unique architectural character, and reasonable floorplate, planners considered reuse of Leisy Hall for market-rate townhomes.

Several factors led to the decision not to pursue reuse of this structure. Leisy Hall spans much of Fort Lawton from east to west, dividing the site into separate north and south sections. This ran contrary to the goal of creating a single, integrated neighborhood. Additionally, further architectural analysis indicated that the 15-foot structural module would only allow for narrow two-bedroom units, whose expected market value could not justify the high cost of repurposing and completing a seismic upgrade of the building. Finally, market-rate housing in Leisy Hall would require a sizeable surface parking lot in the middle of the site.



Leisy Hall

### NEIGHBORHOOD INTERFACE

The Draft Concept Plan proposes to front single-family houses along 36th Avenue West, but allows vehicular access and garages along a rear alley. Much of the tree canopy could be retained, perforated periodically by paired walkways serving the new houses. This approach strikes a balance between creating a friendly two-sided residential street, and existing neighbors' desire to preserve trees for their character, screening effect, and potential habitat value.

The planning team also presented a detailed photographic analysis of the landscaped buffer at each of the proposed intersections with new streets, discussing the potential removal or relocation of specific trees, and various means of mitigating these actions, as well as the potential wildlife habitat and vegetation improvements that might be made. These are summarized in the following graphics and lists.



## Existing 36th Avenue West Landscaped Buffer

### Assets

- Strong visual buffer between neighborhood & military uses
- Maturing trees
- Potential wildlife corridor

### Liabilities

- Limited visibility
- Potential hiding place
- Too densely planted (needs thinning)
- Limits connection to new neighborhood

### Challenges

- Buffer created as screen for military vehicle storage
- Dense planting stunts growth as trees mature
- Limited visibility – possible safety issue
- Dominated by younger Douglas-firs – limited tree mix
- No pedestrian amenities



Existing 36th Avenue West Edge

## Proposed 36th Avenue West Buffer Modifications

### Wildlife Habitat Modifications

- Thin to improve structure as existing trees mature
- Plant additional tree species for structural variety
- Plant native shrub layer for forage
- Add wet meadow species in swale

### Human Habitat Modifications

- Add sidewalk
- Add swale to manage stormwater and separate sidewalk from street
- Thin lower limbs to improve visibility
- Face houses toward the street to enhance neighborhood character



Proposed 36th Avenue West Modifications

## HOUSING DISTRIBUTION

The Draft Concept Plan that was presented at the July 12 community workshop shows a total of 216 new housing units on the Fort Lawton site. Of these, 85 are housing for families and individuals who are homeless, six are Habitat for Humanity self-help homeownership units, and 125 are market-rate homes. As noted earlier, the range of market rate units may vary between 108 to 125 units depending on conditions at the time of development. As drawn, the Draft Concept Plan illustrates how the higher number of units may be accommodated on the site. The mix of housing types in this plan is as follows:

6	Large Single Family
10	Mid-sized Single Family
50	Small Single Family
42	Large Townhomes
<u>17</u>	<u>Smaller Townhomes</u>
<b>125</b>	<b>Market-Rate Units</b>
30	AHA Townhomes
<u>55</u>	<u>Senior Studios</u>
<b>85</b>	<b>Homeless Units</b>
<u>6</u>	<u>Habitat Townhomes (Self-Help)</u>
<b>216</b>	<b>Total Units</b>

These numbers are not intended to indicate a final unit mix but reflect the current mix as indicated by market analysis and project feasibility. The ultimate market rate housing mix will be determined by the market.

In the Draft Concept Plan, the market rate units are scattered throughout the site, with larger single-family homes facing 36th Avenue West, all served by rear alleys. In general, larger units are located on 36th Avenue West and toward the north end, where there are the best views. Market-rate duplex townhomes are interspersed with single-family homes and AHA family duplexes throughout the remainder of the site. Some smaller townhomes are located adjacent to the AHA senior housing building on the parcel west of Texas Way West.

As mentioned above, the AHA building for homeless seniors is on the parcel west of Texas Way West near the VA building. The AHA/YWCA family townhomes are interspersed with the market rate townhomes in groups of four to seven duplexes.

## 4.6 COMMUNITY FEEDBACK

Participants in the July 12 community workshop were clearly pleased with many elements of the Draft Concept Plan. Even most of those with serious concerns expressed praise for the detailed nature of the analysis and design. The key issues of debate were consistent with previous meetings, although more refined and to some extent more resolved.

### HOUSING MIX

Quite a few neighbors noted their discomfort with the number of housing units and/or the number of homeless units. At the same time, some other stakeholders said they liked what they saw in terms of total units and the mix.

One new theme came up relating to the quality of design and construction of the new homes. Enthusiasm was expressed for design review and close monitoring by the master developer (SHA).

### STREET CONNECTIVITY

Many of the neighbors present expressed their desire to not connect the streets in the new development to 36th Avenue West. In a spirited discussion, some participants strongly supported the proposed connections, while others strongly opposed them. The consultant team and City staff made it clear that the final plan would show connected streets. At one point, a participant asked if it would be possible to make one less connection. The planning team suggested that perhaps West Lawton Place did not need to connect. This idea was strongly supported by those in attendance.

Many people expressed appreciation for the offsets in the east-west streets at the new 37th Avenue West.

### TRAFFIC

Many of those present had continued concern about traffic on 36th Avenue West. There were wide-ranging opinions about the impacts of overall density, street connectivity, and other factors on traffic on 36th Avenue West. One interesting thread in the conversation was that several of those who had earlier strongly supported the closure of the south end of 36th Avenue West expressed doubt about that earlier idea.

### WILDLIFE HABITAT

Participants continued to be passionately concerned about wildlife habitat, especially for the great blue herons. In this meeting, it seemed that participants were reassured that the plan they were looking at responded to these concerns quite well. People expressed pleasure at the preservation of forested areas and interior trees. Most were guarded but fairly accepting of the treatment of the 36th Avenue West landscaped buffer, especially if the West Lawton Street connection were removed.

### **INTERIOR PARKS AND GREENWAYS**

Most participants seemed quite pleased with the interior parks and greenways as proposed. There was discussion about ownership and maintenance of these green spaces, and it was initially clarified that a homeowners association would be responsible. Upon further discussion with stakeholders, it was determined that the central neighborhood park shown in the proposed Redevelopment Plan (see Chapter 5) will be owned and maintained by the Seattle Parks and Recreation Department. The remaining open space will be managed by a homeowners association.

## 4.7 IMPACTS

The planning team evaluated the Redevelopment Plan against the community-expressed goals and guiding principles, with the following results. Checkmarks indicate that the planning team believes the goals and/or principles were achieved. Question marks are described in the following section.

### COMMUNITY-EXPRESSED GOALS

#### Community

- √ Reflect neighborhood **character**
- √ Maintain home **property values** in this community
- ? Keep current **zoning**
- √ Enhance neighborhood **quality and values**
- √ Ensure a **family-safe** environment

#### Housing

- √ Optimize **residential mix**
- √ **Mix incomes** in a natural way
- √ Offer **diverse housing** choices for incomes, ages, and family sizes
- √ **Limit** total development
- √ **Blend** new development with existing neighborhood

#### Circulation

- ? Minimize neighborhood **traffic**
- √ Improve entry to **Discovery Park**
- √ Offer multiple circulation **choices**
- √ Create pedestrian-**friendly and safe** streets
- √ Minimize impact of the **Veterans Affairs** building and traffic

#### Open Space / Environment

- √ Protect existing **forested areas**
- √ Improve **wildlife corridors** between Kiwanis Ravine and Discovery Park
- ? Increase **trails** into Discovery Park
- √ Improve **trees, vegetation, and habitat** across the site
- √ Repair site **topography** and natural **drainage**
- √ Create a **green and environmentally** sensitive community

### GUIDING PRINCIPLES

#### Community

- √ **Blend / integrate** new development with the adjacent neighborhood and Discovery Park
- √ **Enhance neighborhood quality** and values through a master planning approach
- √ Create a **safe** community
- √ Maintain / enhance **property values** with good master planning
- √ **Plan for impacts** on the community (schools, police, traffic, etc.)

### Housing

- ✓ Provide a **diversity of housing options** -- including a mix of market-rate, affordable, self-help, and homeless housing
- ✓ **Blend new housing into the fabric** of the surrounding community; avoid “Urban Village” character
- ✓ **Blend self-help and homeless housing** into community in a natural way
- ✓ **Reuse existing buildings** if feasible
- ✓ Build “**built green**” homes

### Circulation

- ✓ Create **pedestrian-friendly and safe** streets
- ✓ **Minimize negative traffic impacts** (from the new homes or FLARC) on existing neighborhood streets
- ✓ Improve the West Government Way **entry to Discovery Park**
- ✓ Improve **public transit** service
- ✓ Increase connections to **local pedestrian and bike trails** (e.g., Discovery Park)

### Open Space / Environment

- ✓ Create a **green and environmentally sensitive** community, including minimizing carbon footprint
- ✓ Provide **adequate parks and open spaces** for new community residents  
Balance clustered housing with open space
- ✓ Protect existing **specimen trees**, forested areas, and **wildlife habitat** areas
- ✓ **Improve wildlife corridor** connections between Kiwanis Ravine and Discovery Park
- ✓ Repair site **topography and natural drainage**



In short, the planning team believed that the Redevelopment Plan met all the criteria of the guiding principles, and nearly all the community-expressed goals. The three community-expressed goals that remain in question are as follows:

- **Keep current zoning.** While the Redevelopment Plan does not require an overall zone change, it does require use of the City's Planned Residential Development master planning option. It also requires a contract rezone for the parcel housing the AHA senior building.
- **Minimize neighborhood traffic.** The planning team believes that the Redevelopment Plan's network of interconnected streets is the best plan for minimizing traffic. The team acknowledged, however, that many of the neighborhood participants in the process would prefer no road connections between the new development and 36th Avenue West.
- **Increase trails into Discovery Park.** The Redevelopment Plan certainly could make a strong connection to the Discovery Park trail system, and some think it should. Others, however, don't think such a connection is desirable. This question is outside this project's scope of work. The plan works fine with or without trail connections to Discovery Park.

The Draft Concept Plan was further refined based on community input, new information, and official decision making. In general, there were few changes relative to the Draft Concept Plan. The proposed Redevelopment Plan is presented in total in Chapter 5.





# CHAPTER 5

## Fort Lawton Redevelopment Plan

The proposed Fort Lawton Redevelopment Plan was crafted during the spring and summer of 2008, based on the City's and community's vision, the various stakeholders' goals as expressed during the public involvement process, analysis of site and design issues, and economic feasibility. The plan was refined during a highly iterative and interactive process that is described in detail in the previous chapter. A summary of the proposed Redevelopment Plan is presented here.



Aerial View looking West from 36th Avenue West

## 5.1 OVERALL PLAN

The proposed Redevelopment Plan is for a new mixed-income neighborhood that will be laid out on a north-south street grid following the pattern of the adjacent Kiwanis Ravine neighborhood (Figure 5.1-1). Approximately 144 to 161 single-family houses and duplex townhomes, together with a 55-unit apartment building, will be arranged throughout the site. This includes 85 units for homeless families and single seniors, as well as six self-help homeownership units to be developed by Habitat for Humanity.

One goal of the new Fort Lawton neighborhood is to be a model of an environmentally friendly and sustainable community. The current artificially plateaued and mostly paved site will be regraded to slope gently from south to north to blend in with the surrounding neighborhood and natural areas in a more seamless manner. All existing forested areas and most interior trees will be retained and enhanced with the addition of a diverse mixture of new street trees.

The addition of two new parks, two pocket parks, and a new north-south 37th Avenue West greenway with swales and natural landscaping will further enhance the community. Careful treatment of the 36th Avenue West streetscape will blend the new community into the existing neighborhood while enhancing the existing landscaped buffer aesthetically and providing avian habitat.

At this stage, the Redevelopment Plan is conceptual. Site planning provides enough detail to determine its physical and economic feasibility, as well as its alignment with City policy and neighborhood goals. This is not, however, a final design. Site base information has been taken from City of Seattle, King County, and Army records. No new site survey has been conducted. Market conditions will evolve during the time it takes to negotiate a transfer of the property from the federal government. Detailed design and site engineering are required before construction can begin, and the public will have the opportunity to comment during this design development process. City agencies have reviewed drafts of the plan and deemed it feasible, but detailed construction drawings will be subject to review and approval through the City's standard development permitting pathways. Nevertheless, the plan represents the City of Seattle's intent at this time.

Throughout the process, public conversations focused on several critical site plan elements, including circulation, open and green space, and the housing program. These elements are described below.



Texas Way West: Looking North to Viewpoint Park

Figure 5.1-1 Rendered Site Plan



## 5.2 CIRCULATION

Key circulation issues for the new Fort Lawton neighborhood include site access, internal circulation, and street connections to the existing Kiwanis Ravine neighborhood.

### SITE ACCESS

Given Fort Lawton’s location between Discovery Park and Kiwanis Ravine, and at the edge of the bluff above the Lake Washington Ship Canal, access is limited to West Government Way and 36<sup>th</sup> Avenue West to the south and Texas Way West and 40<sup>th</sup> Avenue West to the north.

The Redevelopment Plan makes little change to the north access via Texas Way West, 40<sup>th</sup> Avenue West, and ultimately Commodore Way.

South access to the new Fort Lawton neighborhood will be via Texas Way West. The plan reduces 36<sup>th</sup> Avenue West south of West Fort Street to a local access loop serving only the homes on that block. As such, the redundancies of Texas Way West and 36<sup>th</sup> Avenue West will be eliminated, allowing tree planting, reduction of pavement, and an improved avian habitat linkage between Discovery Park and Kiwanis Ravine.

Texas Way West becomes the primary access road for the existing and new neighborhoods. A new intersection, created at the curve of Texas Way West, slopes down to connect 36<sup>th</sup> Avenue West just south of the existing Harvey Hall (Figure 5.2-1 Area A).

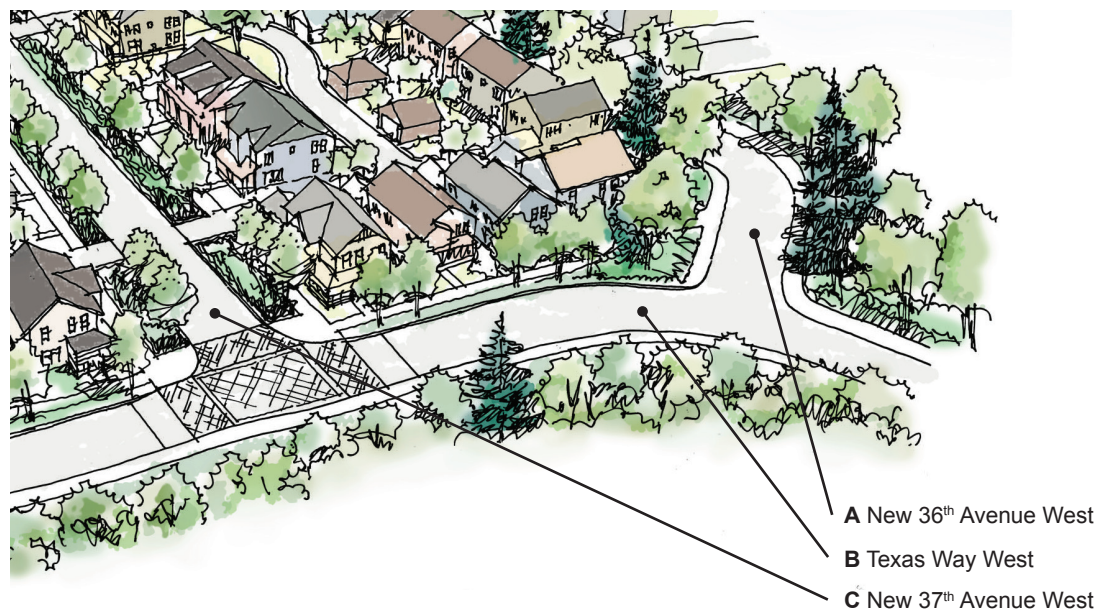


Figure 5.2-1: Proposed Intersections at Texas Way West

### INTERNAL CIRCULATION

The plan maintains strong pedestrian and vehicular connectivity internally and with the adjacent neighborhood, while minimizing cut-through traffic.

A north-south street grid will organize the site, continuing the pattern of the existing Kiwanis Ravine neighborhood. A new central north-south street – 37th Avenue West (Figure 5.2-2 Area B) – will unify the new neighborhood and allow for the dispersal of local north-south traffic. This street contains sufficient right-of-way to allow for enhanced landscaping and the creation of a vegetated swale for stormwater management. This street will act as both street and greenway, creating a public amenity for pedestrians and vehicles, and serving new and existing residents.

### 36TH AVENUE WEST CONNECTIONS

East-west streets will be connected to the existing neighborhood at three points (Figure 5.2-3) – Lawton Lane West (D), West Lawton Street (E), and West McCord Place (F). The new section of West Lawton Street will connect to Texas Way West, offset to the north at the new 37th Avenue West, and will connect to the existing West Lawton Street with a combined street and pedestrian way. The new section of West McCord Place will be offset around the proposed park at the new 37th Avenue West. This will simultaneously discourage cut-through traffic, while also emphasizing the new park as a community centerpiece.

The Redevelopment Plan currently illustrates the portion of West Lawton Street west of the north-south alleys between 36th and 37th avenues as a pedestrian corridor and pocket park (Figure 5.2-3 Area E). This option could help save some significant trees in the 36th Avenue West landscaped buffer. However, final design of this connection will be determined after additional study by the City of Seattle and SHA to determine whether a full vehicular connection is required or if it may remain as a pedestrian connector.

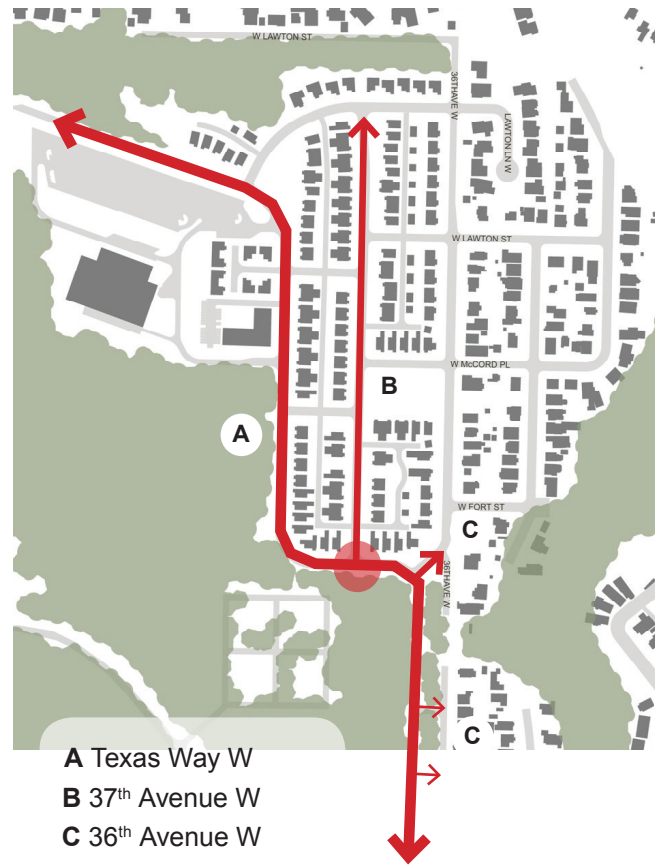


Figure 5.2-2: Circulation Diagram



Figure 5.2-3: Offset East-West Streets

### 5.3 OPEN AND GREEN SPACE

The Redevelopment Plan protects existing forested areas and many existing trees. It also aims to enhance the landscaped buffer along 36th Avenue West as a natural habitat. The plan also proposes the addition of two new parks, two pocket parks, and scores of new street trees to the site.

#### FORESTED HABITAT AREAS

This plan calls for conveyance of major forested areas on the site to the City of Seattle Parks and Recreation Department as a BRAC public benefit conveyance. This includes the acreage of the wooded slope at the site's north end and forested area on the west of Texas Way West at the south end of the site. In addition, the City is requesting conveyance of wooded property to the west and south of the Fort Lawton Army Reserve Center not needed by the Department of Veterans Affairs (Figure 5.3-1 Area A).

In conjunction with the reconfiguration of 36th Avenue West south of West McCord Place, tree plantings and other improvements should be made to the west of 36th Avenue West to improve the avian habitat connection between Kiwanis Ravine and Discovery Park (Figure 5.3-1 Area B).

#### INTERNAL PARKS AND GREENWAYS

The Redevelopment Plan includes a neighborhood park at a location central to both existing and new housing, as well as a greenway that will serve as a central pedestrian spine and corridor for natural stormwater treatment. A north-south greenway will line the length of the east side of the new 37th Avenue West from Texas Way West all the way north to Lawton Lane West. This greenway allows for natural stormwater management and makes the new street a handsome pedestrian promenade with northerly views toward Ballard, Sunset Hill, and the Shilshole Marina (Figure 5.3-1 Area C).

A central neighborhood park of about 25,000 square feet (5/8 acre) will be situated along West McCord Place, between 36th Avenue West and the new 37th Avenue West. This park provides access for new and existing residents. The park will provide for passive recreational use for neighbors of all age groups, as well as a play area for young children. The alignment of this park just south of West McCord Place allows an east-west green connection and view corridor from 36th Avenue West to the edge of Discovery Park (Figure 5.3-1 Area D).

A second park will be situated along the curve of Texas Way West to the north, providing a public viewpoint and a potential location for a naturalized stormwater pond. This park will protect the existing excellent views down Texas Way West all the way to the Ship Canal and Salmon Bay (Figure 5.3-1 Area E).

Figure 5.3-1: Open Space Diagram



## EXISTING AND NEW TREES

The Redevelopment Plan protects a maximum number of existing trees. As shown, a few interior trees will be lost, but these will be offset by the planting of numerous new trees selected to create greater species variety in the area. The plan also proposes modifying the landscaped buffer on 36th Avenue West to enhance its ability to support natural habitat while also improving neighborhood connections. This would include the removal and addition of trees to create greater habitat diversity.

The Redevelopment Plan maximizes the protection of existing trees. For example, small pocket parks will be located around existing trees along 37th Avenue West (Figure 5.3-1 Area C).

An additional pocket park is shown between 36th Avenue West and the new residential alleys at West Lawton Street. This park will offer a pedestrian entrance to the new neighborhood, as well as an excellent location for transplanting trees from the landscaped buffer during thinning and creation of new street intersections at Lawton Lane West and West McCord Place.

## NEIGHBORHOOD INTERFACE

The Fort Lawton site is bordered by forest to the south, west, and north. As such, the key neighborhood interface is on the east edge of the site along 36th Avenue West. The east side of 36th Avenue West is currently single-family housing, except for several multifamily buildings immediately north of West Government Way. The west side is largely an earthen berm, planted with evergreen trees. This wooded berm screens the residential area from the military uses.

The Redevelopment Plan places new single-family houses along 36th Avenue West but allows vehicular access and garages along a rear alley. Much of the tree canopy will be retained, perforated periodically by paired walkways serving the new houses. This approach strikes a balance between creating a friendly, two-sided residential street, and preserving existing trees for their character, screening effect, and potential habitat value.

Existing evergreen trees along the 36th Avenue West buffer are maturing, but too densely



Proposed Plan at 36th Avenue West





Existing Section View at 36th Avenue West



Proposed Buffer Enhancements at 36th Avenue West

New Home      Landscaped Buffer      36th Avenue West      Existing Home

planted for long-term health. They also offer limited visibility and little species variety. As such, some of the younger evergreens should be moved to the locations of existing curb cuts and/or the new pocket park at West Lawton Street. This will allow the paired walkways for new residences along 36th Avenue West, as well as the new intersections at West Lawton Street and West McCord Place, while preserving and enhancing the tree cover as avian habitat. This effort will be further enhanced by planting new trees with varied native species and a native shrub layer for the long-term health of the landscaped buffer area.

This plan also envisions adding a sidewalk and bioswale in the existing 36th Avenue West right-of-way immediately east of the existing landscaped buffer. Some trimming of the lower limbs of existing evergreens and planting a varied native shrub mix will allow human circulation and visibility at the same time it preserves avian habitat and improves forest health.



Existing Landscaped Buffer at 36th Avenue West

## 5.4 HOUSING PROGRAM

This Redevelopment Plan envisions a mixed-income neighborhood including between 108 and 125 market-rate units, 85 units for the homeless and six for Habitat for Humanity (Table 5.4-1 and Figure 5.4-1).

Table 5.4-1: Housing Program

Unit Type	Single-Family Focus	Townhouse Focus
Large Single Family	14	6
Mid-sized Single Family	15	10
Small Single Family	50	50
Large Townhomes	17	42
Smaller Townhomes	12	17
<b>Total Market Rate Units</b>	<b>108</b>	<b>125</b>
<b>Total Self-Help Townhomes</b>	<b>6</b>	<b>6</b>
AHA Townhomes	30	30
AHA Senior Flats	55	55
<b>Total Homeless Units</b>	<b>85</b>	<b>85</b>
<b>Total Units</b>	<b>199</b>	<b>216</b>

## MARKET RATE HOUSING

The proposed unit mix of the Redevelopment Plan focuses on product types in the middle income range, with a few large single-family homes, and no stacked flats proposed. The market-rate mix was identified for site planning purposes and financial feasibility analysis. It is based on 2008 market information. The final mix of units may vary based on market conditions at the time of development. The difference between the two identified scenarios is the emphasis on single-family homes versus duplex townhomes in the market-rate housing. The site plan diagram and rendering illustrate the higher number of total units in the “townhome-focus” scenario.

Market-rate units include detached single-family homes of various sizes as well as townhouse duplexes. All new housing along 36th Avenue West and the north edge of the site will be single-family. Additional single-family lots will be scattered throughout the site, with a heavier concentration to the north. These will be a combination of larger and modestly sized homes on lots of approximately 5,000 square feet, and small-lot single-family houses. The final mix will depend on market conditions at the time of development, but in general larger lots will face 36th Avenue West and view locations to the north, with smaller lots interior to the site and to the south.

Townhouse duplexes are proposed in lieu of larger townhouse buildings because this scale of structure is similar in character to a larger house and better reflects the character of the Magnolia neighborhood. These duplexes, which would contain both large and small townhome units, would be built throughout the new community, except along 36th Avenue West or the northern edge of the site. These duplex townhouses will also be interspersed with the self-help and homeless housing described below.

**SELF-HELP HOUSING**

The Redevelopment Plan includes six Habitat for Humanity self-help home ownership units. These are proposed as a group of three duplexes located amid smaller market-rate single-family houses and duplexes.

**HOMELESS HOUSING**

The Redevelopment Plan includes 30 AHA family homes in townhouse duplexes. These are scattered throughout the site, especially along Texas Way West and the new 37th Avenue West. These are proposed as groups of four to seven duplexes, interspersed with market-rate single-family and duplex units.

The Redevelopment Plan includes 55 senior studio units in a single building located on the parcel that is west of Texas Way West. The building is at the south end of this parcel, allowing residents on one side to have views of Discovery Park, and some of the residents on the other side to have views of Ballard and Salmon Bay. This location also provides easy access for any veteran residents to the services at the VA facility immediately to the west, and presents a nice façade to Texas Way West.

Figure 5.4-1: Housing Distribution Diagram



Legend

- Market-Rate Housing
- Habitat and AHA Townhomes
- AHA Senior Studios

## Chapter 5: Fort Lawton Redevelopment Plan

Existing Fort Lawton Aerial Photo



Proposed Fort Lawton Redevelopment Plan





# CHAPTER 6

## Public Benefit Conveyances

The following sections describe the City of Seattle’s homeless housing and public benefit conveyance requests.

### 6.1 NOTICES OF INTEREST RECEIVED AND SELECTED

In the fall of 2006, the City of Seattle provided notice of the availability of property at Fort Lawton, and received five notices of interest in early 2007, as follows:

- United Indians of All Tribes (Lead Developer) – Included market-rate housing, homeless housing, community space, and open space
- Seattle Housing Authority (Lead Developer) – Included market-rate housing, homeless housing, self-help housing, and open space
- Downtown Emergency Service Center – Included homeless housing only
- Seattle Parks and Recreation Department – Included open space to be incorporated into Discovery Park
- Seattle Veterans Museum – Included space for Seattle Veterans Museum

Advised by a technical advisory group, the mayor approved the following NOI program:

- Seattle Housing Authority – Master developer
- Archdiocesan Housing Authority – Developer and service provider, housing for homeless seniors and families
- YWCA of Seattle-King County-Snohomish County – Service provider, family housing
- United Indians of All Tribes – Referral and service provider for homeless seniors
- Habitat for Humanity Seattle/South King County – Developer of self-help homeownership housing
- Seattle Parks and Recreation Department – Owner and manager of a portion of parks and open space

Further information on this process and Seattle’s homeless housing program is provided in the City’s Homeless Assistance Submission that is submitted to the U.S. Department of Housing and Urban Development along with this Redevelopment Plan, available at [www.seattle.gov/neighborhoods/fortlawton/brac](http://www.seattle.gov/neighborhoods/fortlawton/brac).

## 6.2 SITE PLAN DISCUSSION

As described in previous chapters, the City of Seattle conducted a thorough, interactive, and iterative community engagement and redevelopment planning process during the spring and summer of 2008. The homeless housing and public benefit conveyance requests presented here represent a balance between the City's vision, community goals expressed during this process, homeless housing needs, and specific site considerations.

The Fort Lawton site, identified as surplus by the Army, is approximately 28.81 acres, located between Discovery Park and a neighborhood of largely single-family homes, as well as some apartments. About 25 percent of the site (7.08 acres) is currently forested and proposed to remain so for avian habitat corridors between the great blue heron rookery in Kiwanis Ravine and Discovery Park. Another 4.4 acres are taken up by the Texas Way West corridor, which is currently a federal road and proposed to become a public city street. The remainder of the site – 17.33 acres – is currently developed as military facilities and parking lots.

The City of Seattle proposes that this remaining area be redeveloped as a mixed-income neighborhood that is highly compatible with Discovery Park and the established Kiwanis Ravine neighborhood, and features new parks and greenways, 85 units of homeless housing, six self-help homeownership housing units, and approximately 108-125 units of market-rate housing. The homeless housing is proposed as 55 senior studios in a single building, as well as 30 units of family housing in 15 duplex townhomes. The self-help homeownership housing is proposed as six units in three duplex townhome structures developed by Habitat for Humanity.

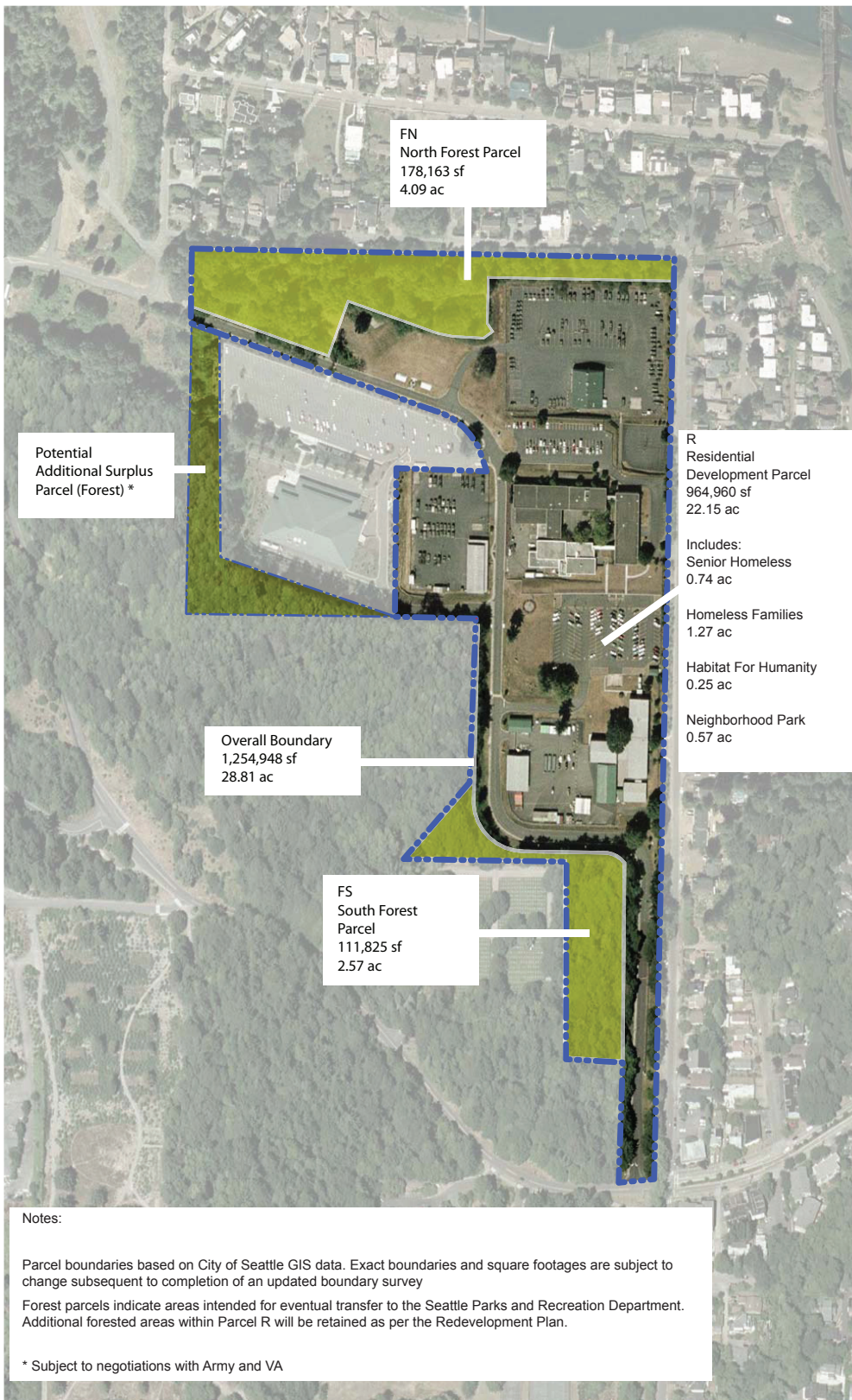
## 6.3 CONVEYANCE REQUESTS

Following the redevelopment program described above, a total of 9.49 acres of the Fort Lawton site will be requested for public benefit conveyance for open space, homeless housing, and self-help homeownership housing. The open space and senior homeless housing conveyances are described on the accompanying diagrams (Figures 6.3-1 and 6.3-2). The homeless family housing and self-help homeownership housing conveyances will be on scattered lots across the remaining site, as described below.

As part of this BRAC redevelopment planning process and public benefit conveyance, the City of Seattle expects to pay the Army fair market value for the remainder of the site as determined through market and pro-forma analysis, as well as subsequent negotiations.



Figure 6.3-1 Parcelization Plan



## **PARKS**

The City of Seattle requests a minimum of 6.66 acres of currently forested areas as public benefit conveyances for parks, open space, and wildlife habitat. This includes 4.09 acres at the north end of the site that is currently mixed coniferous forest and largely steep slopes, as well as 2.57 acres at the south end of the site that is currently evergreen forest adjacent to Texas Way West and the Fort Lawton Cemetery. See the accompanying parcelization map (Figure 6.3-1). These parcels will be conveyed to the City of Seattle Parks and Recreation Department and become part of Discovery Park.

In addition, the City is requesting a conveyance of 25,000 square feet in the central east portion of the site for a neighborhood park. This approximately one-half acre park is an important component to the success of the Fort Lawton Redevelopment Plan and is a key to integrating the redeveloped site with the existing neighborhood.

Finally, the City is requesting conveyance of wooded property to the west and south of the Fort Lawton Army Reserve Center that is not needed by the Department of Veterans Affairs. Depending on the needs of the VA, this area is approximately 2.5 acres (Figure 6.3-1).

## **HOMELESS**

The City of Seattle requests that approximately 2.01 acres of the Fort Lawton site be conveyed to the City of Seattle for development of homeless housing. Of this, 0.74 acres (150 feet X 215 feet) is located at the south end of the parcel west of Texas Way West, as shown on the accompanying parcelization map. This parcel will be used for the senior housing building, as well as accompanying parking, landscaping, and outdoor activity areas (Figure 6.3-2 Area C).

The remaining 1.27 acres will be scattered throughout the developed portion of the site as 30 lots, averaging 1,850 square feet, for family duplex units and yards. These units are expected to be clustered in groups of three to seven duplexes (six to 14 units) that are interspersed with self-help and market-rate duplexes and single-family houses (Figure 6.3-2 Area B).

## **HABITAT FOR HUMANITY SEATTLE/SOUTH KING COUNTY**

Finally, Habitat for Humanity Seattle/South King County requests that 0.25 acres of the Fort Lawton site be conveyed to Habitat for Humanity for six units, averaging 1,850 square feet per unit, of self-help homeownership housing in duplex townhomes. It is anticipated that these three duplexes will be adjacent to each other and to market-rate townhomes at a location to be determined in detailed site planning to come (Figure 6.3-2 Area B).

Figure 6.3-2 Redevelopment Plan Diagram



#### **6.4 PERSONAL PROPERTY NECESSARY TO SUPPORT REDEVELOPMENT**

After reviewing the personal property listing for Fort Lawton, the LRA is requesting the following items to support the homeless uses in this Redevelopment Plan: all commercial grade kitchen equipment, two desks, two desk chairs, six visitor chairs, and two four-drawer legal filing cabinets.

# CHAPTER 7

## Implementation Strategy

### 7.1 FINANCING MODEL

The Redevelopment Plan for Fort Lawton requires a sophisticated financing model to achieve its objective of an environmentally sustainable, mixed-income neighborhood. SHA, as master developer, is familiar with the various financing strategies to develop a project of this size, including acquisition loans, construction debt, and financial management. While final funding sources will be determined in the future as the project progresses, the basic expenses and sources of income for the project are outlined on the following pages.



Redevelopment Plan Rendering Detail

## EXPENSES

The expected expense items for implementation of the Redevelopment Plan include the following:

- development of detailed drawings and plans by an architectural and engineering team;
- submittal for entitlements, including demolition and master use permits;
- replatting of the site to include public rights-of way (ROW) for new streets and individual parcels for parks and housing;
- demolition of the existing buildings and parking lots;
- preparation of site, including grading;
- installation of site infrastructure, including all utilities, a stormwater system, and roads; and
- preparation of final buildable lots for transfer to homeless housing providers and Habitat for Humanity Seattle/South King County or sale to market-rate developers.

## INCOME

The income source for the project will be the sale of single-family and duplex townhome lots to market-rate developers. SHA has used this model successfully at its other large, master planned communities, refining the process through the years. Please see Appendix H for a detailed explanation of the financing model.

## SOURCES OF AVAILABLE FUNDING

The development of both the homeless housing projects by the Archdiocesan Housing Authority and the affordable self-help homeownership townhomes by Habitat for Humanity Seattle/South King County will require financing from both private and public sources. These financing applications will be made in the future upon the approval of the Redevelopment Plan by the City Council. Each organization has a strong track record of securing financing for similar projects.

## HOMELESS HOUSING

The Archdiocesan Housing Authority will develop a total of 85 units of homeless housing at Fort Lawton. This will include 30 units of townhome development (in duplexes) for homeless families, and a 55-unit studio multifamily building for homeless seniors. While the developments differ from one another, it is anticipated that each will utilize the following potential sources:

### Supportive Housing Program (SHP)

The Supportive Housing Program is authorized by the McKinney-Vento Homeless Assistance Act and is designed to develop supportive housing and services that will allow homeless persons to live as independently as possible.

SHP funds can be used in the following ways to provide new permanent housing:

- Acquisition
- Rehabilitation
- New construction
- Leasing
- Supportive services
- Operations
- Administration

### Low Income Housing Tax Credits (LIHTC)

The Low Income Housing Tax Credit is a congressionally created tax credit (Internal Revenue Code Section 42) available to investors in low-income housing. It is designed to encourage investment that helps finance construction and rehabilitation of housing for low-income renters. The LIHTC program offers property owners and investors a credit or reduction in their tax liability every year for 10 years. The equity raised through the sale of these credits represents approximately half the cost of development.

### Section 8 Project-Based Program

The Section 8 Project-based program subsidizes units in Seattle Housing Authority-owned and privately owned properties throughout Seattle. Tenants residing in project-based units pay 30 percent of their income for rent and utilities; the balance of their housing costs is paid by the Section 8 Project-based program. Tenants in project-based units are assisted as long as they live in the unit and continue to qualify for the program.

### Washington State Housing Trust Fund (HTF)

Established in 1987, the Washington State Housing Trust Fund helps communities meet the housing needs of low-income and special needs populations. The HTF provides funds to:

- support the construction, acquisition, and rehabilitation of more than 4,500 units every biennium;
- create rental and homeownership opportunities in every region of the state for people with incomes below 80 percent of median; and
- support special needs housing.

### King County Housing Finance Program (HFP)

Most of King County's funds for affordable housing development and preservation are made available through the King County Housing Finance Program. HFP provides capital funds for acquisition, rehabilitation, site improvements, new construction, and other costs related to housing development. Projects are selected through a competitive application process. The HFP includes funds from King County's local Housing Opportunity Fund

(HOF), the federal HOME program, the County and Small Cities portion of the Community Development Block Grant (CDBG) entitlement, and the Regional Affordable Housing Program (RAHP). Periodically, HFP will also offer other County fund sources targeted for a specific special needs population.

### **City of Seattle Office of Housing (OH)**

The Office of Housing Multifamily Program provides capital and operating funds to support the preservation or development of affordable multifamily rental housing. Application rounds in this competitive funding process are held twice a year, with approximately \$15 million of capital awarded annually. Supportive housing that serves homeless families and individuals is a high priority.

### **SELF-HELP HOMEOWNERSHIP HOUSING**

#### **Habitat for Humanity of Seattle/South King County**

Habitat for Humanity of Seattle/South King County will sponsor the development of six self-help homeownership units at Fort Lawton. These are proposed as a group of three duplexes located amid smaller market-rate single-family houses and duplexes. It is anticipated that homeowners may require down payment assistance to afford their new homes.

#### **Washington State Housing Trust Fund (HTF)**

Housing Trust Funds may be used for the following homeownership activities:

- Down Payment Assistance Loans (on existing homes) - HTF funds may be used for down payment assistance (DPA) loans to assist low-income households to purchase an existing home or condominium. If a homebuyer cannot afford an additional payment, the DPA may be loaned on a zero interest basis secured by a subordinate deed of trust in favor of the sponsor with repayment when affordable or at refinance or sale.
- Self-Help Projects - HTF funds may be used for the purchase of land or infrastructure to benefit self-help homeownership projects.

#### **City of Seattle Office of Housing (OH)**

The Office of Housing Homeownership Program funds may be used for the activities listed below:

- Homeownership Program funds can be used for down payment assistance loans to low-income homebuyers purchasing units in newly constructed or rehabilitated housing projects.
- Homeownership funds can be used to pay development costs for new construction and acquisition/rehabilitation projects, including acquisition, infrastructure and building construction, and development soft costs.



## 7.2 IMPLEMENTATION ACTION PLAN

### CITY PLANS AND ENTITLEMENT

As guided by the City of Seattle's Comprehensive Plan, the zoning, local permitting and approvals, and platting are the City entitlements that will be required on the site prior to undertaking development activities. These entitlements would be initiated by SHA with involvement from the City and, in some instances, DOD.

### POLICY / ZONING CHANGES

The proposed Redevelopment Plan may be implemented under the existing Comprehensive Plan policies and SF-7200 (Single Family) zoning, with the potential exception of the area of the site that would accommodate the AHA senior housing building. These land use decisions would occur as part of a Master Use Permit (MUP) approval and is one of several pieces of the MUP that will be evaluated together and receive combined decisions/recommendations from several City departments and require final approval by the Seattle City Council.

### LOCAL PERMITTING AND APPROVALS

The City of Seattle Department of Planning and Development (DPD) will oversee the MUP process conducted by SHA. The MUP may incorporate the following items:

1) *Council conditional use* for Planned Residential Development (PRD) (SMC 23.44.034) for single-family and townhouse residences meeting L-1 standards.

2) *Contract rezone* (SMC 23.34.004) for the senior housing building. As part of a contract rezone, the following provisions must also be submitted:

- Property Use and Development Agreement (PUDA) (SMC 23.34.004A) for the AHA senior housing building on a separate parcel, which will restrict the use and development standards of the rezoned property to the proposed specific use, as well as any other density or development forms beyond PRD provisions.
- Waiver of Certain Requirements (SMC 23.34.004B) to waive specific bulk and off-street parking and loading requirements (presumably under PRD) as needed.

3) *Subdivision provisions* (SMC 23.22.100) that provide standards for streets, pedestrian and vehicle access, blocks, lots, and utilities. Platting would delineate:

- Contract rezone parcel(s)
- Single-family lots
- Other development units
- New public streets

4) *Administrative conditional use provisions* (SMC 25.09.240) to consider exemptions within environmentally critical areas, although not expected due to the avoidance of critical area impacts in the proposed Redevelopment Plan.

However, it is important to note that the final permitting and approval process will be determined after extensive review by the Seattle Department of Planning and Development.

### ENVIRONMENTAL REVIEW

The National Environmental Policy Act (NEPA) of 1969 directs all federal agencies to conduct environmental reviews for proposed actions, such as the conveyance of the Fort Lawton property to the City of Seattle for park and residential uses. The Army will be responsible for completing the NEPA process. Depending on the Army's approach and schedule, NEPA could be conducted separately or integrated with the Washington State Environmental Policy Act (SEPA). SEPA is the responsibility of the local jurisdiction, in this case, the City of Seattle. SEPA is triggered by certain land use actions, including the request for a rezone or for development permits for projects over a specific size threshold (typically 20 units). SEPA determinations are made at the time of application for rezone or land use permit. Possible scenarios for conducting NEPA/SEPA include:

- *Separate and distinct NEPA/SEPA processes* – This scenario could occur, especially if the Army determines its action is categorically exempt from NEPA. The City would then conduct a separate SEPA process by preparing a SEPA checklist / mitigated determination of non-significance (MDNS) or a determination of significance (DS) / environmental impact statement (EIS).
- *Sequential process* – In this scenario, DOD would prepare an environmental assessment (EA) and finding of no significant impact (FONSI), and the City could adopt a supplemented EA (if necessary) to satisfy SEPA. It is unlikely that an EIS would be required under NEPA.
- *Combined document* – A NEPA EA / SEPA checklist or EIS could be prepared as one integrated document.

These decisions will be made prior to the conveyance of the property and will allow for additional public input and comment on the proposed redevelopment plan.

### OTHER FEDERAL/STATE REGULATIONS AND APPROVALS

Federal sources of funding directed toward the redevelopment of the Fort Lawton site will trigger compliance with the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA). Other regulations may be applicable as more detailed project planning goes forward.

## 7.3 PHASING

The redevelopment of the Fort Lawton site could potentially be completed within 5 to 6 years after the conveyance of the land by DOD. The key activities to be scheduled during that timeline include the following: entitlements and design; demolition of existing buildings and site elements; and construction of the new site infrastructure, housing, and open spaces (Figure 7.3-1).

One unique element of this redevelopment effort is the potential impact of the City of Seattle's DPD Directors Rule 5-2007, which recommends a buffer of 500 feet from the perimeter of the Kiwanis Ravine heron colony. A major condition of that rule requires that any clearing, grading, or outside construction shall be done outside of the nesting season (February 1 through July 31.) However, the buffer only overlaps portions of the northern and southern ends of the site not the middle. The draft phasing plan for the redevelopment considered the impact of this restriction in the overall phasing of the site and assumes that activities can be scheduled around the six-month nesting season.

### Years 1-2: Entitlements and Design

It is anticipated that it will take 18-24 months to secure all of the entitlements and permits identified in the *City Plans and Entitlements* section. However, the goal would be to fast track the completion of the demolition and mass grading plans once the overall master plan is completed and approved. This would enable demolition and grading to proceed in Year 2 while construction documents for the infrastructure and housing are completed and permits secured.

### Year 2: Demolition and Mass Grading

As noted above, demolition of existing buildings and site elements would be completed in Year 2. After demolition, the site would be regraded in preparation for the construction of the infrastructure. These two activities can be completed outside of the heron nesting season.

### Year 3: Site Infrastructure

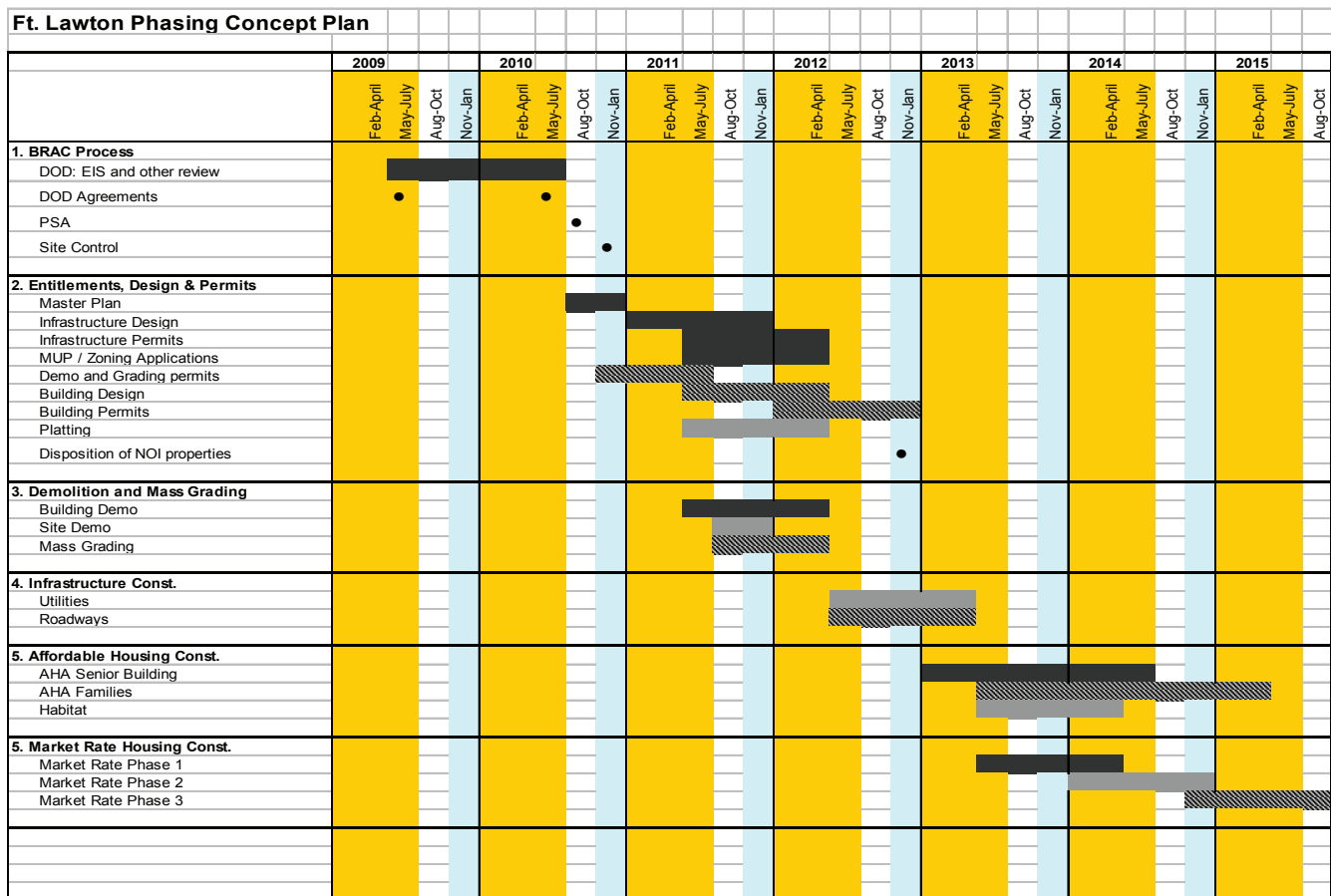
Construction of the redevelopment's infrastructure (streets, utilities, etc.) would be completed in Year 3. By having the site prepared in Year 2, this site work will proceed quickly from north to south, with activities phased based on the heron nesting season. If necessary, work can begin on the center portion of the site, which is not impacted by the Directors Rule, and then focus on the northern and southern portions outside of the nesting season.

### Years 4–6 Housing Construction

Construction of all of the housing units will occur over a period of 2-3 years depending on the overall housing market at the time of development. It is anticipated that construction of the larger AHA senior housing building would begin at the start of Year 4. This site is outside of the heron buffer so, while it

may take 12-18 months to complete, its schedule will be uninterrupted. All of the remaining homes proposed in the plan are smaller and thus have shorter construction timelines – 6-8 months for a single home. Thus, the phasing of the construction of the remaining homes may be carefully coordinated with the heron nesting season. Since the center portion of the site is not impacted by these restrictions, it is anticipated that housing construction may continue in that area year round, while new housing on the northern and southern portions of the site would be coordinated with the seasonal restrictions. It is anticipated that construction on the northern end of the site would precede that on the southern portion. This works well with the site utilities phasing. Since it is anticipated that construction access would be from the southern end of the site, building from north to south will also limit impact on homes once they are completed and occupied.

Figure 7.3-1: Schematic Phasing Diagram



# CHAPTER 8

## References

### Published Documents

AKS P.S. Inc. 2008. Fort Lawton Redevelopment Plan Existing Facilities Assessment. June 13, 2008.

Bush, Roed, and Hitchings, Inc. (BRH). 2008. *Existing Sewer and Water Capacity Investigation* – Fort Lawton, Seattle.

City of Seattle. 2005. DPD Interp. #05-004. Analysis and Decision of the Director of the Department of Planning and Development, Application #2403622. Dept. of Planning and Development. Dated February 14, 2005. Available online at URL = <http://www.seattle.gov/dpd/notices/decisions/2403622.pdf>.

City of Seattle. 2007. City of Seattle Comprehensive Plan Amendments (amended 2007, published 2008); designates the Fort Lawton Army Reserve Center on the Future Land Use Map as Multi-family Residential Area. Available: [http://www.seattle.gov/dpd/Planning/Seattle\\_s\\_Comprehensive\\_Plan/ComprehensivePlan/default.asp](http://www.seattle.gov/dpd/Planning/Seattle_s_Comprehensive_Plan/ComprehensivePlan/default.asp).

City of Seattle. 2008. City of Seattle Municipal Code (SMC Title 23) Land Use Code. Available: <http://clerk.ci.seattle.wa.us/~public/toc/t23.htm>.

City of Seattle. 2008. City of Seattle Municipal Code (SMC 25.09) Regulations for Environmentally Critical Areas. Available: <http://clerk.ci.seattle.wa.us/~public/toc/25-09.htm>.

City of Seattle. 2008. 2007 Consolidated Annual Performance and Evaluation Report (CAPER). Dated March 13, 2008. Available online at URL = [www.seattle.gov/humanservices](http://www.seattle.gov/humanservices).

City of Seattle. 2008. Community Relations Plan = Community Relations Plan, Office of Housing. Dated July 2008. Available online at URL = [www.seattle.gov/neighborhoods/fortlawton/brac/](http://www.seattle.gov/neighborhoods/fortlawton/brac/).

City of Seattle, Department of Planning and Development (DPD). 2007. Director's Rule 5-2007, Great Blue Heron Management Plan. Code Interpretation, Seattle Environmentally Critical Areas Ordinance, SMC 25.09.200.C. February 5, 2007.

Department of Defense (DOD). 2006. Base Redevelopment and Realignment Manual. Office of the Deputy Under Secretary of Defense (Installations and Environment). DoD 4165.66-M. Washington, DC. March 1, 2006.

Gardner-Johnson. 2008. *Fort Lawton Redevelopment. Magnolia Neighborhood City Of Seattle, Washington*. June.

Institute of Transportation Engineers (ITE). 2003. Trip General Manual, 7th Edition. ISBN No: 0-935403-79-5, Item IR-016E. Washington, DC.

King County. 2005. 10-Year Plan to End Homelessness = “A Roof Over Every Bed in King County: Our Community’s Ten-Year Plan to End Homelessness”, Committee to End Homelessness King County. Dated March 2005. Available online at URL = [www.cehkc.org](http://www.cehkc.org).

Nelson\Nygaard Consulting Associates Inc. 2008. *Fort Lawton Transportation and Circulation – Existing Conditions*.

Stratum Group. 2008. *Geology Assessment*. Fort Lawton Army Reserve Center Seattle, Washington. July 2, 2008.

U.S. Army Corps of Engineers (USACE). 2007. *Final Environmental Condition of Property Report*. Fort Lawton U.S. Army Reserve Complex. September.

U.S. Department of Defense (DOD). 1997. *Environmental Assessment for the Relocation and Replacement of Army Reserve Facilities at Fort Lawton*. Atlanta, GA: Army Reserve Command; Seattle, WA: 70th Regional Support Command. March.

U.S. Department of Defense (DOD). n.d. U.S. Army Reserve Integrated Cultural Resources Management Plan. Historic Properties Component. 70th Regional Support Command – Washington. Compiled by Parsons, Inc.

U.S. Department of Housing and Urban Development (HUD). 2006. Guidebook on Military Base Reuse and Homeless Assistance. HUD’s Homeless Assistance Programs. Office of Community Planning and Development, Office of Special Needs Assistance Programs. July 2006.

### Personal Communications

Hauger, Tom. Manager, Comprehensive and Regional Planning. City of Seattle Department of Planning and Development, Seattle, WA. May 8, 2008—meeting with Chris Jowell, City of Seattle Office of Housing, Rob Lloyd of EDAW, and Jan Mulder of EDAW regarding zoning designation, development standards, and land use approvals.

Stave, Marti. Land Use Planner. City of Seattle Department of Planning and Development, Seattle, WA. June 30, 2008—email and phone conversation with Jan Mulder of EDAW regarding DPD Interpretation No. 05-004 issue 4a.

# Appendix A

## City of Seattle Resolution No. 30883







## City of Seattle Legislative Information Service

*Information updated as of July 30, 2008 3:02 PM*

---

### Resolution Number: 30883

---

A RESOLUTION relating to the Fort Lawton Army Reserve Center, authorizing the Mayor or his designee to request the United States Department of Defense to recognize the City of Seattle as a Local Redevelopment Authority (LRA) for the closure of the Fort Lawton Army Reserve Center (Fort Lawton), and authorizing the Mayor or his designee to apply for federal grant funds for the City to perform the duties of an LRA.

**Date introduced/referred:** June 26, 2006

**Date adopted:** June 26, 2006

**Status:** Adopted

**Vote:** 9-0

**Committee:** Full Council for Introduction and Adoption

**Sponsor:** LICATA

**Index Terms:** LAND-ACQUISITION, DISCOVERY-PARK, MAGNOLIA, US-GOVERNMENT, FORT-LAWTON, MILITARY-INSTALLATIONS

### Text

RESOLUTION \_\_\_\_\_

A RESOLUTION relating to the Fort Lawton Army Reserve Center, authorizing the Mayor or his designee to request the United States Department of Defense to recognize the City of Seattle as a Local Redevelopment Authority (LRA) for the closure of the Fort Lawton Army Reserve Center (Fort Lawton), and authorizing the Mayor or his designee to apply for federal grant funds for the City to perform the duties of an LRA.

WHEREAS, through the federal Base Realignment and Closure Act (BRAC) process the Department of Defense has proposed closure of Fort Lawton and the President of the United States, with Congress concurring, has designated Fort Lawton for closure; and

WHEREAS, the Department of Defense, as the administering BRAC agency, has informed the City of the two ways in which the City can provide guidance and input into the Department of Defense disposal decision concerning Fort Lawton: either by the City serving as a Local Redevelopment Authority or by the City consulting with the Department of Defense during the disposal process; and

WHEREAS, acting as an LRA provides the greatest opportunity for the City to guide the Fort Lawton disposal process, by planning and implementing a community involvement process and by preparing a local redevelopment plan for Fort Lawton; and

WHEREAS, the City desires to ensure adequate access to Discovery Park is provided and the reuse of Fort Lawton is consistent with the City's comprehensive plan and reflects citywide priorities and community interests; and

WHEREAS, the Department of Defense has advised the City of the availability of grant funds to perform the duties of an LRA; and

WHEREAS, the City believes the recognition of the City as the LRA for Fort Lawton would be beneficial to the City and its citizens and provide the opportunity for the City to lead a community input process prior to the City's preparation of a Fort Lawton redevelopment plan for the Department of Defense to consider in disposing of this property; NOW THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SEATTLE, THE MAYOR CONCURRING, THAT:

Section 1. The Mayor or his designee is authorized to submit to the Department of Defense, for and on behalf of the City of Seattle, a request that the City be recognized as the Local Redevelopment Authority for the Fort Lawton BRAC disposal process. Upon recognition as the LRA, the Mayor or his designee is authorized to identify appropriate stakeholders and lead a community input process to develop a redevelopment plan for the Fort Lawton Army Reserve Center, all in accordance with the requirements of and schedule identified in the BRAC process.

Section 2. The Mayor or his designee is authorized to submit grant applications to the Department of Defense for funding to assist the City to perform the duties of an LRA and to provide such information and documents as may be required in connection therewith.

Adopted by the City Council the \_\_\_\_ day of \_\_\_\_\_, 2006, and signed by me in open session in authentication of its adoption this \_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_

President \_\_\_\_\_ of the City Council

THE MAYOR CONCURRING:

\_\_\_\_\_

Gregory J. Nickels, Mayor

Filed by me this \_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_

# City Clerk

(Seal)

Linda Cannon/DB

OIR, Ft. Lawton Local Reuse Authority RESO

June 16, 2006

Version #1

1

[Fiscal Note](#)



**FISCAL NOTE FOR NON-CAPITAL PROJECTS****Department:****Contact Person/Phone:****DOF Analyst/Phone:**

Office of Intergovernmental Relations	Linda Cannon 684-8263	Candice Chin 233-7014
---	-----------------------	-----------------------

**Legislation Title:**

A RESOLUTION relating to the Fort Lawton Army Reserve Center, authorizing the Mayor or his designee to request the United States Department of Defense to recognize the City of Seattle as a Local Redevelopment Authority (LRA) for the closure of the Fort Lawton Army Reserve Center (Fort Lawton), and authorizing the Mayor or his designee to apply for federal grant funds for the City to perform the duties of an LRA.

- **Summary of the Legislation:**

This legislation would direct the Executive to request recognition by the United States Department of Defense (DOD) as a Local Redevelopment Authority (LRA) for closure of the Ft. Lawton Army Reserve Center, and would authorize the Executive to apply for federal grant funds to perform the duties of an LRA.

- **Background:**

The DOD intends to move the Army Reserve units currently located at the Ft. Lawton Army Reserve Center to Ft. Lewis, Washington, to close Ft. Lawton, and to dispose of Ft. Lawton as surplus property. Other federal agencies and certain public benefit providers will have the first opportunity to obtain this surplus property. As part of this closure, the City has an option to form an LRA to perform the following functions:

- To conduct outreach for homeless-assistance providers and other eligible recipients of public benefit property transfers.
- To provide leadership, prepare, and build consensus for a base redevelopment plan.
- To consult with the DOD on personal property disposal.
- To serve as a single point of community contact for the DOD.

If the City does not elect to serve as the LRA, the DOD will perform these functions. The City wishes to serve as the LRA to develop a base redevelopment plan, which will be as reflective and responsive as possible to needs of the Seattle community.

The DOD has advised the City of the availability of limited grant funds to perform the duties of an LRA. This resolution will provide authorization to apply for these DOD grant funds if needed and appropriate to perform the duties of an LRA.

- *Please check one of the following:*

**This legislation does not have any financial implications.**

**This legislation has financial implications.**

***Appropriations:***

<b>Fund Name and Number</b>	<b>Department</b>	<b>Budget Control Level*</b>	<b>2006 Appropriation</b>	<b>2007 Anticipated Appropriation</b>
To be determined	OIR	To be determined	TBD	TBD
<b>TOTAL</b>				

**Notes:** Contingent upon successful application for DOD grant funds, the City will propose subsequent legislation to formally accept and appropriate grant funds.

***Anticipated Revenue/Reimbursement: Resulting From This Legislation:***

<b>Fund Name and Number</b>	<b>Department</b>	<b>Revenue Source</b>	<b>2006 Revenue</b>	<b>2007 Revenue</b>
To be determined	OIR	DOD	\$50,000	
<b>TOTAL</b>			\$50,000	

**Notes:** Several City departments are expected to participate in conducting community outreach, in conducting an interactive planning process, and in development of the base redevelopment plan. The City has not determined all the means by which community outreach will be conducted, or the costs associated with that outreach. At present, certain costs of preliminary planning are being absorbed within the existing budget authority of City departments.

The DOD has advised the City of the availability of limited grant funds to perform the duties of an LRA. This resolution will provide authorization to apply for these DOD grant funds if needed. The revenue reflected above is a rough estimate, to be refined as the roles of various City departments are better defined. Costs that exceed possible DOD grant funding will be absorbed within the existing budget authority of City departments.

***Total Regular Positions Created Or Abrogated Through This Legislation, Including FTE Impact:***

<b>Position Title and Department*</b>	<b>Fund Name</b>	<b>Fund Number</b>	<b>Part-Time/ Full Time</b>	<b>2006 Positions</b>	<b>2006 FTE</b>	<b>2007 Positions**</b>	<b>2007 FTE**</b>
N/A							
<b>TOTAL</b>							

***Notes:***

- **Do positions sunset in the future?** N/A

***Spending/Cash Flow: TBD***

<b>Fund Name and Number</b>	<b>Department</b>	<b>Budget Control Level*</b>	<b>2006 Expenditures</b>	<b>2007 Anticipated Expenditures</b>
-----------------------------	-------------------	------------------------------	--------------------------	--------------------------------------

N/A				
<b>TOTAL</b>				

**Notes:**

- **What is the financial cost of not implementing the legislation?** None
- **What are the possible alternatives to the legislation that could achieve the same or similar objectives?**

If the City does not elect to serve as the LRA, the DOD will perform these functions.

- **Is the legislation subject to public hearing requirements:** No
- **Other Issues**

Various Magnolia and Discovery Park community groups are expected to have a strong interest in future redevelopment plans for Ft. Lawton.

**Please list attachments to the fiscal note below:** None





## Appendix B

# Fort Lawton Public Meetings Matrix



## Public Meeting Matrix

Date	Agenda/Discussion Items
July 19, 2008	<ul style="list-style-type: none"> <li>• Introduction and Agenda Review</li> <li>• Draft Plan</li> </ul>
July 12, 2008	<ul style="list-style-type: none"> <li>• Introduction and Agenda Review</li> <li>• Process Update/Feedback/Project Guidance</li> <li>• Open Space</li> <li>• Housing Program</li> <li>• Circulation</li> <li>• Character</li> <li>• 36<sup>th</sup> Avenue Treatment</li> <li>• Impacts</li> </ul>
June 21, 2008	<ul style="list-style-type: none"> <li>• Introduction and Agenda Review</li> <li>• Process Update/Feedback/Guiding Principles</li> <li>• Affordable Housing Program</li> <li>• Housing Market Analysis</li> <li>• Overall Housing Program</li> <li>• Transportation Implications</li> </ul>
June 19, 2008	<ul style="list-style-type: none"> <li>• Reminder of Upcoming Planning Workshops</li> <li>• Review and improve the Community Relations Plan: review plan section by section, opportunity to submit additional comments</li> <li>• Next steps</li> </ul>
June 2, 2008	<ul style="list-style-type: none"> <li>• Review of reasons for meeting</li> <li>• Limitations of the Community Relations Plan</li> <li>• Inclusion of community members' interests in the Community Relations Plan</li> <li>• Improving the Community Relations Plan</li> <li>• Reschedule date for the next Community Relations Plan meeting</li> </ul>
May 31, 2008	<ul style="list-style-type: none"> <li>• Site Analysis and Background Information (feedback)</li> <li>• Building Program (feedback)</li> <li>• Building Location Options (feedback)</li> <li>• Open Space Options (feedback)</li> <li>• Site Access Options (feedback)</li> <li>• Internal Circulation Options (feedback)</li> <li>• 36<sup>th</sup> Avenue Treatments (feedback)</li> <li>• Parks Overview</li> </ul>
May 19, 2008	<ul style="list-style-type: none"> <li>• Purpose community meetings on homeless</li> <li>• Community relations plans</li> <li>• Community concerns/questions on homeless housing</li> </ul>

April 26, 200	<ul style="list-style-type: none"> <li>• BRAC Process and NOI review</li> <li>• Goals Discussion Conclusion</li> <li>• Overview of Next Steps</li> <li>• Community Visioning: High Point Case Study</li> <li>• Community Visioning: Fort Lawton</li> </ul>
April 21, 2008	<ul style="list-style-type: none"> <li>• Discussion of homelessness and housing</li> </ul>
March 29, 2008	<ul style="list-style-type: none"> <li>• Project Update</li> <li>• Goals Statement and Project Vision</li> <li>• Stakeholder Process Overview</li> <li>• Goals and Visions</li> <li>• Idea “Parking Lot” and Questions</li> </ul>
March 13, 2008	<ul style="list-style-type: none"> <li>• Project Update</li> <li>• Stakeholder Process Discussion: 3 Concepts of Outreach, Stakeholder Workshops, Information Presentations, Public Access and Outreach, Tours, Other Stakeholder Concepts</li> <li>• Next Meeting/Tours</li> <li>• How to improve this meeting</li> </ul>
February 25, 2008	<ul style="list-style-type: none"> <li>• City’s decision on NOI requests for Ft. Lawton property</li> <li>• City’s selected master developer</li> <li>• Next steps in Ft. Lawtom reuse plan</li> <li>• Community Participation in Ft. Lawton Reuse Planning</li> <li>• Public Q &amp; A</li> </ul>
April 19, 2007	<ul style="list-style-type: none"> <li>• BRAC process</li> <li>• Army value</li> </ul>
February 13 & 14, 2007	<ul style="list-style-type: none"> <li>• Discuss NOIs recieved</li> </ul>
December 13, 2006	<ul style="list-style-type: none"> <li>• Welcome/Meeting Overview</li> <li>• Fort Lawton Closure &amp; BRAC</li> <li>• Department of Housing &amp; Urban Development Role</li> <li>• Next Steps</li> <li>• Q&amp;A</li> </ul>
October 17, 2006	<ul style="list-style-type: none"> <li>• Welcome</li> <li>• Meeting Overview</li> <li>• Fort Lawton and the Base Realignment and Closure (BRAC) Process</li> <li>• Role of the Department of Housing and Urban Development (HUD)</li> <li>• Overview of Discovery Park</li> <li>• Introduction/Overview of Stations</li> <li>• Conclusion/Next Steps</li> <li>• Break to Stations</li> </ul>
September 26, 2006	<ul style="list-style-type: none"> <li>• Welcome</li> <li>• Workshop purpose and BRAC process</li> <li>• Surplus property</li> <li>• Homelessness and BARAC</li> <li>• Local Reuse Authority: LRA Role and Timeline, Notices of Interest Applications, Zoning, Public Process, Consultations</li> <li>• Tour</li> </ul>

# Appendix C

## Topography and Soils



**STRATUM GROUP**

P.O. Box 2546, Bellingham, WA 98227  
Phone (360) 714-9409

July 2, 2008

Michael Schuler  
EDAW  
815 Western Avenue, Suite 300  
Seattle, WA 98104

Re: **Fort Lawton Geology Report**  
Seattle, Washington

Dear Mr. Schuler:

The attached report provides a generally geology assessment of geologic conditions at the Fort Lawton Army Reserve Center in Seattle Washington. The primary purpose of this report was to identify any geologic or geotechnical constraints that may constrain redevelopment on the site.

The only significant geologic issue on the site is that the slope on the north end of the Fort Lawton Army Reserve site is potentially unstable. The slope is steep enough and the presence of seeps and springs are such that alteration of the slope conditions would likely lead to shallow surface soil failures or erosion on some portions of the slope unless engineered designed mitigation measures are in place. Additional detailed analysis should be performed to establish appropriate setbacks from the slope and/or to establish engineered designed mitigation measures.

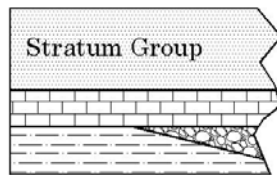
Stratum Group appreciates the opportunity to be of service to you. Should you have any questions regarding this geology assessment please contact our office at (360) 714-9409.

Sincerely yours,  
**Stratum Group**

Dan McShane, L.E.G., M.Sc.  
Licensed Engineering Geologist

**REPORT**  
**GEOLOGY ASSESSMENT**

**FORT LAWTON ARMY RESERVE CENTER**  
**SEATTLE, WASHINGTON**



PO Box 2546  
Bellingham, WA 98227  
(360) 714-9409

July 2, 2008



July 2, 2008  
Geology Assessment  
Fort Lawton Army Reserve Center  
Seattle, WA

## GENERAL GEOLOGY

Northwestern Washington has been occupied by continental glaciers at least four times during the Pleistocene Epoch (1.6 million to 10,000 years ago). During these glacial and accompanying interglacial periods, the underlying geology units were eroded and a relatively thick layer of glacial related and interglacial fluvial sediments were deposited in the vicinity of the Fort Lawton area.

The Geologic Map of Surficial Deposits in the Seattle 30' x 60' Quadrangle, Washington (Yount, Minard and Dembrof, 1993) indicate that subject area of Fort Lawton is underlain by advance outwash deposits and pre-Fraser deposits.

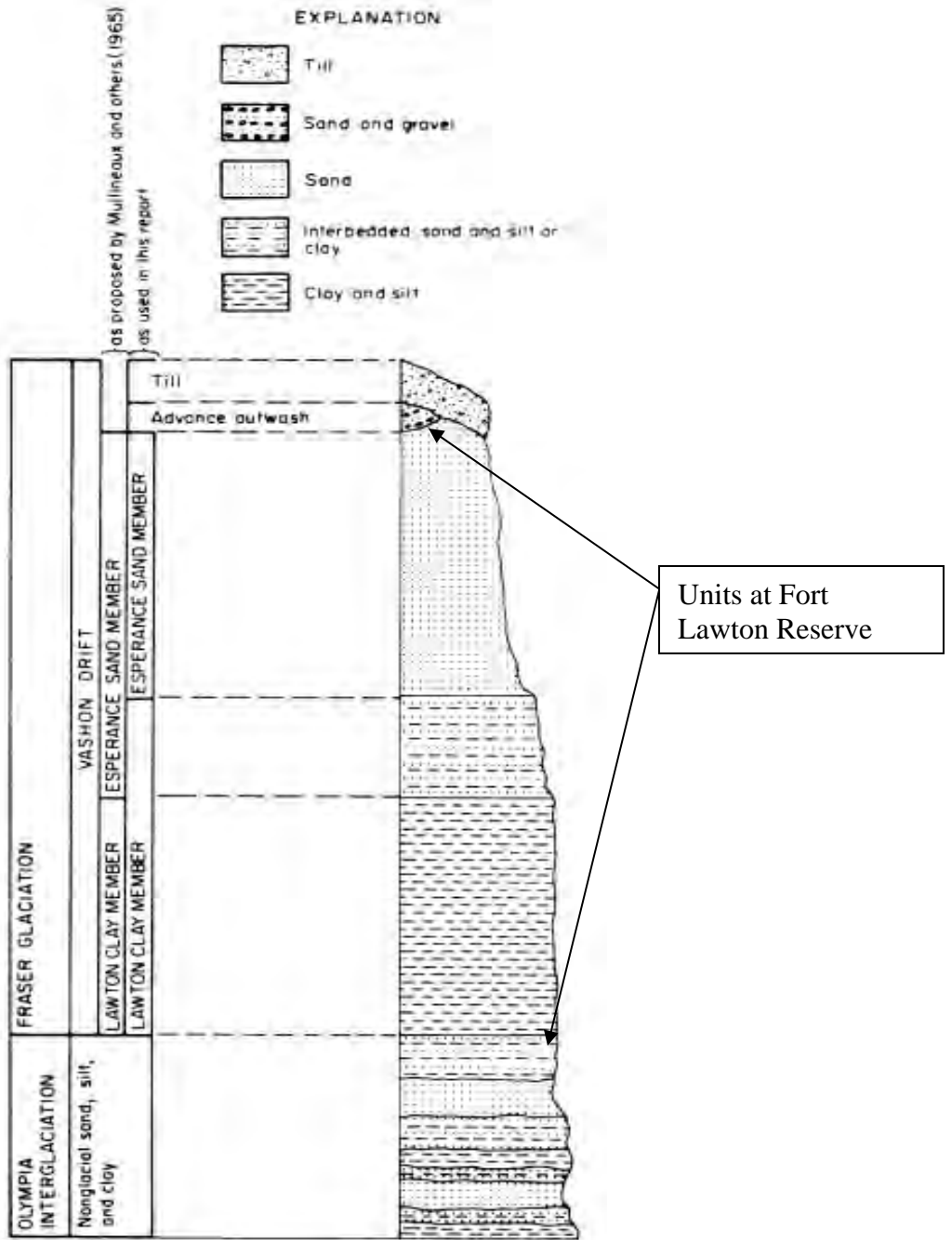
The advance outwash deposits consist of slightly oxidized, light red-brown gravel and sand and light brown to gray silt and clay, moderately- to well-sorted, and well stratified. Sections generally coarsen upward from parallel laminated thin-bedded silt and clay through well-sorted cross-bedded sand to moderately-sorted, cross-bedded and plane bedded gravel. The advance outwash deposits were deposited by glacial melt water from the advancing glacial ice during the last glacial period approximately 20,000 years ago. This unit includes the Lawton Clay and Esperance Sand.

The Lawton Clay represents the earliest advance outwash when the Puget Lobe of glacial ice pushed south into the Puget Sound lowland far enough to block the northward-flowing drainage to the Strait of Juan de Fuca. This resulted in a widespread deposit of silt and clay which constitutes the Lawton Clay Member of the Vashon Drift (Mullineaux and others, 1965). The Lawton Clay is overlain by the Esperance Sand Member. The contact between the Lawton Clay and the Esperance Sand is not generally a sharp contact. Typically there is a transitional zone, several meters thick, in which sand is interbedded with silt and clay. The Esperance Sand grades coarser and more pebbly near its top, grading into the coarser grained advance outwash. In other places the Vashon advance outwash was deposited in stream channels cut into the Esperance Sand creating a more abrupt change.

The advance outwash deposits including the Esperance Sand and Lawton Clay are underlain by pre-Fraser deposits at the Fort Lawton site. The pre-Fraser deposits consist of interbedded oxidized brown, red-brown to gray gravel, sand, silt and clay. The unit is moderately to well bedded and contains minor amounts of diamicton (ice-contact deposits) and outwash sand and gravel. Generally the unit is non glacial with abundant peat and woody debris. In the Seattle area the unit includes deposits of the Olympian nonglacial interval and the upper portion of the deposit may include minor amounts of pre-Fraser glacial deposits.

A general stratigraphic sequence from Tubbs (1974) is presented below.

July 2, 2008  
 Geology Assessment  
 Fort Lawton Army Reserve Center  
 Seattle, WA



General stratigraphic sequence from Tubbs (1974).

July 2, 2008  
Geology Assessment  
Fort Lawton Army Reserve Center  
Seattle, WA

## **SPECIFIC SITE OBSERVATIONS**

The Fort Lawton Army Reserve site consists of a gently northward sloping upland area with a steep north-facing slope on the north side of the site. Numerous buildings and paved parking areas cover the upland area with a few grass-covered and landscaped areas. Building areas and some of the parking areas have been leveled such that cut and fill areas are present on site. The steep north-facing slope on the northern boundary of the property is primarily tree-covered with a mix of alders, big leaf maples, Douglas fir and western red cedar. The brush understory is thick and includes significant areas that are covered with black berry brambles. A small portion of the slope north of Texas Way is grass-covered.

Soils underlying the site consist primarily of sand and gravel with some silt units. The soils generally become coarser grained towards the south. Silt to clay soil becomes predominant near the north end of the site just south of West Lawton Street along the base of the steep north-facing slope. Fill soils of local derivation are likely present over parts of the site where past grading took place. Fill soils are evident along the slope between the northern most parking area and West Lawton Street.

The steep north-facing slope along the northern boundary of the site is generally plainer with minor convergent and divergent areas. Springs and seeps are present near the base of this slope both on the site and off site further to the north. The slope appears to be generally stable with slope angles on the order of between 20 degrees and 30 degrees. No obvious recent landslides are evident on the slope; however, minor soil creep is evident. Significant portions of the slope have been heavily burrowed by rats and fill soils are present near the upper portions of the slope.

Most of the upland area appears to be relatively well drained. A swale area along the west side of 36<sup>th</sup> Avenue West appears to receive some storm water run off from paved areas and there is no evidence of surface water flow at this location. However, based on soil descriptions associated with underground storage tank investigations and hand dug test pits along the north side of the site and surface soil observations on the site, silty soils with lower permeability should be expected particularly towards the north end of the site.

July 2, 2008  
Geology Assessment  
Fort Lawton Army Reserve Center  
Seattle, WA

## **SPECIFIC VICINITY OBSERVATIONS**

As development on a property can have off site impacts and off-site observations can assist in evaluating the geology of the area, observations were made along the steep slopes in the ravine at Kiwanis Memorial Park located to the east of the site and along West Lawton Street, Commodore Way and 40<sup>th</sup> Avenue West located north of the site.

A steep sided ravine is located within Kiwanis Memorial Park. The upper slopes of the ravine are underlain by compact sand and gravel. The soils become progressively siltier towards the bottom of the ravine and the base of the ravine slope is underlain by clay soils in some areas. Seeps and springs are present at the base of the slopes and a year round spring fed stream is located in the bottom of the ravine. Evidence of past shallow landslides is evident throughout the ravine. The slides appear to be triggered by a combination of the very steep slopes along with piping of sand and silt at the base of the slope within the springs and seeps.

Slopes and limited soil exposures along West Lawton Street and Commodore Way indicate numerous wet areas with a mix of soil types from very compact sand to hard clay. No obvious landslides are present in the area, but retaining walls and development of homes on pilings near the tops of slopes along with wet soil areas indicates that slopes are likely potentially unstable if cut or if fill is placed on the slopes. Portions of Commodore Way appear to have been subjected to differential settlement or road bed failure along a wet area.

A road cut along 40<sup>th</sup> Avenue West northwest of the property exposes glacial till. The till appears to pinch out towards the south and appears to be overlying advance outwash sand and gravels.

July 2, 2008  
Geology Assessment  
Fort Lawton Army Reserve Center  
Seattle, WA

## **POTENTIAL GEOLOGY HAZARDS**

The only potential geology hazard at the site is the potential for shallow landslide hazards associated with the steep slope on the north side of the site.

The slope along the north end of the Fort Lawton Army Reserve site is potentially unstable. No landslides are evident at the site nor are slides reported (Shannon and Wilson, Inc., 2003). However, the slope is steep enough and the presence of seeps and springs are such that alteration of the slope conditions would likely lead to shallow surface soil failures or erosion on some portions of the slope unless engineered designed mitigation measures are in place. Additional detailed analysis should be performed to establish appropriate setbacks from the slope and/or to establish engineered designed mitigation measures.

Removing invasive plants from the slope such as blackberries and English ivy will have minimal impact on slope stability in the short term and in the long term enhance slope stability. Encouraging evergreen trees on the slope as opposed to deciduous trees will also improve slope stability by reducing the frequency that the slope will be saturated.

Development could potentially be done on the slope or near the slope, but will require site and development specific engineered designed retaining structures and site specific subsurface drainage.

Redevelopment of the site will not lead to an increase the risk of off-site landslides as long as storm water and surface water run off is handled in a manner similar to the way it currently is managed on the site. Much of the site is currently covered with impervious surfaces and water is directed into an existing storm water system. Redevelopment of the site could potentially infiltrate more storm water if low impact development techniques are used; however, a full evaluation of this issue is not possible as there are no specific redevelopment plans at this time. If ground water recharge is maintained at similar levels as is currently taking place at the site or at levels near natural conditions, no off-site impacts would be posed.

Shannon and Wilson, Inc. (2003) as well as Tubbs (1974) indicate that slope stability problems are associated perched ground water above the Lawton Clay at some locations in Seattle. The contact between the overlying sandy units and underlying silts on the slope along the north side of the site does not appear to be a sharp contact, and the slope does not appear to have been impacted by the types of failures typically associated with perched water above the Lawton Clay as at other Seattle locations. Tubbs (1974) observed that saturation failures associated with perched water above the Lawton Clay appeared to be an issue on the southwest and west sides of the hills in Seattle and the same conditions were not present on the east and north sides of the

July 2, 2008  
Geology Assessment  
Fort Lawton Army Reserve Center  
Seattle, WA

hills. Tubbs postulated that the contact between the two units was slightly sloped to the west southwest and hence high water pore pressure was limited to those slopes.

As topography and geomorphic evidence on the slope to the north indicates that ground water mounding is not a cause of past slope failures, maintaining ground water infiltration levels at natural background levels should not cause slope stability problems typically associated with ground water mounding. Natural ground water recharge can be accommodated at the site via a combination of using existing storm water facilities and new infiltration sites and would depend on the amount of impervious development proposed and the amount of evergreen tree covered areas on the site.

### **GEOTECHNICAL CONSIDERATIONS**

Soils underlying much of the site consist of soils that have been over ridden by glacial ice. As such the native soils have been over consolidated and will support typical foundation loads. However, there is likely variability across the site as at least a portion of the site is located in an area transitioning between sub units between the Lawton Clay, Esperance Sand and more generic glacial outwash. In addition cut and fill grading in the past to create a semi terraced landscape on portions of the site means that some of the soils underlying the site have been disturbed and are underlain by fill. As noted in hand dug test pits on the slope on the north side of the property, fill soils covered some portions of the slope.

Due to the variable nature of soil conditions, larger buildings with heavier foundation loads may be subject to differential settlement unless site specific foundation designs specific to site soil conditions are developed. However, soil conditions on the site should not be pose particularly difficult conditions for site development.

# Appendix D

## Existing Facilities Study





# Fort Lawton Reuse Plan Existing Facilities Assessment

June 13, 2008



1011 SW Klickitat Way  
Suite 102  
Seattle, WA 98134  
206.623.6832



## EXECUTIVE SUMMARY

The existing buildings at Fort Lawton, which are being considered through the evolution of the City of Seattle's Reuse Proposal, were evaluated for their overall condition, use, and characteristics. This Limited Facilities Assessment illustrates the information discovered concerning five of the seven major existing buildings at Fort Lawton. The two remaining buildings were not examined as the Fort Lawton USARC Building 240 is not part of the City's Reuse Plan and documents for the OMS Building 240 were unavailable. Drawings were used in the field to confirm the current conditions and layouts of the buildings. Each building's construction methods, square footage, exterior appearance, interior facets, and mechanical systems were addressed.

## Conclusions

The following are the conclusions of this Facility Assessment:

Generally, all the buildings were in good condition.

- Building 211
  - Built in 1952.
  - A single story concrete with brick masonry veneer and wood joist roof structure.
  - Contains unheated storage.
- Building 214
  - Built in 1999.
  - A single story pre-engineered steel structure with corrugated metal siding and metal roofing.
  - Contains offices and computer equipment storage.
- Harvey USARC Building 216
  - Built in 1952 and in 2003 an addition was added.
  - A two story concrete with brick masonry veneer and steel joist structure. The 2003 building addition is a one story pre-engineered metal structure with metal siding and a brick veneer wainscot.
  - Contains offices, classrooms, storage, and auditorium.
- Leisy USARC Building 220
  - Built in 1970 with a building addition added in 1976.
  - A two story precast concrete column and steel joist structure with precast concrete panels.
  - Contains offices, classrooms, storage, and assembly spaces.
  - May contain asbestos.
- AMSA Building 222
  - Built in 1970.
  - A single story precast concrete column and steel joist structure with precast concrete panels.
  - Maintenance shop for army vehicles.

**TABLE OF CONTENTS**

Executive Summary ..... i

Introduction ..... 1

Building 211 ..... 3

Building 214 ..... 5

Harvey USARC Building 216 ..... 7

Leisy USARC Building 220 ..... 10

AMSA Building 222 ..... 13

## INTRODUCTION

This Limited Facilities Assessment evaluates the existing buildings at Fort Lawton that are to be considered during the development of the City of Seattle's Reuse Proposal. Documents and as-builts provided by the Army Reserve were reviewed in the field to verify the layout and current use of the building. When discrepancies occurred, they were noted on the drawings. The site is comprised of seven major buildings across a sloping site surrounded with tall dense trees. It is landscaped with mostly grass and some small shrubs. There is approximately a 68 foot difference in elevation between the north and south ends of the subject site. A berm divides the east side of the site from neighboring houses.

The seven buildings include:

- Building 211
- Building 214
- Harvey USARC Building 216
- Leisy USARC Building 220
- AMSA Building 222
- Fort Lawton USARC Building 240
- OMS Building 245

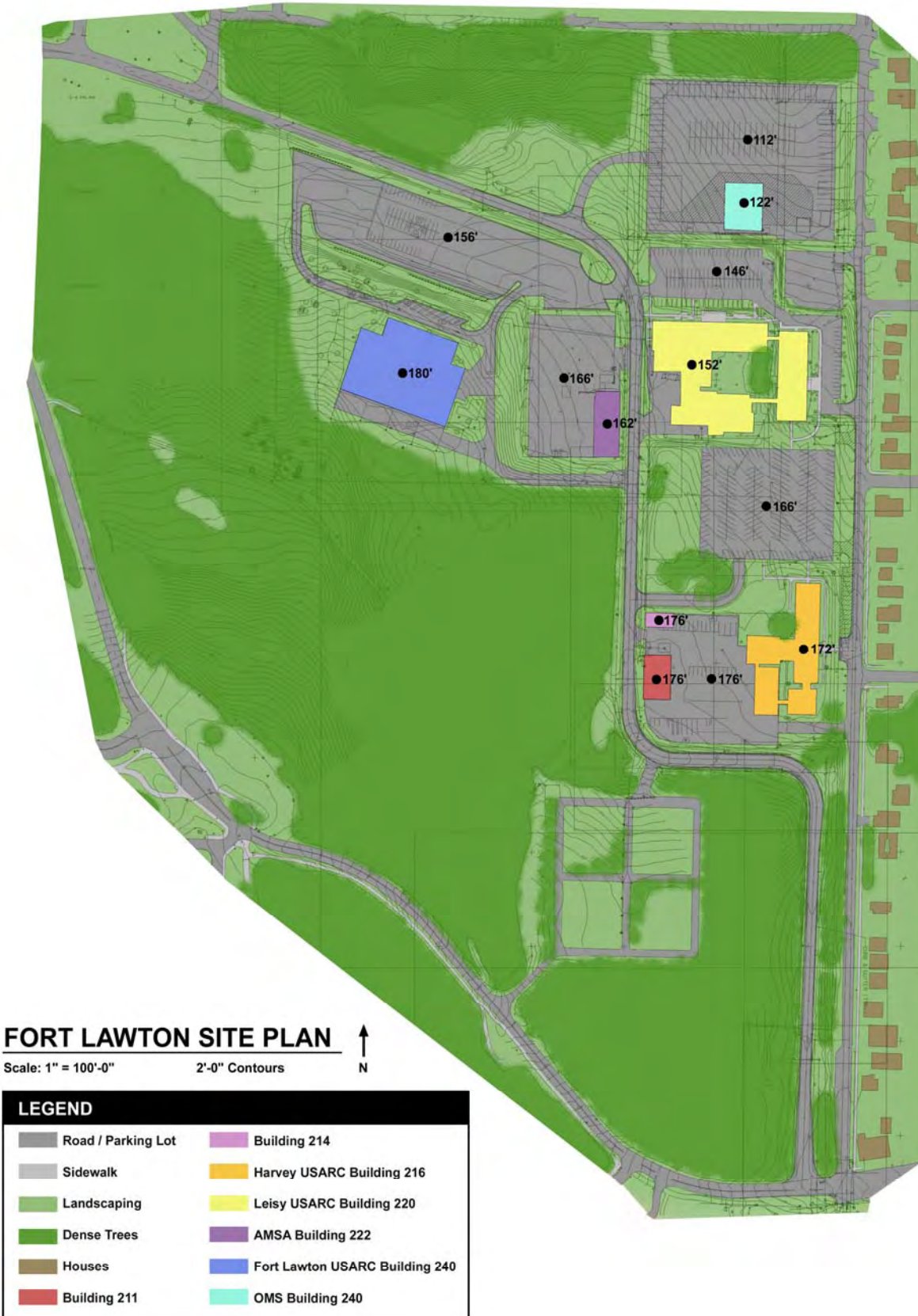
Building 240 will be turned over to the Veterans Administration and is not a part of the City of Seattle's Reuse Plan. Building 211 was originally a maintenance shop, which is now currently used for cold storage and is located west of Harvey USARC Building 216. Building 214 is a pre-engineered metal building that was converted into office spaces and computer equipment storage. It is located just north of Building 211. Harvey USARC Building 216 is located on the eastern site of the site and contains classrooms, offices, storage, and an auditorium. Leisy USARC Building 220 houses offices, classrooms, storage, and assembly areas that is sited north of Building 216. Building 222 is a maintenance shop for army vehicles that is west of Leisy USARC Building 220. Each of the previously mentioned building's construction methods, square footage, exterior, interior, and mechanical systems were documented. A report for each is included on the succeeding pages. On the following page, Figure 1, depicts the building locations relative to the roads, parking lots, houses, and landscape. At this time there is no known information on OMS Building 245, so it is not included in this Facilities Assessment.

The following table is a summary of the buildings. Each building's condition was rated as being Very Good, Good, or Poor.

**Table 1: Fort Lawton Building Report**

Name	Year Built	Total Area (Gross SF)	Condition
Building 211	1952	4,860	Good
Building 214	1999	1,800	Good
Harvey USARC Building 216	1952, 2003	37,248	Very Good
Leisy USARC Building 220	1970, 1976	66,401	Good
AMSA Building 222	1970	6,468	Good
OMS Building 245	?	?	?
<b>Total</b>		<b>116,777</b>	

Figure 1: Fort Lawton Site Plan



**BUILDING 211 – Unheated Materials Storage**

Building 211 is a single story concrete building with brick masonry veneer and wood joist roof structure that was constructed in 1952. Concrete Masonry Units (CMU) were used to infill 3 of the building’s original 4 roll-up doors. The building has a footprint of approximately 4,860 sq ft.

• **Interior:**

Storage areas are created with freestanding chain link and metal mesh enclosures. It is a singular enclosed space with access via an overhead coiling service door. The floor is concrete and the walls are painted concrete. There is a small restroom located on the northwest side of the building.

• **Exterior:**

The site slopes from the north up to the south and is adjacent to the south parking lot for Harvey. Brick masonry wraps the exterior of the building and appears to be in good condition. The clerestory windows, metal doors, and gable built up roof with a mineral cap sheet all seem to be in good condition.

• **Mechanical:**

The building is not heated. Interior lighting is from round ceiling hung fixtures.



Figure 2: Exterior View of Building 211

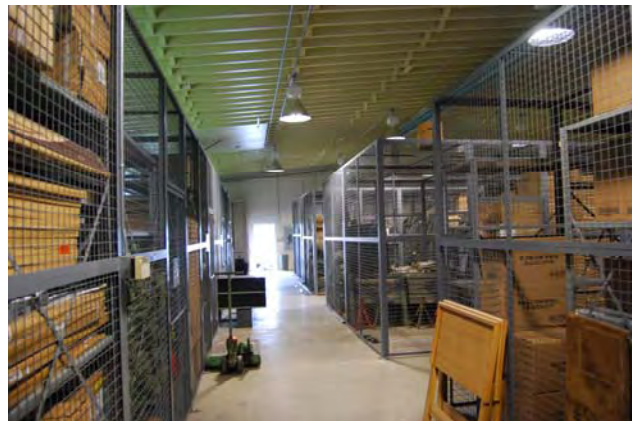
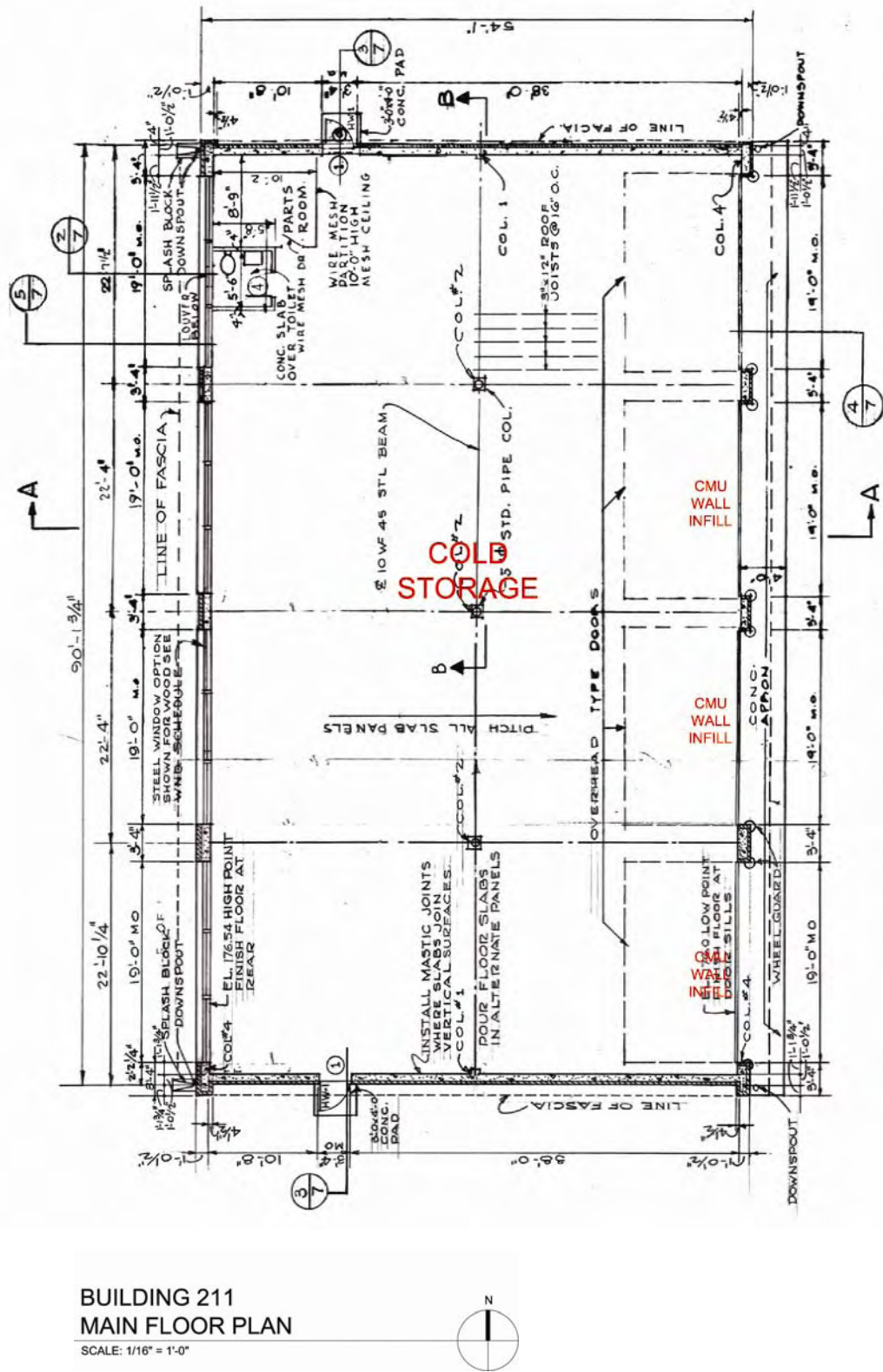


Figure 3: Interior View of Building 211 Metal Storage Enclosures

<b>Building Assessment Summary</b>				
<u>Name</u>	<u>Use Description</u>	<u>Year Built</u>	<u>Total Area (Gross sf)</u>	<u>Condition</u>
Building 211	Unheated Storage	1952	4,860 sf	Good

Figure 4: Building 211 Floor Plan



**BUILDING 214 – Storage and Offices**

Building 214 is single story pre-engineered steel structure with metal siding that was erected in 1999. The building has a footprint of approximately 1,800 sq ft.

• **Interior:**

An ATC 2 x 4 grid ceiling system and painted gypsum wall board partitions are used to create the enclosed office and restroom. The rest of the building has a layer of gypsum wall board covering the exterior walls only up to roughly 7'-6". The remaining is exposed to the steel structure. Vinyl tile is used in the enclosed office and restroom for the interior floor finish. The rest of the building has a concrete floor finish.

• **Exterior:**

The site slopes from the north up to the south and is adjacent to the Harvey parking lot. Metal siding and a metal gable roof creates the exterior of the building. Both appear to be in good condition. The exterior metal doors along with the roll-up door also seem to be in good condition.

• **Mechanical:**

The building is heated with natural gas heaters that are hung from the ceiling. The lighting system is a series of hung fluorescent lights and round ceiling fixtures in the open spaces and recessed fluorescent lights in the enclosed office and restroom.



Figure 5: Exterior View of Building 214



Figure 6: View of Enclosed Office

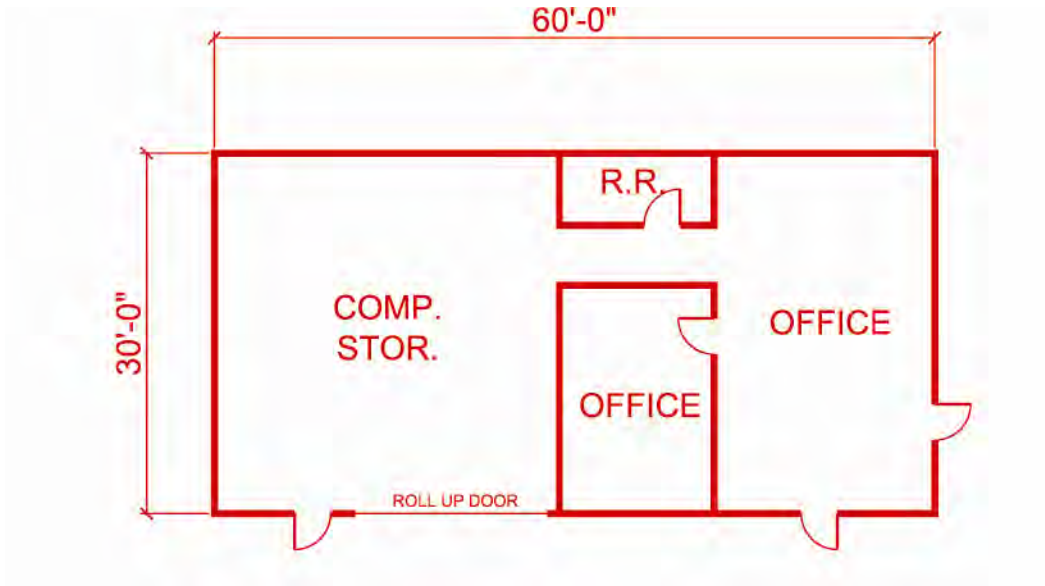


Figure 7: View of Storage Space

<b>Building Assessment Summary</b>				
<u>Name</u>	<u>Use Description</u>	<u>Year Built</u>	<u>Total Area (Gross sf)</u>	<u>Condition</u>
Building 214	Storage and Offices	1999	1,800 sf	Good



Figure 8: Building 214 Floor Plan



BUILDING 214  
MAIN FLOOR PLAN  
SCALE: 1/16" = 1'-0"



**HARVEY USARC BUILDING 216 – Offices, Classrooms, Storage, and Auditorium**

Harvey USARC Building 216 is a two story concrete building with brick masonry veneer and a steel joist structure that was built in 1952. In 2003 a one story pre-engineered metal addition, with metal siding and brick masonry wainscot, was added to the south end of the west wing. The building has a footprint of approximately 27,460 sq ft.

• **Interior:**

Painted gypsum wall board, fabric panels, painted CMU, and a tan colored rubber base are the interior wall finishes. The floor finishes include hardwoods, tile, vinyl tile, and carpet. An ATC 2 x 4 grid system and 2 x 2 grid system are used for the ceiling. Both wood and metal doors are used on the interior. The music area, which is located in the 2003 building addition, contains sound proof practice rooms with STC 45-doors.

• **Exterior:**

The site slopes from the northeast up to the southwest and is landscaped with grass and trees. Brick masonry wraps the exterior of the building and seems to be in good condition. The metal windows and doors also look to be in good condition. The built-up roof system with a mineral cap sheet is about 10 years old and is also in good condition. There is a small courtyard space that was formed when the building addition was added in 2003. This space is rather uninteresting as it only contains gravel and no landscaping features.

• **Mechanical:**

The building is heated with hot water baseboard heaters served from a natural gas boiler. The boiler was upgraded to natural gas from oil in the 90's.



Figure 9: View of Harvey North Elevation

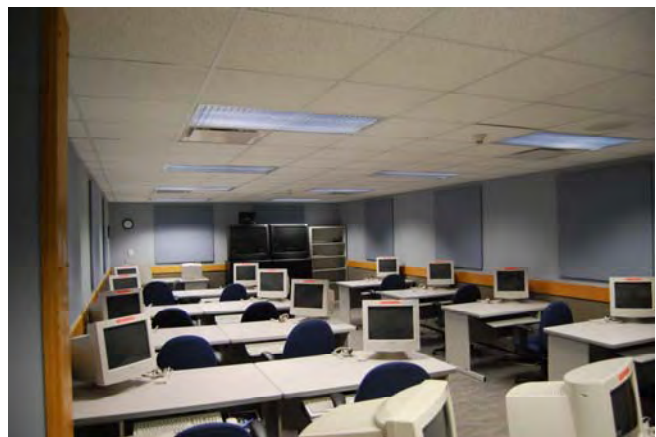


Figure 10: View of Harvey Computer Classroom



Figure 11: View of Harvey Conference Room

**Building Assessment Summary**

<u>Name</u>	<u>Use Description</u>	<u>Year Built</u>	<u>Total Area (Gross sf)</u>	<u>Condition</u>
Harvey USARC Building 216	Offices and Classrooms	1952, 2003	37,248 sf	Very Good

Figure 12: Harvey USARC Building 216 Main Floor Plan

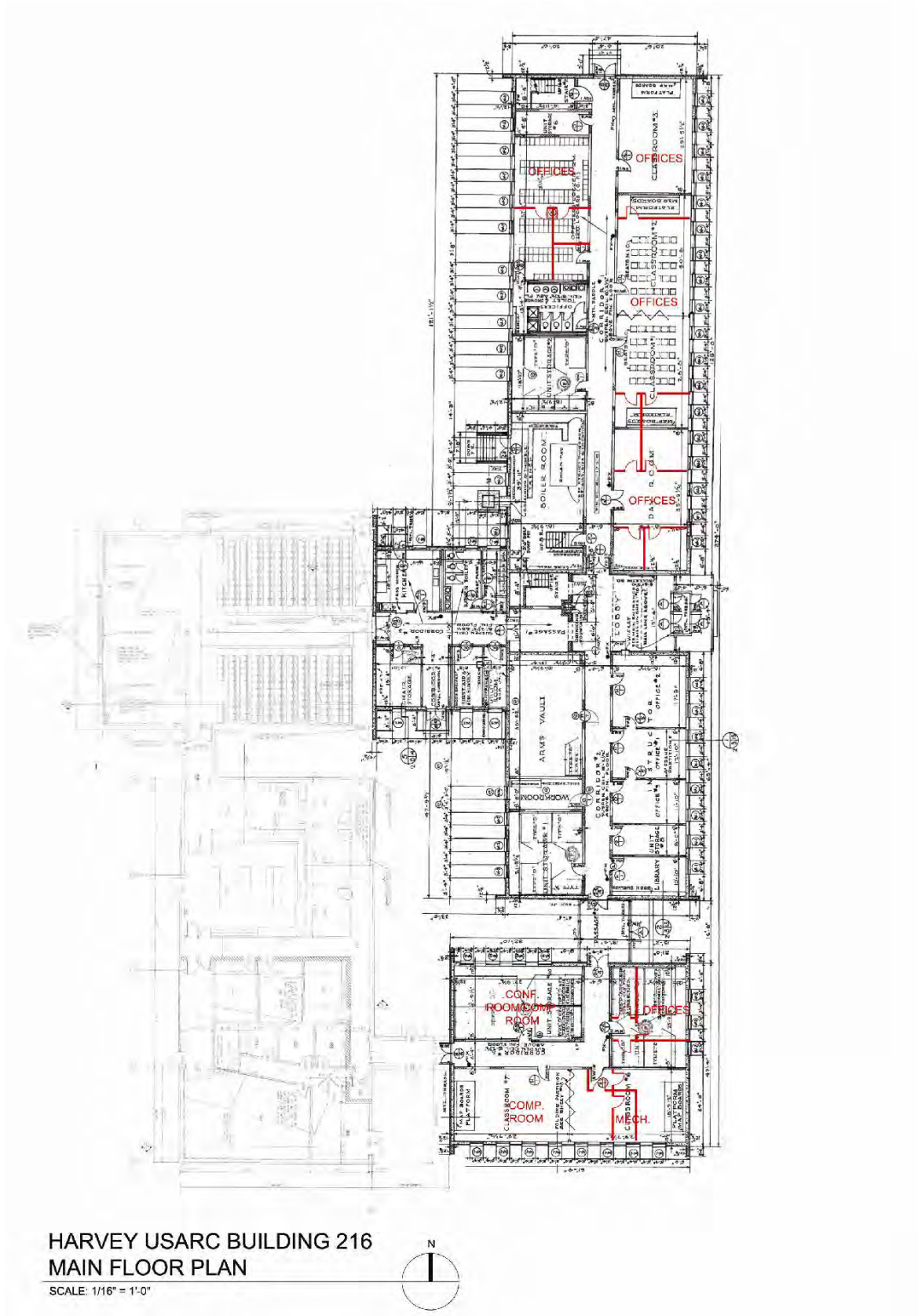
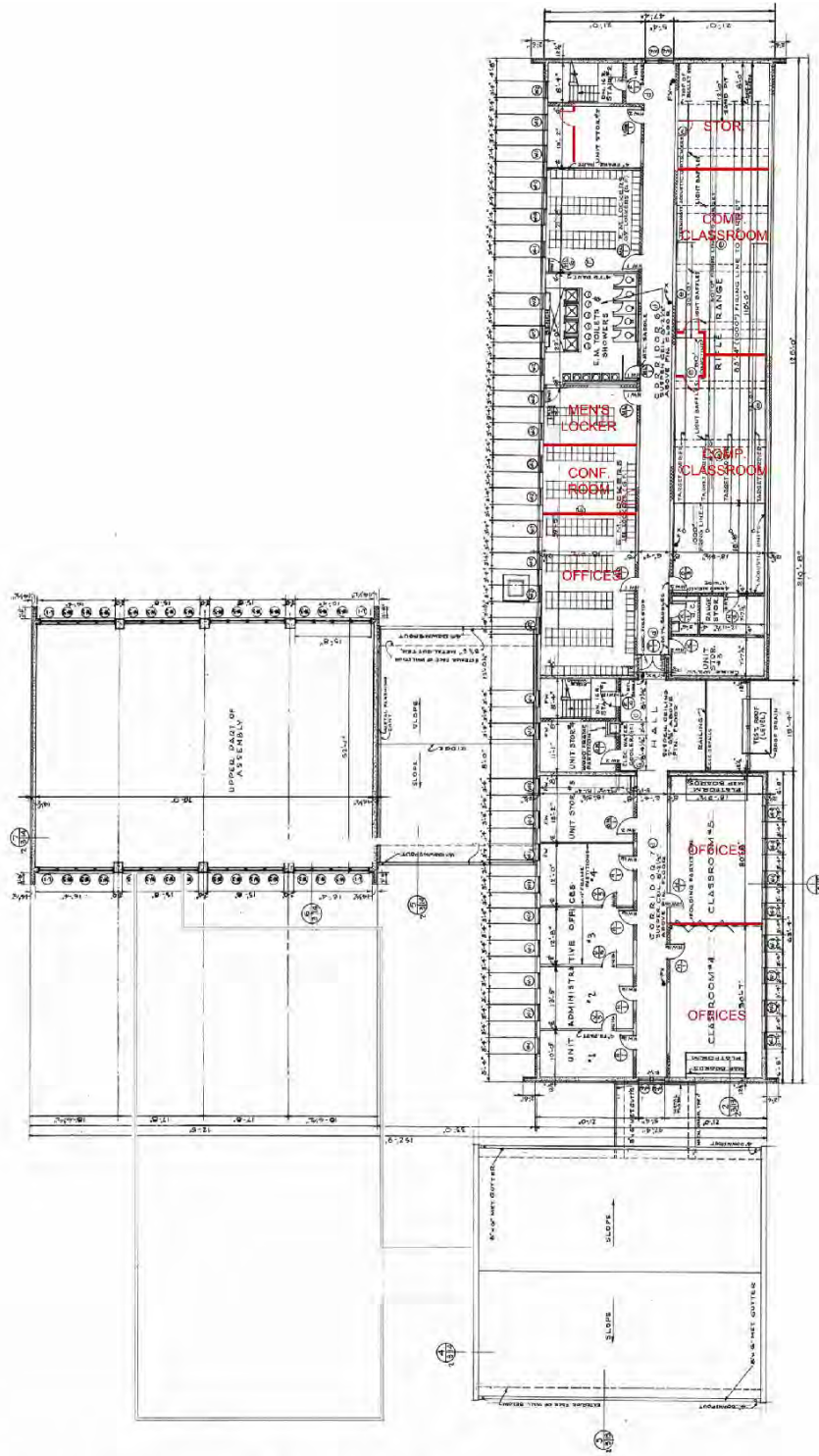


Figure 13: Harvey USARC Building 216 Second Floor Plan



HARVEY USARC BUILDING 216  
SECOND FLOOR PLAN

SCALE: 1/16" = 1'-0"



**LEISY USARC BUILDING 220 – Offices, Classrooms, Assembly Rooms, and Storage**

The Leisy USARC Building 220 is a two story precast concrete column and steel joist structure with precast concrete panels that was built in 1970 and later added to in 1976. The building has a footprint of approximately 43,444 sq ft.

• **Interior:**

Painted gypsum wall board, painted CMU, fabric panels, wood paneling, and a tan colored rubber base are used for the interior wall finishes. The interior floor finishes consist of vinyl tile, concrete, tile, and carpet. Existing construction documents indicated there may potentially be asbestos in some of the vinyl floor tiles. An ATC 2 x 4 grid system is used for the ceiling in most spaces. Some spaces ceilings are painted gypsum wall board or are open to the building structure. Both wood and metal doors are used on the interior.

• **Exterior:**

The site slopes significantly from the northeast up to the southwest and is landscaped with grass and trees. White concrete columns, along with a combination of precast concrete “T” panels and exposed aggregate concrete panels, compose the exterior of the building. These elements of the exterior skin appear to be in good condition. The buildings metal doors and windows also seem to be in good condition. The roof is a built-up roof system with ballast that looks older than 10 years. It is problematic because it leaks. A central courtyard space was formed by the building addition in 1976. This space is a mixture of pavement, grass, and trees.

• **Mechanical:**

The building is heated by baseboard heaters. The emergency operations room and server rooms are the only spaces with air conditioning. The lighting system is mostly recessed or ceiling mounted fluorescent lighting and some round ceiling hung fixtures.



Figure 14: View of Leisy USARC Building 220 South Elevation

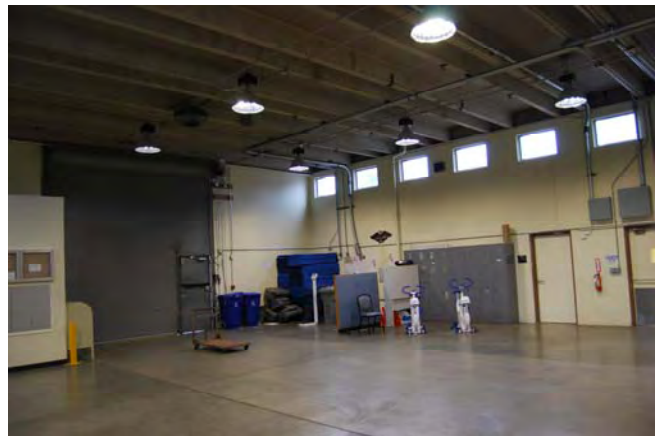


Figure 15: View of Leisy USARC Building 220 Assembly Space



Figure 16: View of Leisy USARC Building 220 Emergency Operations Room

**Building Assessment Summary**

Name	Use Description	Year Built	Total Area (Gross sf)	Condition
Leisy USARC Building 220	Offices and Classrooms	1970, 1976	66,401 sf	Good

Figure 17: Leisy USARC Building 220 Main Floor Plan

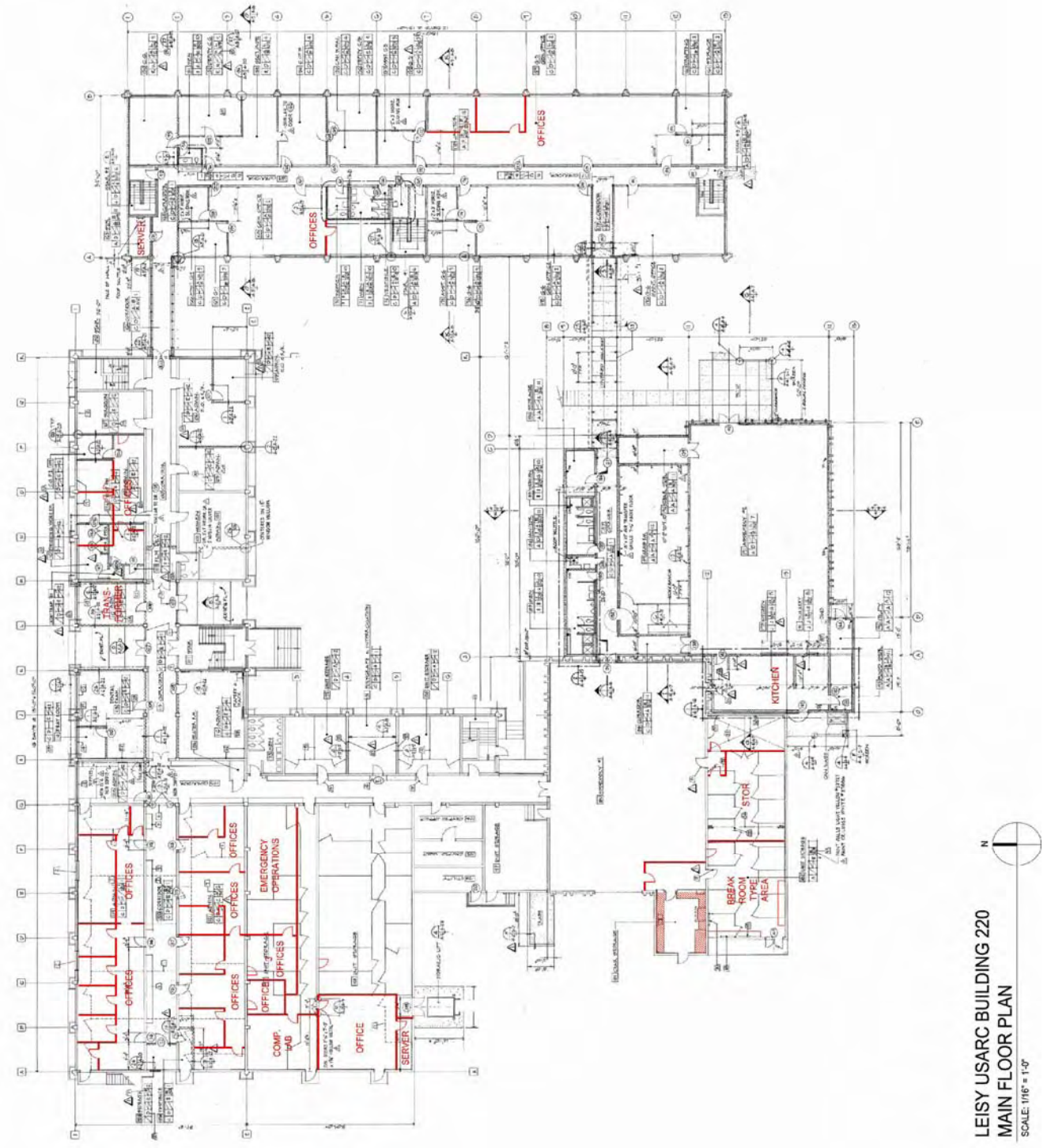
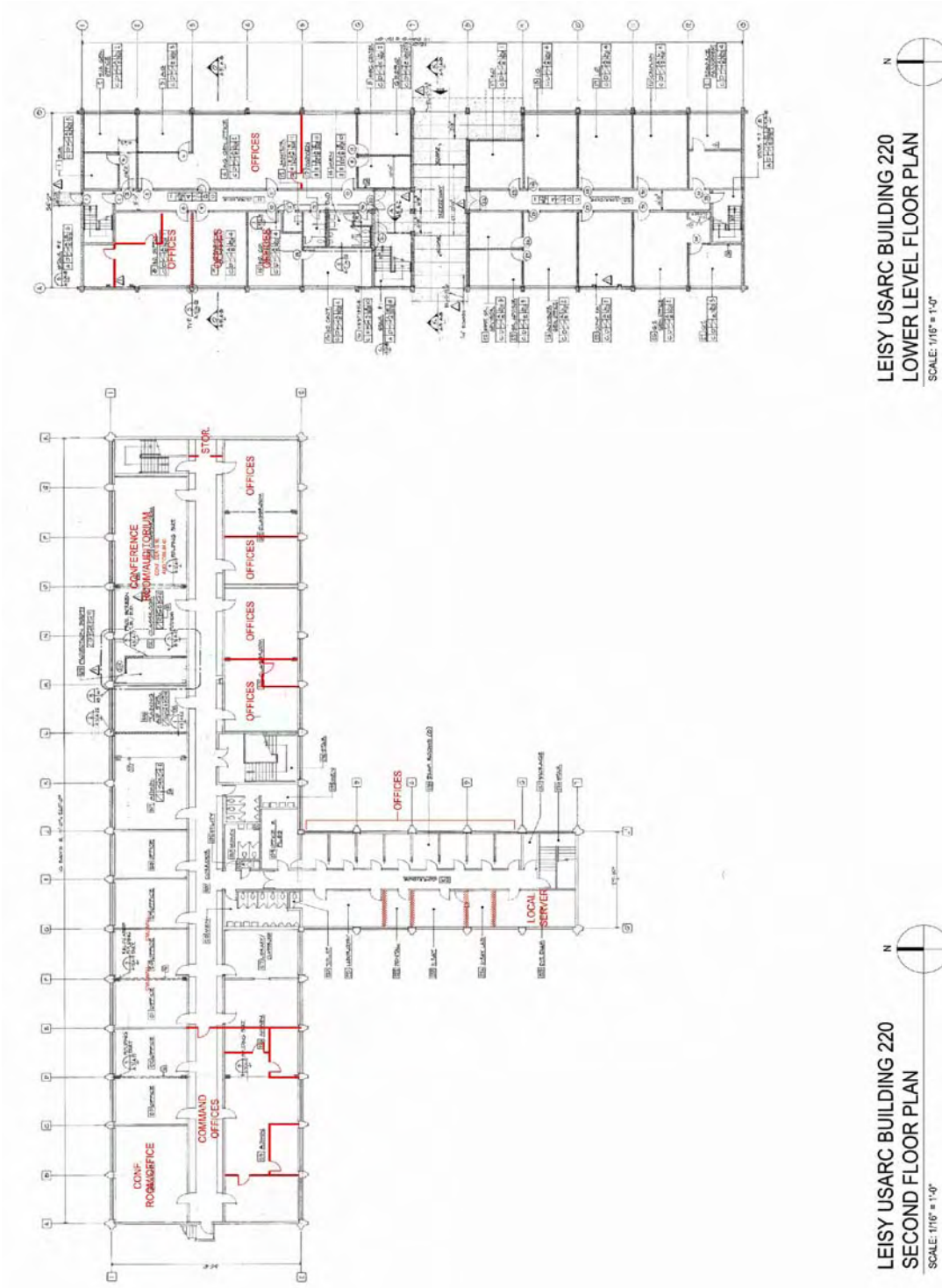


Figure 18: Leisy USARC Building 220 Second Floor Plan



**AMSA BUILDING 222 – Maintenance Shop for Vehicles**

The AMSA Building 222 is single story precast concrete column and steel joist structure with precast concrete panels that was constructed in 1970. It is exactly the same in appearance and construction as the Leisy USARC Building 220. The building has a footprint of approximately 6,468 sq ft.

• **Interior:**

The interior wall finishes are painted gypsum wall board and painted concrete. Vinyl tile and concrete are used for the interior floor finishes. The ceiling is exposed to the steel joists and metal decking. Both wood and metal doors are used in the interior.

• **Exterior:**

The site slopes from the east up to the west. A large parking lot surrounds the north and west sides of the building. White concrete columns, precast aggregate concrete panels, and a built up roof system with a ballast create the exterior of the building. They appear to be in good condition. The west elevation has a series of roll up metal doors, whereas the east elevation has several clerestory windows. The metal doors and windows seem to be in good condition.

• **Mechanical:**

The building is heated by baseboard and wall mounted heaters. The lighting system is fluorescent lighting strips and ceiling hung fixtures.



Figure 19: View of AMSA Building 222 East and North Elevation

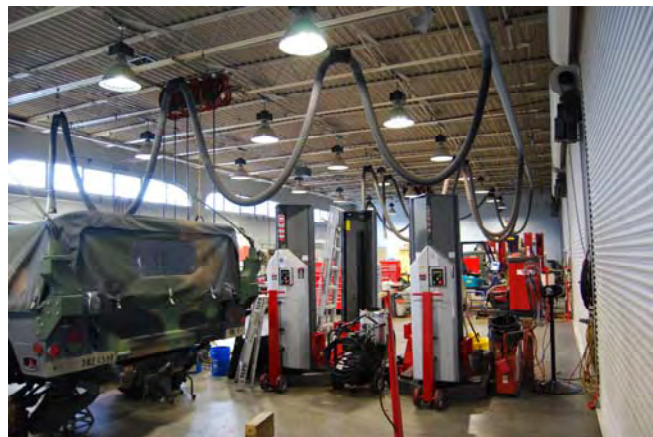


Figure 20: View of AMSA Building 222 Truck Bay

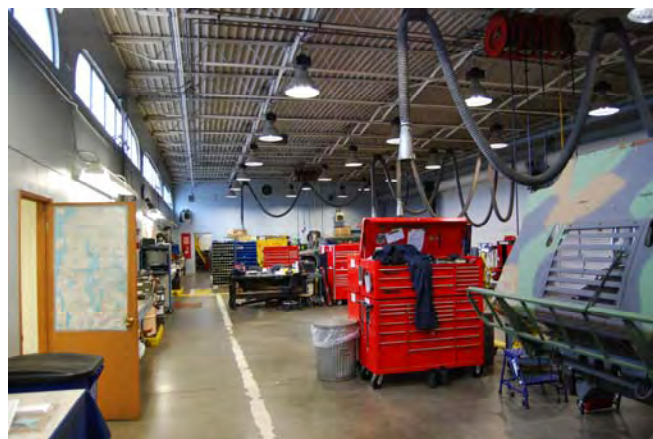


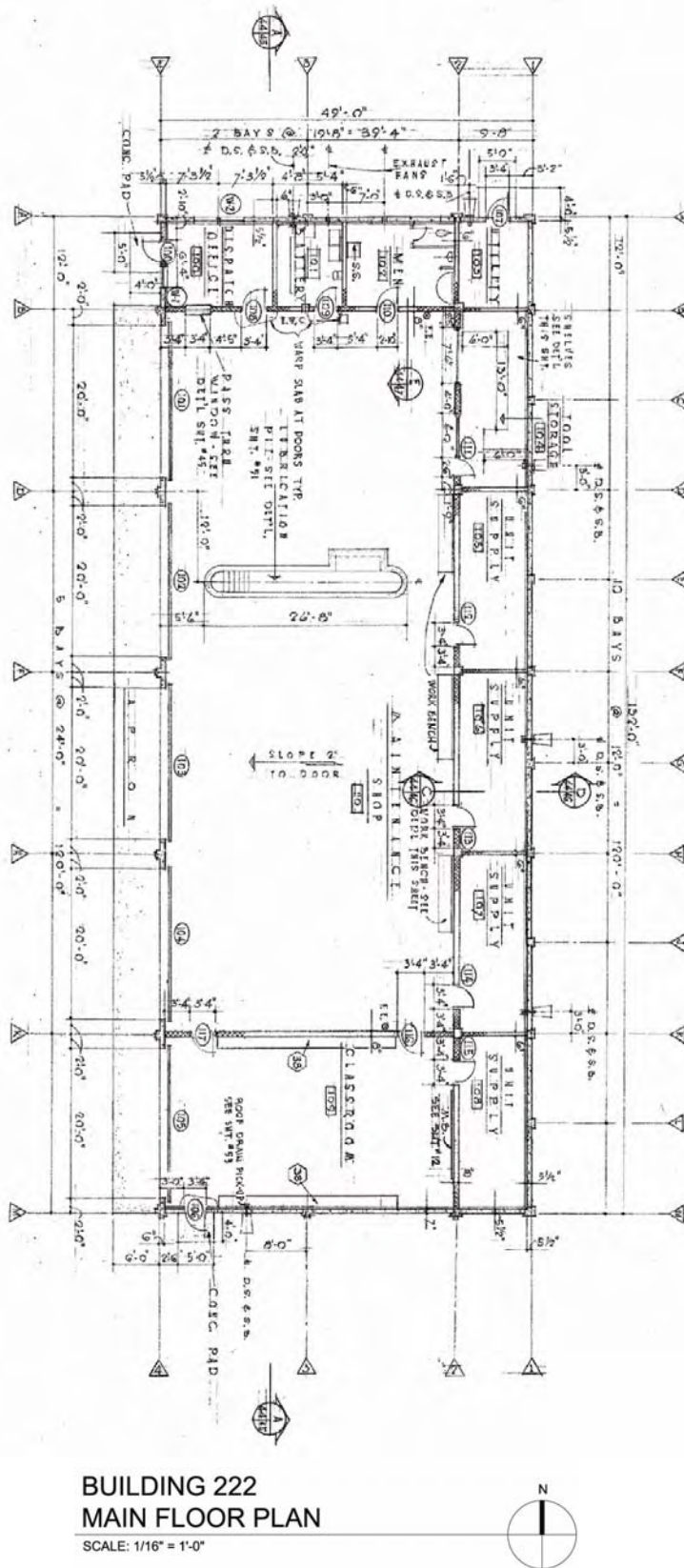
Figure 21: View of AMSA Building 222 Truck Bay

**Building Assessment Summary**

<u>Name</u>	<u>Use Description</u>	<u>Year Built</u>	<u>Total Area (Gross sf)</u>	<u>Condition</u>
AMSA Building 222	Maintenance Shop	1970	6,468 sf	Good



Figure 22: AMSA Building 222 Floor Plan





# Appendix E

## Infrastructure Study



# Memo

**To:** Rob Lloyd, EDAW, Inc.  
**From:** Max Craddock, P.E.  
**CC:** Jay Decker, P.E.  
**Date:** 6/3/2008  
**Re:** Existing Sewer & Water Capacity Investigation - Fort Lawton, Seattle

Mr. Lloyd:

We have completed our capacity investigation of sanitary sewer and water systems currently serving the Fort Lawton property in Seattle, Washington. The results are as follows:

A single 8" sewer currently carries all sanitary flows from the site to a 144" Metro sewer trunk line about 415 feet to the north in Commodore Way. We expect the flow capacity of the 8" sewer to be approximately 2.0 million gallons per day.

We have calculated a hypothetical sewer demand loading based on the development program you provided. The program included 55 senior housing units, a commercial kitchen, 90 three-bedroom townhomes, an 80,000 square foot office building and 150 2-3 bedroom single-family homes. Given these conditions, we calculate a total sewer demand of 0.12 million gallons per day.

We have included a detailed breakdown of our analysis methodology in the appendix to this memo.

We are unable to make a determination of the capacity of the the potable water system serving the property without testing the existing system for pressure and flow rate. There is no current record of pressure and flow testing for water mains in the vicinity. The record of recent construction at Fort Lawton indicates that the property is served by a 12" water main which should provide a high level of service given that sufficient water pressure is present.

It has been our pleasure to assist you in this project. Please do not hesitate to contact either Jay Decker or myself if there is any other way we can be of assistance.

Sincerely,



Max Craddock, P.E.

---

**APPENDIX:**

**Existing Sanitary Sewer Capacity and Hypothetical Sewer Demand Calculations**

## Ft. Lawton Existing Sewer Capacity Determination

Bush, Roed & Hitchings, Inc.

May 28, 2008

### EXISTING CONDITIONS

8" diameter sewer (assumed concrete) exits sewer manhole 27, SSMH 27, at north side of site and connects to 144" Metro sewer trunk in Commodore Way. This is the only existing sewer drain from the site. To determine available sewer capacity for future development it will be necessary to know the capacity of this single sewer drain. Known details regarding this length of sewer are as follows:

Per 8/14/2000 as-built drawing for Ft. Lawton USARC/OMS

Sheet C3.9 - Sanitary Sewer Plan and Profile:

SSMH 27

Top EL = 101.04

IE 8" N = 85.76

IE 8" S = 85.89

Per City of Seattle Sewer Card 2712-7 after drawing 860-27(?)

SSMH 27

Top EL = 95.6

IE = 81.5

### DETERMINATION OF SEWER SLOPE

Due to difference in vertical datum used when SSMH 27 details were recorded, the approximate slope of pipe will be determined based on existing change in surface elevation from SSMH 27 to the 144" Metro sewer trunk and the distance between SSMH 27 and the trunk. Change in elevation will be determined by 2-foot contour mapping of the area created by the Seattle Department of Planning and Development (DPD).

~ Distance D = 415 feet

~ Change in Surface Elevation  $\Delta e$  = 53 feet

~ Slope of pipe S =  $53/415 = 0.13 = 13\%$

### CALCULATION OF SEWER CAPACITY

Using Manning's Equation

$n = 0.013$  (avg. value for concrete pipe)

$S = 0.13$

$A = 0.3526 \text{ ft}^2$

$R = 0.1675 \text{ feet}$

$Q_{\text{full}} = 4.42 \text{ cfs}$

• Q full is adjusted for 70% full pipe,  $d/D = 0.7$  (for sewer design Civil Eng. Ref. Manual, 10<sup>th</sup> Ed.)

$Q/Q_{\text{full}} = 0.71$

$0.71 * 4.42 \text{ cfs} = 3.14 \text{ cfs} = 2.0 \text{ MGD}$



8" SANITARY OUTLET CAPACITY ANALYSIS

BY MANNING'S

$$Q = \frac{1.49}{n} AR^{2/3} \sqrt{S}$$

$$S = 0.13$$

$$n = 0.013 \text{ (AVG. FOR CONC PIPE)}$$

$$A = \frac{\pi}{4} d^2 = \frac{\pi}{4} (0.67')^2 = 0.3526 \text{ ft}^2$$

$$R = \frac{A}{P}, \quad P = \pi d = \pi (0.67') = 2.105'$$
$$= \frac{0.3526 \text{ ft}^2}{2.105 \text{ ft}}$$
$$= 0.1675 \text{ ft}$$

$$Q = \left( \frac{1.49}{0.013} \right) (0.3526) (0.1675)^{2/3} \sqrt{0.13}$$
$$= 4.42 \text{ cfs (FULL FLOWING)}$$

70% DEPTH ADJUSTMENT FOR SANITARY CAPACITY ANALYSIS (ASCE)

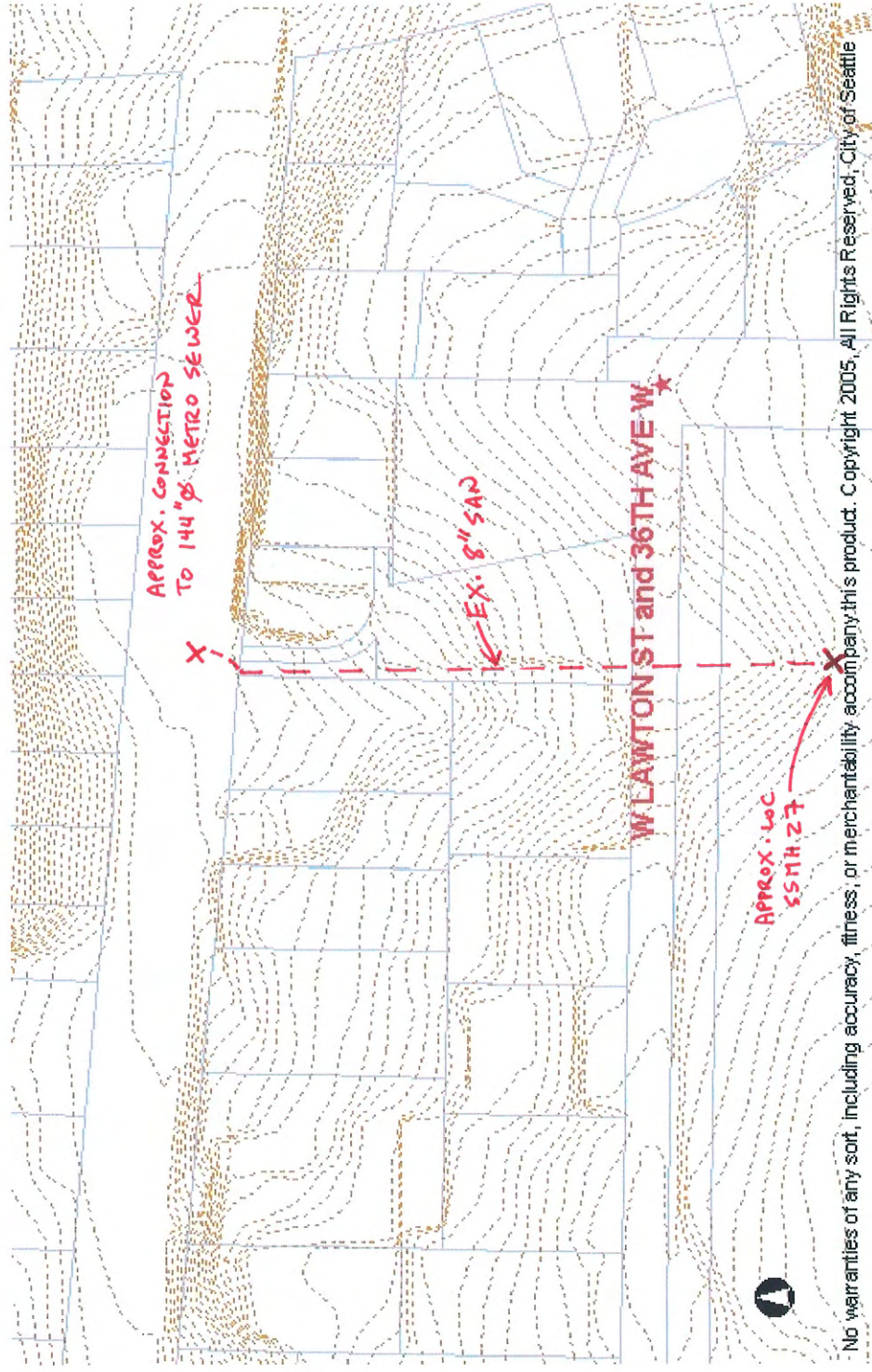
$$\frac{d}{D} = 0.7 \Rightarrow \frac{Q}{Q_{full}} = 0.71$$

$$Q = (0.71) Q_{full} = 0.71 (4.42 \text{ cfs})$$
$$= 3.14 \text{ cfs} = \underline{\underline{2.0 \text{ MGD}}}$$



City of Seattle: DPD GIS MAP - 5/28/2008

FT. LAWTON SANITARY OUTLET PIPE SLOPE DETERMINATION



No warranties of any sort, including accuracy, fitness, or merchantability accompany this product. Copyright 2005, All Rights Reserved, City of Seattle

Legend


Two Foot Contours

Parcels

APPROX. LENGTH OF 8" SAN = 415'  
 " CHANGE IN ELEV. = 53'  
 PIPE SLOPE =  $\frac{53'}{415'} = 12.8\%$

Notes:

<a href="#">SEATTLE.GOV</a>	<a href="#">City Services</a>	<a href="#">Departments</a>	<a href="#">Staff Directory</a>	<a href="#">About Seattle</a>	<a href="#">City Contacts</a>
-----------------------------	-------------------------------	-----------------------------	---------------------------------	-------------------------------	-------------------------------

**SEATTLE.GOV**  
Greg Nickels, Mayor

SEARCH: \_\_\_\_\_ Go

[Home](#) | [About Us](#) | [Contact Us](#)

**Department of Planning and Development**  
*Shaping and protecting Seattle's built and natural environment*

[Permits](#) | [Planning](#) | [Research](#) | [Enforcement](#) | [Publications](#) | [Codes](#) | [Notices](#) | [News](#)

*Diane Sugimura, Director*

DPD / Research

## SIDE SEWER CARDS & MAPS

### 3614 W LAWTON ST

[Search Again](#)

Side sewer cards from 2001 are available as large JPEG images. A high-speed connection (e.g., cable or DSL), is highly recommended if you wish to download these cards.

The JPEG image displayed in your browser window may be too large to print on 8.5-by-11-inch paper. We recommend that you right-click the image, select **Save Picture As**, and save the image to a location on your local computer. You can then open the card in the image viewer of your choice and resize as necessary. Alternatively, you can choose a larger paper size (11-by-17-inch recommended) in your browser's **Print** dialog box.

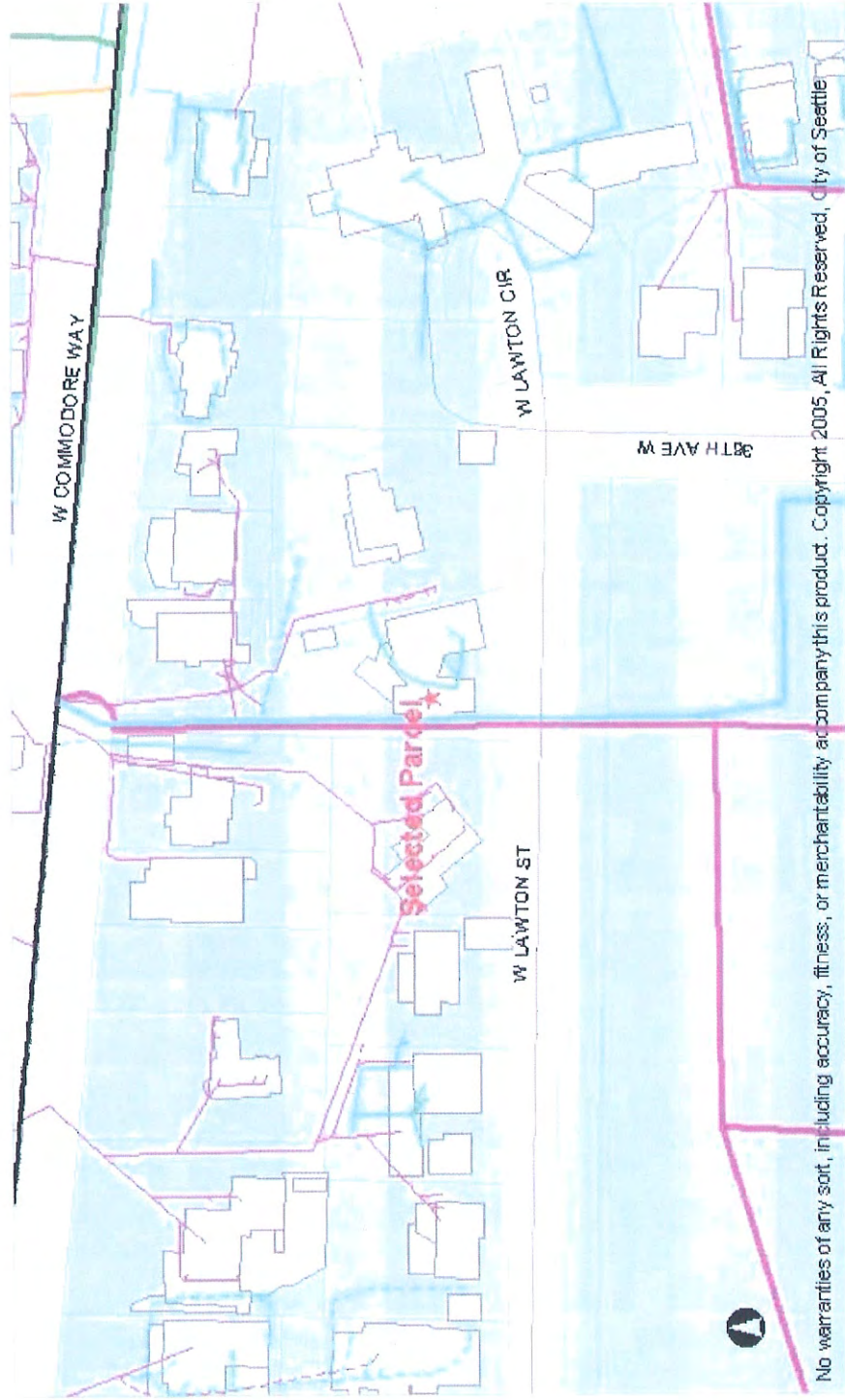
**Recommended Side Sewer Card(s):**

- Card# 3725-4 [View Card Front](#) - [Back](#)
- Card# 3725-2 [View Card Front](#) - [Back](#)

**Other Side Sewer Cards That May Be Related To Your Search** (may include repeated data from above results):

- Card# 2712-7 [View Card Front](#) - [Back](#)
- Card# 3725-4 [View Card Front](#) - [Back](#)
- Card# 3725-2 [View Card Front](#) - [Back](#)
- Card# 3725-3 [View Card Front](#) - [Back](#)

[Search Again](#)



Legend

- State Highway
- Interstate Freeway
- Residential
- Arterial
- Drainage Mainline
- Sanitary Mainline
- Combined Mainlines
- Metro Mainline
- Drainage Lateral
- Side Sewer
- Drainage Lateral (not inspected)
- Side Sewer (not inspected)
- Buildings
- Parcel

Department of Planning and Development (DPD)

[DPD Home](#) | [About DPD](#) | [Contact DPD](#) | [Search DPD](#)

[Seattle.gov: Services](#) | [Departments](#) | [Staff Directory](#) | [Mayor](#) | [City Council](#)

Copyright © 1995-2005 City of Seattle

[Questions/Complaints](#) | [Privacy & Security Policy](#)



CARD NO. 2712-7  
End

KC Short Plat 83-601



City of Seattle 2712-7

11/08/01

5-12-95 9  
LAWTON LANE ADD. S

36<sup>TH</sup> AVE. W.

W. LAWTON ST.

LAWTON LANE W.

W. LAWTON ST.

12" storm (U.S. Army)

123 MH

344 NH

Army storm  
109.6  
103.2  
(per 83-27)  
8<sup>th</sup> Army 540  
LAWTON  
See Dwg. # 860-27  
11/10/01

PLAN NOS

L. I. D.'s

BOOK

GRAD.

SEWER

C.W.

P.V.

18" storm  
U.S. Army  
109.6  
103.2  
(per 83-27)  
8<sup>th</sup> Army 540

U.S. Army

123 MH

344 NH

## Sewer Demand for Ft. Lawton Hypothetical Development Program

Bush, Roed & Hitchings, Inc.  
May 23, 2008

### PROGRAM CHARACTERISTICS (EDAW)

- 55 senior housing apartments, 1 bath each
- Commercial kitchen, 3 meals/day for 65 persons
- Ninety(90) 3 bdrm townhomes, 1800 sf, avg. 2 bath
- 80k sf office building (FLARC)
- 150 2-3 bedroom single-family homes, avg. 3 bath

**TOTAL PROGRAM SEWER DEMAND = 117,250 GPD**

### CALCULATIONS:

#### SINGLE-FAMILY RESIDENTIAL SEWER DEMAND

- WAC 246-272A-0230
- King County Board of Health Code Title 13: On-Site Sewage

Design flow  $Q_{\text{design}}$  for single family residences from King County  
= 150 gal/ bdrm-day up to 3 bdrms (add 1 bdrms at 120 gal/ bdrm-day)  
(Flow rate used exceeds WAC flow rate with Washington State added surge factor of 0.33)

Single-Family Home Demand  
= (150 units)(2.5 bdrm)(150 gal/bdrm-day), avg. value used for bedrooms per unit  
= **56,250 GPD**

**Total Single-Family Residential Demand**  
= **56,250 GPD**

#### NON SINGLE-FAMILY RESIDENTIAL SEWER DEMAND

- WAC 246-272A-0230
- "Onsite Wastewater Treatment Systems Manual", EPA/625/R-00/008 – Chapter 3, February 2002
- King County Board of Health Code Title 13: On-Site Sewage

Senior Housing Apartment Demand  
Per EPA (80 gal/unit-day is upper range of observed values):  
= (55 units)(80 gal/unit-day)  
= **4,400 GPD**

Commercial Kitchen Demand

Per King County:

= (65 seats)(50 gal/seat·day)

= **3,250 GPD**

Townhome Demand

Per King County:

= (90 units)(3 bdrm)(2 person/bdrm)(75 gal/ person·day)

= **40,500 GPD**

---

Office Building Demand

Per EPA

= (80,000 sq. ft.)(assuming 1 employee/100 sq. ft.)(16 gal/ employee·day)

= **12,800 GPD**

**Total = 60,950 GPD**

**TOTAL PROGRAM SEWER DEMAND**

Single Family Residential Demand

56,250 GPD

Non Single Family Residential Demand

60,950 GPD

**117,200 GPD**



## Jay D. Decker

---

**From:** Lloyd, Rob [Rob.Lloyd@edaw.com]  
**Sent:** Tuesday, May 20, 2008 12:11 PM  
**To:** Jay D. Decker  
**Subject:** Fort Lawton Sewer capacity

Jay,

Following up on our phone call I am sending a hypothetical program for Fort Lawton Housing Units.

Just to test capacity, use the following mix of program:

- ✓ A. 55 Senior housing apartments, one bathroom each, common commercial kitchen producing 3 meals/day for 65 people
- ✓ B. 90 3 br townhomes 1800sf each, avg. 2 bath
- ✓ C. 80k sf existing office building (FLARC)
- ✓ D. 150 2-3 bedroom homes, avg. 3 bath.

We would be interested in knowing what the major capacity thresholds would be in terms of numbers which would trigger major upgrades.

Please let me know if you have questions about this.

Regards,

Rob

Rob Lloyd  
Associate  
Urban Designer, LEED AP

EDAW Inc  
815 Western Avenue, Suite 300 Seattle, WA 98104  
T 206.622.1176 F 206.343.9809  
Direct 206.267.7758

How To Use This Site | About Us | Contact Us | Search

SF RES  
DESIGN FLOW RATES  
w/ REFERENCE TO  
EPA FOR NON  
SF-RES DESIGN  
FLOWS.

Legislature Home | Senate | House of Representatives  
[Print Version](#) | [No está disponible en español](#)

WACs > Title 246 > Chapter 246-272A > Section 246-272A-0230  
[246-272A-0220](#) << [246-272A-0230](#) >> [246-272A-0232](#)  
[Washington State Register filings since 2003](#)

WAC 246-272A-0230  
**Design requirements — General.**

(1) On-site sewage systems may only be designed by professional engineers, licensed under chapter 18.43 RCW or on-site sewage treatment system designers, licensed under chapter 18.210 RCW, except:

(a) If at the discretion of the local health officer, a resident owner of a single-family residence not adjacent to a marine shoreline is allowed to design a system for that residence; or

(b) If the local health officer performs the soil and site evaluation, the health officer is allowed to design a system.

(2) The designer shall use the following criteria when developing a design for an OSS:

(a) All sewage from the building served is directed to the OSS;

(b) Sewage tanks have been reviewed and approved by the department;

(c) Drainage from the surface, footing drains, roof drains, subsurface stormwater infiltration systems, and other nonsewage drains is prevented from entering the OSS, the area where the OSS is located, and the reserve area;

(d) The OSS is designed to treat and disperse the sewage volume as follows:

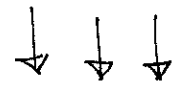
(i) For single-family residences:

(A) The operating capacity is based on 45 gpd per capita with two people per bedroom.

(B) The minimum design flow per bedroom per day is the operating capacity of ninety gallons multiplied by 1.33. This results in a minimum design flow of one hundred twenty gallons per bedroom per day.

(C) A factor greater than 0.33 to account for surge capacity may be required by the local health officer.

(D) The local health officer may require an increase of the design flow for dwellings with anticipated greater flows, such as larger dwellings.



Inside the Legislature

\* Find Your Legislator

\* Visiting the Legislature

\* Agendas, Schedules and Calendars

\* Bill Information

\* Laws and Agency Rules

\* Legislative Committees

\* Legislative Agencies

\* Legislative Information

\* Center

\* E-mail Notifications (Listserv)

\* Students' Page

\* History of the State Legislature

Outside the Legislature

\* Congress - the Other Washington

\* TV Washington

\* Washington Courts

\* OFM Fiscal Note Website



(E) The minimum design flow is two hundred forty gallons per day.

(ii) For other facilities, the design flows noted in "On-site Wastewater Treatment Systems Manual," USEPA, EPA-625/R-00/008, February 2002 (available upon request to the department) shall be used. Sewage flows from other sources of information may be used in determining system design flows if they incorporate both an operating capacity and a surge capacity.

(e) The OSS is designed to address sewage quality as follows:

(i) For all systems, the designer shall consider:

(A) CBOD<sub>5</sub>, TSS, and O&G;

(B) Other parameters that can adversely affect treatment anywhere along the treatment sequence. Examples include pH, temperature and dissolved oxygen;

(C) The sensitivity of the site where the OSS will be installed. Examples include areas where fecal coliform constituents can result in public health concerns, such as shellfish growing areas, designated swimming areas, and other areas identified by the local management plan required in WAC 246-272A-0015.

(D) Nitrogen contributions. Where nitrogen has been identified as a contaminant of concern by the local management plan required in WAC 246-272A-0015, it shall be addressed through lot size and/or treatment.

(ii) For OSS treating sewage from a nonresidential source, the designer shall provide the following information:

(A) Information to show the sewage is not industrial wastewater;

(B) Information regarding the sewage quality and identifying chemicals found in the sewage that are not found in sewage from a residential source; and

(C) A site-specific design providing the treatment level equal to that required of sewage from a residential source;

(f) The vertical separation to be used to establish the treatment levels and application rates. The selected vertical separation shall be used consistently throughout the design process.

(g) Treatment levels:

(i) Requirements for matching treatment component and method of distribution with soil conditions of the soil dispersal component are listed in Table VI. The treatment levels correspond with those established for treatment components under the product performance testing requirements in Table III of WAC 246-272A-0110. The method of distribution applies to the soil dispersal component.

(ii) Disinfection may not be used to achieve the fecal coliform requirements to meet:

(A) Treatment levels A or B in Type 1 soils; or

(B) Treatment level C.

KING COUNTY BOARD OF HEALTH CODE  
TITLE 13 - ON-SITE SEWAGE

13.28.070

B. Where marginal soil conditions exist, the health officer may require that additional investigation be conducted.

C. Where there is evidence of high winter water table or shallow restrictive layer, the health officer may require that additional testing or monitoring be conducted to verify water table levels. The applicant's plan for conducting such testing shall be specified in a water table monitoring plan which shall be submitted no later than January first, to allow adequate time to monitor and evaluate the seasonal water table. If not a part of a full site design application submission the plan shall be accompanied by a fee as specified in the fee table. The health officer shall render a decision on the acceptability of the results of the seasonal high water table testing or monitoring within twelve (12) months of receiving the application, contingent upon presence of precipitation conditions typical for the region.

(R&R No. 99-01 § 2 (part), 3-19-99; R&R No. 3 Part 4 § 6, 12-19-86)

13.28.070 Required absorption area.

A. Single-family Dwellings. For design purposes one hundred fifty (150) gallons/bedroom/day shall be utilized in determining unit volume with a minimum of three (3) bedrooms. For each additional bedroom OSS designs must use at least an additional one hundred twenty (120) gallons/bedroom/day. Loading rates shall be determined according to soil texture type as outlined in Table 13.28-4.

**Table 13.28-4  
Maximum Hydraulic Loading Rate For Residential Sewage<sup>1</sup>**

Soil Type	Soil Textural Classification Description	Loading Rate gal./sq. ft./day
1A	Very gravelly <sup>2</sup> coarse sands or coarser, extremely gravelly <sup>3</sup> soils	1.2 <sup>4</sup>
1B	Very gravelly medium sands, very gravelly fine sands, very gravelly very fine sands, very gravelly loamy sands	Varies according to soil type of the non-gravel portion <sup>5</sup>
2A	Coarse sands	1.2
2B	Medium sands	1.0
3	Fine sands, loamy coarse sands, loamy medium sands	0.8
4	Very fine sands, loamy fine sands, loamy very fine sands, sandy loams, loams	0.6 <sup>6</sup>
5	Silt loams that are porous and have well developed structure	0.45 <sup>6,7</sup>

[Table 13.28-4 Explanatory Notes Follow on Next Page]

**Table 13.28-4  
Explanatory Notes**

1. Compacted soils, cemented soils, and/or poor soil structure may require a reduction of the loading rate or render the soil unsuitable for OSS.

2. Very Gravelly = >35% and <60% gravel and coarse fragments, by volume.

3. Extremely Gravelly = >60% gravel and coarse fragments, by volume.

4. Due to the highly permeable nature of type 1A soil, only alternative systems which meet or exceed treatment standard 2 may be installed.

5. The loading rate listed for the soil type present in the non-gravel portion is to be used for calculating the minimum absorption area required. The value is to be determined from this table.

6. OSS installed in soil texture type 4 and type 5 shall be constructed during dry weather and dry soil conditions to minimize compaction and smearing during excavation.

7. SSAS in soil type 5 must utilize pressure distribution.

**B. Buildings Other than Single-family Residences.**

1. The owner shall file a covenant agreeing that the property will remain under one (1) ownership for all commercial developments not classified as community systems.

2. Required absorption area must be determined by using one of the following methods:

a. By using the figures given in Table 13.28-5, then using the appropriate application rate from Table 13.28-4; or

b. By determining average water meter readings for one (1) year from at least three (3) similar establishments and adding a minimum safety factor of fifty percent (50%).

3. The minimum SAS area must be two hundred (200) square feet.

**Table 13.28-5**

Type of Establishment <sup>1</sup>	Gallons Per Person Per Day
Multiple Family Dwelling (per person – 2 per bedroom – Minimum of 2 bedrooms per unit)	75
Factories, office buildings, etc. (add 100 gallons/day for each utility sink per shift; food service not included)	20
Food Service Establishments – with food preparation	50 (gallons per seat)
Taverns – no food preparation (estimate patrons per day and add 15 gallons/employee)	5
[Table continues on Next Page]	

Table 13.28-5 (Continued)

Type of Establishment <sup>1</sup>	Gallons Per Person Per Day
Mobile Home Parks (figure minimum 3 bedrooms, 2 people per bedroom)	75
Resort Camps	50
Work or Construction Camps	50
Day Camps (no meals served)	15
Swimming Pools and Bathhouse (sanitary facilities only)	15
Country Clubs (per member present, add 15 gallons/day per employee)	130
Motels with kitchen (figure 2 persons per bed space)	50
Motels (figure 2 persons per bed space)	40
Drive-in Theaters (per car space)	10
Theaters (per auditorium seat)	5
Airports (per passenger)	5
Retail Stores (per toilet room for customer use)	650
Retail Stores (per employee per shift – add 100 gallons/day for each utility sink)	15
Service Stations (per vehicle served)	15
Churches without kitchen (seating capacity)	5
Churches with kitchen (seating capacity)	15
Recreational Vehicle Parks (without sewer and water hookups – with central toilets and showers – per space)	50
Recreational Vehicle Parks (with sewer and water hookups – with central toilets and showers – per space)	100
Boarding Houses	50
Campgrounds (with central comfort station – with flush toilets and showers – per space)	50
Campground (with central comfort station – without showers – per space)	25
Picnic Parks (flush toilets only – per person)	5
Picnic Parks (with flush toilets – bathhouse and showers – per person)	10
[Table continues on Next Page]	

Table 13.28-5 (Continued)

Type of Establishment <sup>1</sup>	Gallons Per Person Per Day
<p>For uses not listed in this table, the upper range values in <i>Design Manual: On-Site wastewater Treatment and Disposal Systems</i>, United States Environmental Protection Agency, EPA-625/1-80-012, October, 1980 shall be used. If the type of facility is not listed in the EPA design manual, design flows from one of the following shall be used:</p> <p>(A) <i>Design Standards for Large On-site Sewage Systems</i>, 1993, Washington State Department of Health (available upon request to the department); or</p> <p>(B) <i>Criteria for Sewage Works Design</i>, revised October 1985, Washington State Department of Ecology (available upon written request to the department of ecology).</p>	

1. For buildings other than single-family residences the requirements of Section 13.28.020(B) shall be met.

(R&R No. 99-01 § 2 (part), 3-19-99; R&R No. 3 Part 4 § 7, 12-19-86)

### Chapter 13.32

#### BUILDING SEWERS

##### Sections:

- 13.32.010 General.
- 13.32.020 Pipe specifications.
- 13.32.030 Joints and grading.
- 13.32.040 Pipe bends.
- 13.32.050 Cleanouts.
- 13.32.060 Minimum horizontal separation.

##### 13.32.010 General.

Construction, materials, distance separations and other specifications shall be as set out in this chapter. (R&R No. 99-01 § 2 (part), 3-19-99; R&R No. 3 Part 5 § 1(A), 12-19-86)

##### 13.32.020 Pipe specifications.

Pipe for constructing the building sewer shall be a minimum of four inches (4") inside diameter and be cast-iron or plastic composition which complies with the current King County Plumbing Code. Polyvinyl chloride pipe shall comply with American Society of Testing Materials (ASTM) specification D-3034 as a minimum. (R&R No. 99-01 § 2 (part), 3-19-99; R&R No. 3 Part 5 § 1(A) (1), 12-19-86)

One of the more important wastewater-generating flows identified in this study was water leakage from plumbing fixtures. The average per capita leakage measured in the REUWS was 9.5 gallons/ person/day (35.0 liters/person/day). However, this value was the result of high leakage rates at a relatively small percentage of homes. For example, the average daily leakage per household was 21.9 gallons (82.9 liters) with a standard deviation of 54.1 gallons (204.8 liters), while the median leakage rate was only 4.2 gallons/house/day (15.9 liters/house/day). Nearly 67 percent of the homes in the study had average leakage rates of less than 10 gallons/day (37.8 liters/day), but 5.5 percent of the study homes had leakage rates that averaged more than 100 gallons (378.5 liters) per day. Faulty toilet flapper valves and leaking faucets were the primary sources of leaks in these high-leakage-rate homes. Ten percent of the homes monitored accounted for 58 percent of the leakage measured. This result agrees with a previous end use study where average leakage rates of 4 to 8 gallons/ person/day (15.1 to 30.3 liters/person/day) were measured (Brown and Caldwell, 1984). These data point out the importance of leak detection and repair during maintenance or repair of onsite systems. Leakage rates like those measured in the REUWS could significantly increase the hydraulic load to an onsite wastewater system and might reduce performance.

**Maximum daily and peak flows**

Maximum and minimum flows and instantaneous peak flow variations are necessary factors in properly sizing and designing system components. For example, most of the hydraulic load from a home occurs over several relatively short periods of time (Bennett and Lindstedt, 1975; Mayer et al., 1999; University of Wisconsin, 1978). The system should be capable of accepting and treating normal peak events without compromising performance. For further discussion of flow variations, see section 3.3.3.

**3.3.2 Nonresidential wastewater flows**

For nonresidential establishments typical daily flows from a variety of commercial, institutional, and recreational establishments are shown in tables 3-4 to 3-6 (Crites and Tchobanoglous, 1998; Tchobanoglous and Burton, 1991). The typical values presented are not necessarily an average of the range of values but rather are weighted values based on the type of establishment and expected use. Actual monitoring of specific wastewater flow and characteristics for nonresidential establishments is strongly recommended. Alternatively, a similar establishment located in the area might provide good information. If this approach is not feasible, state and local regulatory agencies should be consulted for approved design flow guidelines for nonresidential establishments. Most design flows provided by regulatory agencies are very conservative estimates based on peak rather than average daily flows. These agencies might accept only their established flow values and therefore should be contacted before design work begins.

**Table 3-4. Typical wastewater flow rates from commercial sources<sup>a,b</sup>**



Facility	Unit	Flow, gallons/unit/day		Flow, liters/unit/day	
		Range	Typical	Range	Typical
Airport	Passenger	2-4	3	8-15	11
Apartment house	Person	40-80	50	150-300	190
Automobile service station <sup>c</sup>	Vehicle served Employees	8-15 9-15	12 13	30-57 34-57	45 49
Bar	Customer Employees	1-5 10-16	3 13	4-19 38-61	11 49
Boarding house	Person	25-60	40	95-230	150
Department store	Toilet room Employee	400-600 8-15	500 10	1,500-2,300 30-57	1,900 38
Hotel	Guest Employee	40-60 8-13	50 10	150-230 30-49	190 38
Industrial building (sanitary waste only)	Employee	7-16	13	26-61	49
Laundry (self-service)	Machine Wash	450-650 45-55	550 50	1,700-2,500 170-210	2,100 190
Office	Employee	7-16	13	26-61	49
Public lavatory	User	3-6	5	11-23	19
Restaurant (with toilet) Conventional Short order Bar/cocktail	Meal Customer	2-4	3	8-15	11
	Customer	8-10	9	30-38	34
	Customer	3-8	6	11-30	23
	Customer	2-4	3	8-15	11

lounge						
Shopping center	Employee Parking Space	7-13 1-3	10 2	26-49 4-11	38 8	
Theater	Seat	2-4	3	8-15	11	

<sup>a</sup>Some systems serving more than 20 people might be regulated under USEPA's Class V Underground Injection Control (UIC) Program. See <http://www.epa.gov/safewater/uic.html> for more information.

<sup>b</sup>These data incorporate the effect of fixtures complying with the U.S. Energy Policy Act (EPACT) of 1994.

<sup>c</sup>Disposal of automotive wastes via subsurface wastewater infiltration systems is banned by Class V UIC regulations to protect ground water. See <http://www.epa.gov/safewater/uic.html> for more information.

Source: Crites and Tchobanoglous, 1998.

**Table 3-5. Typical wastewater flow rates from institutional sources<sup>a</sup>**

Facility	Unit	Flow, gallons/unit/day		Flow, liters/unit/day	
		Range	Typical	Range	Typical
Assembly hall	Seat	2-4	3	8-15	11
Hospital, medical	Bed	125-240	165	470-910	630
	Employee	5-15	10	19-57	38
Hospital, mental	Bed	75-140	100	280-530	380
	Employee	5-15	10	19-57	38
Prison	Inmate	80-150	120	300-570	450
	Employee	5-15	10	19-57	38
Rest home	Resident	50-120	90	190-450	340
	Employee	5-15	10	19-57	38
School, day-only:					

With cafeteria, gym, showers	Student	15-30	25	57-110	95
With cafeteria only	Student	10-20	15	38-76	57
Without cafeteria, gym, or showers	Student	5-17	11	19-64	42
School, boarding	Student	50-100	75	190-380	280

<sup>a</sup>Systems serving more than 20 people might be regulated under USEPA's Class V UIC Program. See <http://www.epa.gov/safewater/uic.html> for more information.

Source: Crites and Tchobanoglous, 1998.

**Table 3-6. Typical wastewater flow rates from recreational facilities<sup>a</sup>**

Facility	Unit	Flow, gallons/unit/day		Flow, liters/unit/day	
		Range	Typical	Range	Typical
Apartment, resort	Person	50-70	60	190-280	230
Bowling alley	Alley	150-250	200	570-950	780
Cabin, resort	Person	8-50	40	80-190	150
Cafeteria	Customer Employee	1-3 8-12	2 10	4-11 30-45	8 38
Camps: Pioneer type Children's, with central toilet/bath Day, with meals Day, without meals Luxury, private bath Trailer camp	Person Person Person Person Person Trailer	15-30 35-50 10-20 10-15 75-100 75-150	25 45 15 13 90 125	57-110 110 130-190 190 38-76 38-57 280-380 280-570	95 170 57 49 340 470
Campground-developed	Person	20-40	30	76-150	110



# Appendix F

## Transportation Study



# M E M O R A N D U M

**To:** Brian Scott, Michael Schuler and Rob Lloyd, EDAW  
**From:** Becca Aue and Thomas Brennan  
**Date:** July 18, 2008  
**Subject:** Fort Lawton Transportation and Circulation – Preferred Site Development Alternative

---

This memorandum provides a brief analysis of the transportation and circulation aspects of the preferred site development alternative for Fort Lawton in Seattle, Washington. The discussion is framed in the context of the guiding transportation and circulation principles outlined by the City of Seattle and the design team early in the process, and how the preferred alternative meets those goals.

- Goal 1:** Create Pedestrian Friendly and Safe Streets
- Goal 2:** Increase Connections to Local and Pedestrian Trails
- Goal 3:** Minimize Negative Traffic Impact of New Development on Existing Neighborhood Streets
- Goal 4:** Improve Government Way Entry to Site and Discovery Park
- Goal 5:** Improve Public Transit Service

## Site Layout and Pedestrian Orientation

Today pedestrian access within and around Fort Lawton is somewhat challenged by grades and design aimed at restricting pedestrian access, such as intermittent sidewalks in and around the site and chain link fencing parallel to 36<sup>th</sup> Ave. W. Yet walking in the area is comfortable due to low traffic volumes and connectivity with the Discovery Park trail system.

The preferred option is oriented around a primary north-south spine road bisecting the site; and creates new east-west links through the site, organizing the street grid in a traditional pattern well understood by motorists and pedestrians. Added sidewalks will fill in the gaps on W. Texas Way and on the west side of 36<sup>th</sup> Ave W., creating a seamless sidewalk network and eliminating the “blank wall” conditions that exist today on 36<sup>th</sup> Ave. W. encouraging drivers to speed. The option also makes use of alleyways to allow rear entry to residential parking, contributing to pedestrian safety by eliminating driveway crossings on street sidewalks, where back-up accidents are a common cause of pedestrian and child fatalities. The addition of new neighborhood parks and connected green streets will further enhance the pedestrian environment and provide gathering points for new and existing residents.

As a basic principal, all new streets will be designed to be safe and comfortable for pedestrians and cyclists.

## Recreational Access

The preferred site design provides improved access for neighborhoods east of the site to Discovery Park. The plan provides for new off-site trail connections should they be seen as a benefit to the Park. The addition of east-west streets will provide pedestrians safe and comfortable access to trails accessible from W. Texas Way. Improved sidewalks on W. Texas Way south of the site should be a priority as well, providing better pedestrian access to trailheads in the vicinity of W. Texas Way and W. Government Way.

Fort Lawton today is well-connected to the existing bicycle network. Bicycle lanes on W. Government Way and Gilman Ave. W. and shared roadways on other streets connect the site to the rest of Magnolia and Seattle and integrate into the larger city network of bike lanes and trails.

## Traffic Circulation and Impacts

Today vehicles access Fort Lawton primarily via W. Government Way and W. Texas Way. Access to Fort Lawton is segregated from adjacent neighborhoods to the east, which are accessible from 36<sup>th</sup> Ave W. Vehicular access is also possible, albeit less directly, via W. Texas Way and 40<sup>th</sup> Ave. W., which connects to residential areas to the north and W. Commodore Way.

Despite an east-west street grid connected to 36<sup>th</sup> Ave W., the preferred site option forces traffic accessing FLARC and the Fort Lawton redevelopment site to use W. Texas Way, effectively eliminating cut through traffic impacts on the neighborhood to the east. A new north-south street bisects the site and is designed for low-speed traffic, pedestrians and bicycles. The street is intended to provide internal access and circulation and appropriate design features should be used to discourage use by drivers traveling the full length of the site. Internal circulation is also enhanced over current conditions with the creation of new east-west connections between 36<sup>th</sup> Ave W. and Texas Way. New connected streets on the north of the site would allow local circulation from the new development and existing neighborhoods to use W. Texas Way to access W. Commodore, distributing traffic more evenly and minimizing negative traffic impacts of the new development on Government Way.

Although no official traffic counts are available from the City of Seattle for the major intersections surrounding the Fort Lawton site, the consultant team conducted two spot counts during the PM peak hour (4:30-5:30 PM), which estimated traffic volumes in the range of 1,600 to 2,000 vehicles daily.<sup>1</sup> Park uses accessed by W. Government Way suggest dramatic variations in traffic volumes occur based on day and time of year.

The preferred site option plans 194 to 216 new housing units. Adjusted estimates from the *Institute of Transportation Engineers Trip Generation Manual* were used to estimate the net change in traffic volumes at master plan build out compared to current conditions due to housing development, planned utilization of the Fort Lawton Army Reserve Center and the removal of military housing at Capehart. These estimates show that combined activities would lead to a net increase of 100 to 115 vehicle trips per PM peak hour. This equates to roughly an additional 1.5 to 2 cars per minute passing through the intersection at W. Texas Way/36<sup>th</sup> Ave NW and Government Way during this period. Realistically however, a small percentage of these new trips will enter and exit the site via the new connection to the north, decentralizing the impact of new generated traffic.

---

<sup>1</sup> Assumes PM peak hour represents 10% of daily traffic volume.



## Site Access from Government Way

The current five-point configuration of Government Way, Texas Way and 36<sup>th</sup> Ave W. creates an inefficient and confusing intersection. While low volumes today minimize safety or traffic issues related to the design, future growth in traffic could increase conflicts. The preferred site option improves the safety and function of this intersection by removing the connection to 36<sup>th</sup> Ave. W. This provides an opportunity to realign this intersection as a four-point intersection with streets meeting at 90 degree angles. This could be achieved by realigning 36<sup>th</sup> Ave W. south of Government Way to the west.

## Public Transit Service

Current public transit service to the site is very good given the relatively low level of residential density and site activity at Fort Lawton and FLARC. Added sidewalks along W. Texas Way and 36<sup>th</sup> Ave. W. will improve neighborhood access to nearby transit service. Buses currently run as frequently as every 15 minutes (peak times) on weekdays and customers in the area have optimal access to seats as the inbound King County Metro Route 33 initiates its run in the area. The projected increases in residential units and employee and visitor activity at the FLARC are not likely to merit additional peak hour service based solely on King County Metro service expansion standards. However, the overall site plan and uses, including projected FLARC expansion, may merit further investment in transit service frequency during off peak times.



# Appendix G

## Market Demand Study





FORT LAWTON  
REDEVELOPMENT.  
MAGNOLIA NEIGHBORHOOD  
CITY OF SEATTLE,  
WASHINGTON

Prepared for:

EDAW &  
CITY OF SEATTLE: OFFICE OF HOUSING

May 27, 2008

DRAFT REPORT  
NOT FOR PUBLICATION



# TABLE OF CONTENTS

---

I.	OVERVIEW/DESCRIPTION (FORT LAWTON AND MAGNOLIA NEIGHBORHOOD) .....	3
II.	EXECUTIVE SUMMARY OF FINDINGS .....	4
III.	MACROECONOMIC OUTLOOK (U.S.) .....	6
IV.	MICROECONOMIC OUTLOOK (SEATTLE/BELLEVUE/EVERETT MSA).....	9
V.	DEMOGRAPHIC COMPOSITION & PROJECTIONS (CENTRAL SEATTLE, MAGNOLIA) .....	14
VI.	LAND USE COMPOSITION ANALYSIS (MAGNOLIA).....	17
VII.	RESIDENTIAL/CONDOMINIUM MARKET ANALYSIS (CENTRAL SEATTLE & MAGNOLIA) .....	21
VIII.	GENERAL LIMITING CONDITIONS.....	31
IX.	COPYRIGHT INFORMATION .....	32
	EXHIBITS.....	33



## I. OVERVIEW/DESCRIPTION (FORT LAWTON AND MAGNOLIA NEIGHBORHOOD)

### Magnolia Neighborhood Area Overview



*Source: King County Assessor*

The Magnolia neighborhood, shown above in red, encompasses the 98199 zip code and is the westernmost neighborhood of the Central Seattle area. The Fort Lawton property is shown in white and is part of a Base Realignment and Closure (BRAC) program being conducted by the Department of Defense and the City of Seattle.

Magnolia is one of the oldest and most well established neighborhoods in the city of Seattle; its landscape primarily contains single family residential structures which house some of the highest household incomes in Puget Sound.

The Fort Lawton Area is located to the East side of Discovery Park and is surrounded by single family dwellings which are typical of the area. The impetus for the following market study is surrounded by the question of which residential housing products could best fit within the market rate housing component of the BRAC. The following information represents Gardner Johnson's analysis for future plans at the subject property.



## II. EXECUTIVE SUMMARY OF FINDINGS

SUMMARY OF RECOMMENDATIONS Fort Lawton Redevelopment						
<b>SUMMARY OF EXISTING STOCK</b>						
Price/Sqft Comparable Currently Selling Attached					\$	363.00
Price/Sqft <2000Sqft					\$	326.00
Price/Sqft >2000Sqft					\$	285.00
Average Single Family All Sizes					\$	313.00
Average lot Square Foot Townhouse						1400
Average lot Square Foot units <2000 Sqft						5400
Average lot Square Foot Units >2000 Sqft						6700
Recommendations						
Approximate Unit Size Range	Price	\$/Sqft	% of total project	Lot Size Per Unit	Product Type	
600 - 1200	\$ 405,000	\$ 450.00	0%	N/A	Stacked Flat	
900 - 1700	\$ 471,900	\$ 363.00	10%	1000 - 1500	Townhome	
1500 - 2200	\$ 603,100	\$ 326.00	2%	1000 - 1500	Luxury Townhome	
1500 - 1900	\$ 554,200	\$ 326.00	20%	2200 - 3500	Small Lot Single Family	
2000 - 2500	\$ 733,500	\$ 326.00	45%	5000 - 5500	Single Family 2 Story	
2500 - 2800	\$ 829,450	\$ 313.00	23%	5500 - 6000	Larger Lot Single Family 2 or 3 Story	

Source: New Home Trends, King County Assessor, Northwest Multiple Listing Service, Gardner Johnson LLC

The chart above reflects Gardner Johnson's recommended prices, sizes and mix for units for the Fort Lawton redevelopment plan. The rationale for our unit mix and suggested pricing comes from our analysis of the Magnolia Neighborhood, its prices and unit composition.

The recommendation for a small percentage of multifamily units, both townhomes and some luxury townhomes, comes from our analysis of the market area. Multifamily product has not traditionally been a strong feature of the Magnolia neighborhood and, as a result, our recommendation for attached units makes up only 12% of the total proposed unit mix for the subject site.

From an historical perspective, multifamily units delivered between 1999 and today total only 225 units in buildings containing five or more units. This number represents a mere fraction of the total units in Magnolia, making multifamily one of the most underrepresented product types in the area. Because of a relative lack of supply, the conclusion could be drawn that opportunities for multifamily development could draw unexpected demand from the surrounding neighborhood. However, when one looks at the average absorption of multifamily product over time, demand for the small number of units which have been delivered has been sluggish. The average monthly





absorption for all of the multifamily units in the past nine or so years has been around one unit per month, per development. Because of the lack of sales velocity for these products, it seems that the development of a large number of multifamily units at the subject property would experience a similar trend in terms of relative demand. In other words, multifamily product has not sold quickly near the subject property showing a lack of demand in the face of relatively limited supply.

Further recommendations for small lot single family product represent a more progressive portion of the total unit mix. Magnolia homes have an average size of 2,600 square feet. This is due to dated housing stock in an established neighborhood, as well as requirements from zoning. Opportunities for density present themselves with product that pushes the boundaries of the current housing makeup. Small lot single family homes between 1,500 and 1,900 square feet represent a product which is seldom seen in a neighborhood of medium sized single family homes. This product type presents an opportunity to increase density in a way that maintains neighborhood character and still provides single family options at lower square footages than are typically seen in the market. Seattle trends for new construction housing must, and will continue to, decrease in terms of square footage. This trend will naturally occur as population increases push even the most established neighborhoods toward smaller products with which to accommodate increasing density.

Homes sized between 2,000 and 2,800 square feet make up the majority of the recommended development size. Homes of this size reflect the character of the current neighborhood and conform to more traditional zoning requirements. Lot sizes for homes in these categories range from 5,000 to 6000 square feet as a function of current residential makeup as well as zoning code requirements.

The recommendations found in the matrix on the previous page conform to the neighborhood's current character. The conformation of new product to existing neighborhood character is one of the many reasons why current zoning exists and, as a result, our recommendations do not veer too far from the existing makeup of Magnolia.

Pricing for the subject property represents a strategy which also conforms to prices found within Magnolia. The prices set out in the matrix represent typical square foot prices found at properties surrounding the property as well as properties throughout the Magnolia neighborhood. An argument in favor of a higher pricing strategy might take into account sales within Magnolia which have shown higher values in price per square foot with regard to recent sales. Because many variables affect prices, our recommendations represent a baseline pricing strategy by which to value the land for potential future developers. Without knowledge of the product which will be delivered, its finishes and the developer who will eventually build such product, it is our considered opinion that the prices found within our matrix represent reasonable assumptions based on current market conditions.



### III. MACROECONOMIC OUTLOOK (U.S.)

The bruised economy limped through the first quarter of 2008, growing at just a 0.6 percent pace as housing and credit problems forced people and businesses alike to hunker down. In as much as we were expecting a decline from the breathtaking pace shown in the third quarter, this rate of growth was weaker than expected. The country's economic growth during January through March was the same as in the final three months of last year. The statistic did not meet what we consider the definition of a recession, which is a contraction of the economy. This means that although the economy is stuck in a rut, it is still managing to grow, albeit slightly.

The increase in real GDP in the first quarter primarily reflected positive contributions from personal consumption expenditures (PCE) for services, private inventory investment, exports of goods and services, and federal government spending that were partly offset by negative contributions from residential fixed investment and PCE for durable goods. Imports, which are a subtraction in the calculation of GDP, increased.

#### NATIONAL ECONOMY AT A GLANCE: FOURTH QUARTER OF 2007

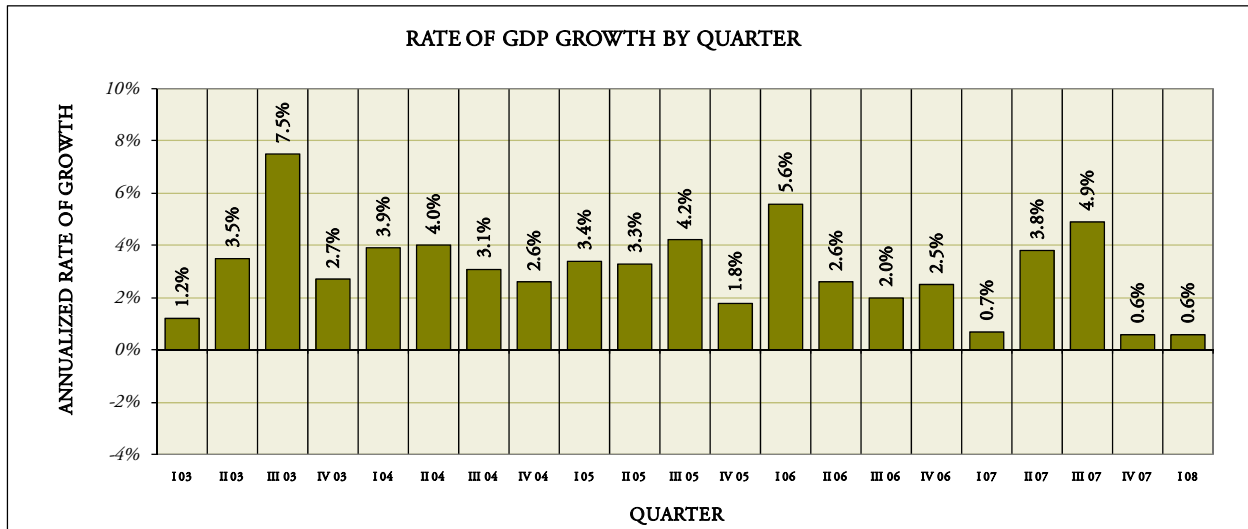
	<u>1Q08</u>	<u>4Q07</u>	
<b>G.D.P.</b>	<b>0.6%</b>	<b>0.6%</b>	
<i><u>Components</u></i>			<i><u>Highlights</u></i>
<i>Consumer Expenditure</i>	<b>1.0%</b>	<b>2.3%</b>	Consumers turned much more cautious, also restraining overall economic growth in the first quarter. Shoppers did cut spending on such things as cars, furniture, household appliances, food and clothes.
<i>Private Investment</i>	<b>-4.7%</b>	<b>-14.6%</b>	We continue to be weighed down by real residential fixed investment whose numbers declined by 26.7 percent
<i>Government Expenditure</i>	<b>2.0%</b>	<b>2.0%</b>	Spending by the government was another factor helping out GDP in the first quarter. That spending rose at a 2 percent pace for the second quarter in a row.
<i>Exports</i>	<b>5.5%</b>	<b>6.5%</b>	U.S. exports are being helped by the falling value of the U.S. dollar, which continue to make U.S. made goods and services less expensive to foreign buyers.
<i>Imports</i>	<b>2.5%</b>	<b>-1.4%</b>	

The estimate was three times the mean expected rate of 0.2% growth, and economists seemed to agree the difference was due to the unexpected growth in inventories in the month of March. Analysts were quick to warn that if domestic companies do not sell through the current inventory backlog, it could mean weakness in the coming quarters.

Positive GDP for the first quarter might mean the United States hasn't fallen into a textbook recession, but many economists feel the financial environment continues to deteriorate. We may not



be formally in a recession based on the preliminary GDP data (but) there should be no doubt this country is struggling within a recessionary environment. Indeed, while the economy produced more goods and services in the first quarter, many of those goods ended up in warehouses without translating into sales. It's unlikely we'll see a similar buildup of inventory in the second quarter, which would translate into lower or negative GDP growth for the quarter ended June 30.



SOURCE: BEA & Gardner-Johnson LLC

The one thing that could boost second quarter GDP are the economic stimulus checks being sent out to over 130 million U.S. households. If consumers spend that money, rather than using it to pay down debt or pad their savings, it could turn into a nice shot of growth for GDP in the second quarter. If households keep spending, even modestly, it is likely that growth in the second quarter will be positive as well,"

In U.S. Real Estate related news:

- New Housing Starts – we have not seen the bottom of the national market. Starts dropped to an annual pace of 947,000 in March from a revised 1.075 million rate in February. This is 11.9 percent decline from the prior month and a 36.5 percent decline year-over-year.

Building permits in March were at a seasonally adjusted annual rate of 927,000. This is 5.8 percent below the revised February number of 984,000 and is 40.9 percent below that of a year ago. Single family permits declined by 6.2 percent from the prior month while multifamily permits<sup>1</sup> declined to 286,000 from 298,000 in February. Overall, permit issuance has declined by 40.9 percent from a year ago.

- New Home Sales – Sales of new one-family houses in March was at a seasonally adjusted annual rate of 526,000. This is 8.5 percent below the revised February rate of 575,000, and

<sup>1</sup> 5 or more units



is 36.6 percent below that of one year ago when sales totaled 830,000. The median price of a new home sold in March was \$227,600; the average price was \$262,200.

- Existing Home Sales – Sales of existing homes fell 2.0 percent in March to a seasonally adjusted annual rate of 4.93 million from a pace of 5.03 million in February and are 19.3 percent below that of a year ago. A rise in condo sales in March was offset by a drop in single-family sales. Regionally, sales rose in the Northeast and West but fell in the Midwest and South.
- The national median existing-home price for all housing types was \$200,700 in March, down 7.7 percent from a year ago when the median was \$217,400. Because the slowdown in sales from a year ago is greater in high-cost areas, there is a downward pull to the national median with relatively higher sales activity in low-cost markets.
- Total housing inventory rose 1.0 percent at the end of March percent to 4.06 million existing homes available for sale, which represents a 9.9-month supply at the current sales pace, up from a 9.6-month supply in February.
- Single-family home sales fell 2.7 percent to a seasonally adjusted annual rate of 4.35 million in March from 4.47 million in February, and are 18.4 percent below the 5.33 million-unit pace in March 2007. The median existing single-family home price was \$198,200 in March, down 8.3 percent from a year ago.
- Existing condominium and co-op sales rose 3.6 percent to a seasonally adjusted annual rate of 580,000 units in March from 560,000 in February, but are 25.5 percent below the 779,000-unit level a year ago. The median existing condo price<sup>4</sup> was \$219,400 in March, which is 2.8 percent lower than March 2007.



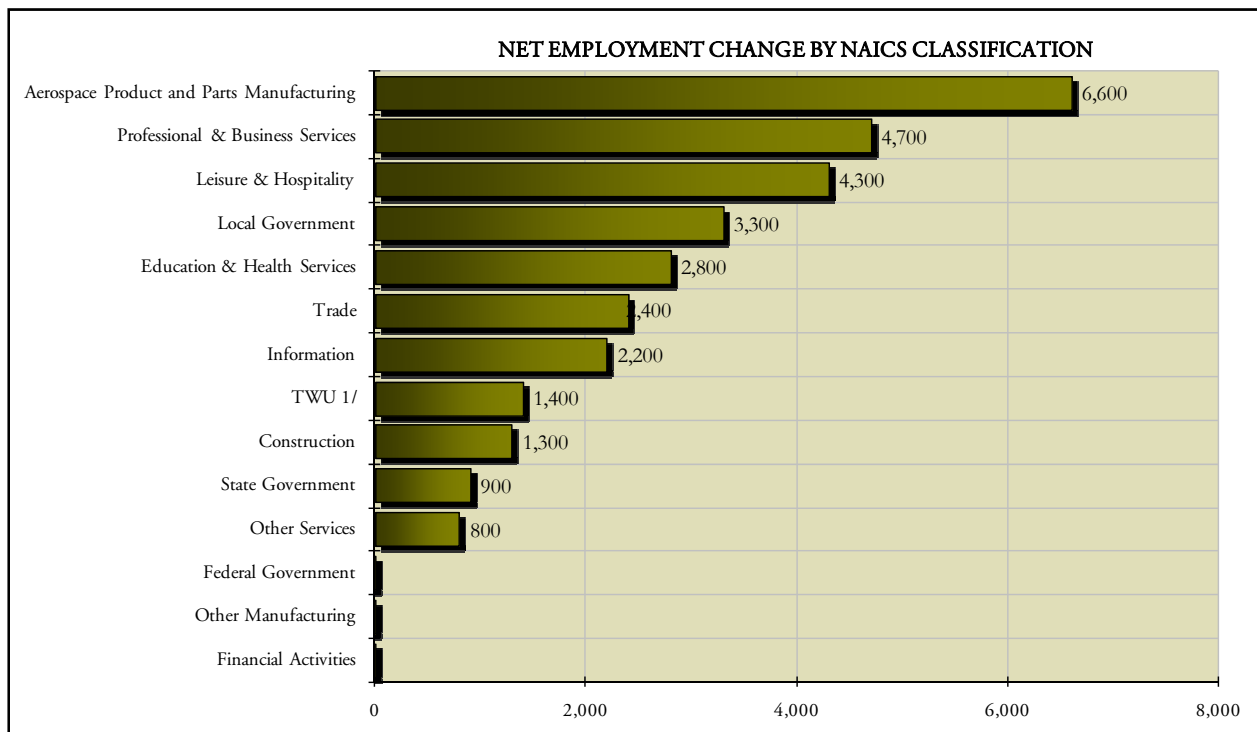
#### IV. MICROECONOMIC OUTLOOK (SEATTLE/BELLEVUE/EVERETT MSA)

March nonfarm employment levels in the Seattle-Bellevue-Everett Metropolitan Division (MD) rose to 1,466,300; 3,400 more than February 2008, and 27,700 more than March 2007. This month's data indicated all sectors gained jobs, such as *Professional and Business Services* (+900), *Construction*, (+1,300), and *Retail Trade* and *Wholesale Trade* (+100 each). *Government* lost 1,200 jobs.

The manufacturing sector gained 200 jobs, mostly in durable goods. Nondurable goods manufacturing remained unchanged from last month. There were no losses the subsectors under durable goods. Aerospace product and parts manufacturing gained 400 positions, and the lowest gain of 100 jobs was in fabricated metal product manufacturing. The rest remained unchanged.

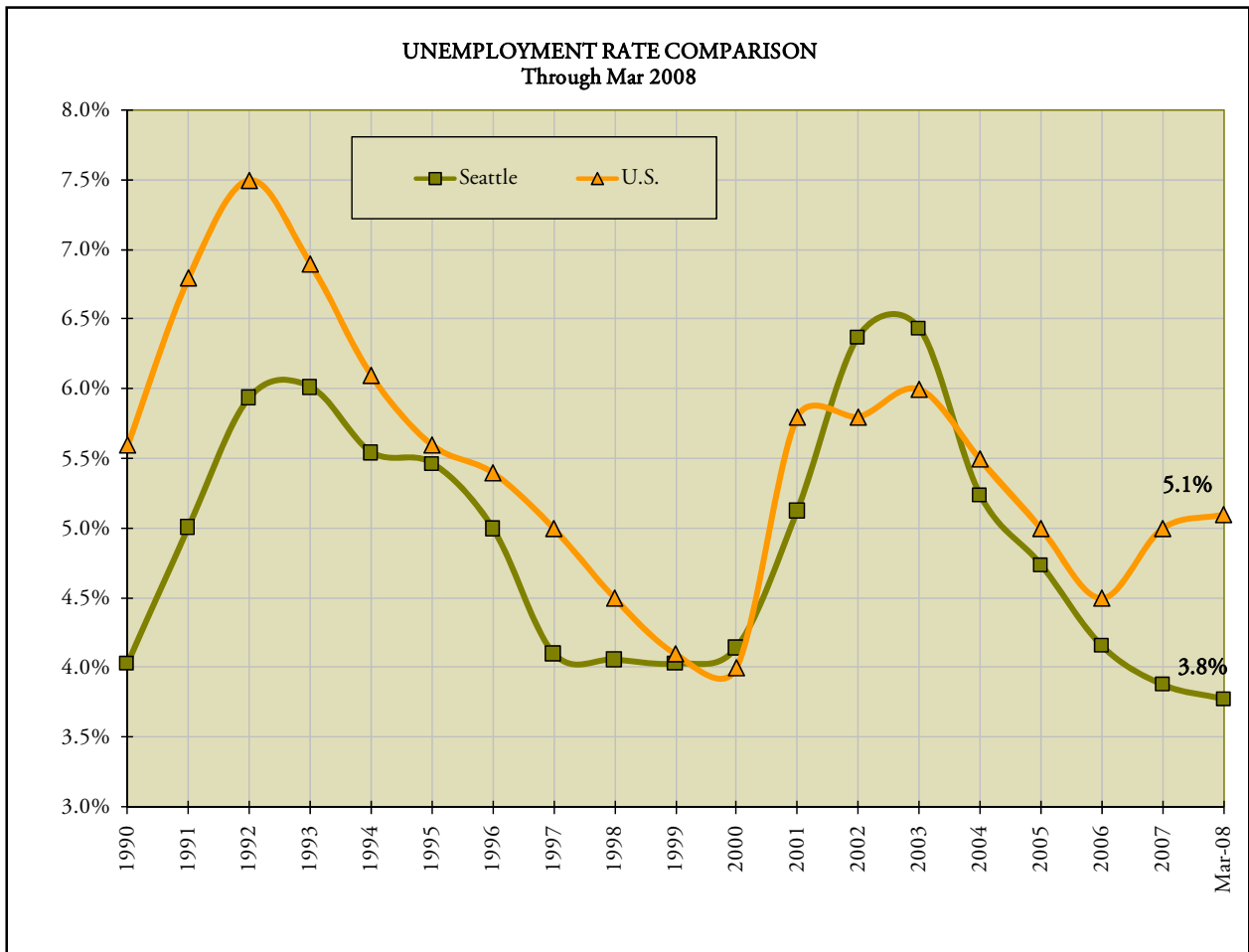
Financial activities remained unchanged over last month. Real estate and rental leasing gained 100 jobs, while credit intermediation and related activities lost 300 positions.

March unemployment rate was unchanged from February's 3.8 percent. The nonfarm payroll employment for March still indicated a healthy and upward climbing labor market in the Seattle-Bellevue-Everett metropolitan area.





## SEATTLE MSA UNEMPLOYMENT RATE VERSUS THE U.S.





## Focus on Boeing

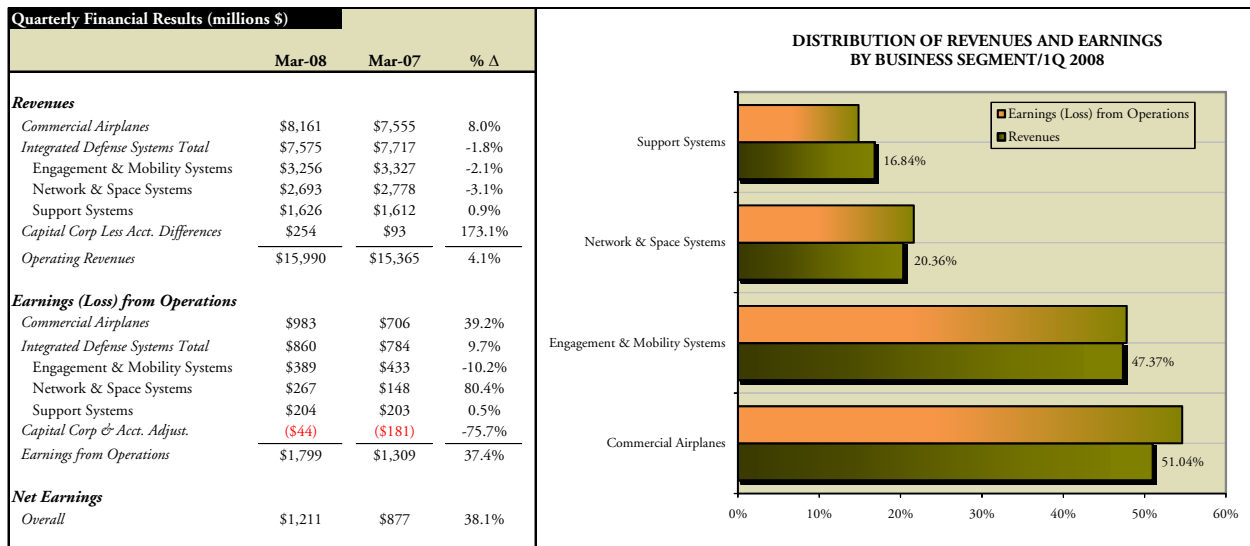
The Boeing Company's first quarter 2008 net income increased 38 percent to \$1.2 billion, or \$1.62 per share from \$2.2 billion, or \$2.85 per share in 2007. Quarterly revenue rose 4 percent to \$16 billion, while the operating cash flow more than doubled to \$1.9 billion reflecting the strong operating earnings and higher commercial airplanes orders.

The total company backlog at quarter end reached a record \$346 billion, up 32 percent in the last year, with quarterly growth driven by both commercial airplane and V-22 multi-year orders.

Full-year operating cash flow grew 28 percent to a record \$9.6 billion, reflecting strong operating earnings, higher commercial airplane orders, and a decrease in working capital requirements.

Boeing Commercial Airplanes (BCA) first-quarter revenues rose to \$8.2 billion on an 8 percent increase in airplane deliveries and higher services volume, partially offset by lower aircraft trading volume. Operating earnings grew 39 percent to \$983 million while margins expanded to 12.0 percent, driven by higher delivery volume and services sales and lower R&D spending. During the quarter, the company delivered its 1,400th 747 airplane and its 700th 777 airplane.

### DISTRIBUTION OF REVENUES AND EARNINGS





## Software & Technology

Microsoft's third quarter results for revenue showed operating income and diluted earnings per share of \$14.45 billion, \$4.41 billion and \$0.47, respectively. Operating income and earnings per share results included a charge of \$1.42 billion, or \$0.15 per share, for the European Commission fine. Income taxes were reduced by \$0.15 per share for the resolution of a tax audit.

Entertainment and Devices revenue for the quarter grew 68% over the comparable period last year driven by robust demand for Xbox 360 consoles. Cumulative console sales surpassed 19 million during the quarter, up 74% from a year ago. Server and Tools revenue growth of 18% added to its string of consecutive double-digit revenue growth quarters, which now stands at 23.

The third quarter also kicked off the largest enterprise platform launch in the company history, which highlights Windows Server 2008, SQL Server 2008 and Visual Studio 2008.

	Three Months Ended			
	Mar-08	Mar-07	% Δ	
<b>Revenues</b>				
<i>Client</i>	\$4,025	\$5,274	-23.7%	<b>12-Month Revenue Growth by Division</b> 
<i>Server Platforms</i>	\$3,255	\$2,748	18.4%	
<i>Online Server Business</i>	\$843	\$603	39.8%	
<i>Business Division</i>	\$4,745	\$4,872	-2.6%	
<i>Entertainment &amp; Devices</i>	\$1,576	\$936	68.4%	
<i>Unallocated &amp; Other</i>	\$10	\$10	-	
<i>Total</i>	\$14,454	\$14,443	-0.1%	
<b>Operating Expenses</b>	\$10,045	\$7,854	-21.8%	
<b>Operating Income</b>	\$4,409	\$6,589	49.4%	
<b>Other Income or Loss</b>	(\$21)	(\$1,627)	n/a	
<b>Net Earnings</b>				
<i>Overall</i>	\$4,388	\$4,962	13.1%	
<i>Per Share (Diluted)</i>	\$0.47	\$0.50	6.4%	

(\$ millions except per share data)





## Detailed Employment Forecast

GARDNER JOHNSON has further refined its detailed employment growth forecast as a function of above expected growth. Details are as follows:

Seattle Metro Area										
Employment Sector	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Construction	72,100	77,800	86,600	93,600	103,800	106,645	109,167	111,337	113,550	115,808
Manufacturing	152,900	147,600	156,500	164,200	170,000	174,834	178,756	181,693	184,681	187,721
Wholesale Trade	67,900	70,100	70,700	72,200	73,600	74,514	75,447	76,398	77,361	78,337
Retail Trade	138,300	150,700	153,900	153,300	156,700	158,905	160,937	162,788	164,660	166,555
Transportation, Warehousing & Utilities	49,900	51,200	49,800	52,000	52,500	53,269	54,166	55,196	56,246	57,317
Information	70,900	73,000	75,400	80,300	83,600	85,797	87,873	89,817	91,807	93,843
Financial Activities	89,700	90,700	90,800	90,400	92,200	93,086	93,924	94,712	95,507	96,309
Professional & Business Services	178,500	187,100	199,600	208,800	215,700	222,812	230,021	237,320	244,851	252,621
Educational & Health Services	134,500	141,900	146,100	149,400	153,600	156,435	159,190	161,857	164,570	167,329
Leisure & Hospitality	114,900	124,000	129,000	132,100	135,600	137,958	140,212	142,355	144,531	146,740
Other Services	47,900	49,400	50,500	50,300	51,000	51,795	52,586	53,375	54,175	54,987
Government	199,800	200,200	199,400	199,500	204,200	206,646	209,061	211,441	213,849	216,284
<b>Total</b>	<b>1,317,300</b>	<b>1,363,700</b>	<b>1,408,300</b>	<b>1,446,100</b>	<b>1,492,500</b>	<b>1,522,696</b>	<b>1,551,337</b>	<b>1,578,289</b>	<b>1,605,789</b>	<b>1,633,849</b>
<i>Rate</i>		<i>3.5%</i>	<i>3.3%</i>	<i>2.7%</i>	<i>3.2%</i>	<i>2.0%</i>	<i>1.9%</i>	<i>1.7%</i>	<i>1.7%</i>	<i>1.7%</i>

We now expect that growth in the Puget Sound region will be headed by *Professional & Business Services* (3.3%), followed by *Construction, Manufacturing, and Information*, all with an average growth rate of 2.5%.

Slowest growth will come in *Financial Activities* (0.9%), *Government* and *Wholesale Trade* (1.2%), and *Retail Trade* (1.3%).



## V. DEMOGRAPHIC COMPOSITION & PROJECTIONS (CENTRAL SEATTLE, MAGNOLIA)

The population statistics below come from the geographic area of Central Seattle. Central Seattle is bound to the North by 85<sup>th</sup> Street to the South by the Rainier Valley. Between 2000 and 2007, the population in the Central Seattle Area increased by 0.7% annually or 13,881 persons. During this period, the number of households increased by 11,326 or 1.1% annually. Declining Household size, from 2.02 persons per households to 1.97 persons per household, contributed a higher percentage increase in households than population during the period from 2000 to 2007.

Projections for the period from 2007 to 2012 show positive annual increases in both population and household growth, with increases of 0.8% and 1.1% respectively. Population is expected to increase by 12,050 persons and household growth is expected to increase by 8,776 households during the period from 2007 to 2012. Household size is expected to decline from 1.97 persons per household in 2007 to 1.94 persons per household in 2012.

**CITY OF SEATTLE POPULATION GROWTH: 2000 - 2012**

	2000	2007	Annual Growth Rate	2012	Annual Growth Rate
	(Census)	(Est.)	00-07	(Proj.)	07-12
Population	294,657	308,538	0.7%	320,588	0.8%
Households	145,555	156,881	1.1%	165,657	1.1%
Male	149,364	157,354	0.7%	163,820	0.8%
Female	145,293	151,184	0.6%	156,767	0.7%
Household Size	2.02	1.97		1.94	

Source: *Demographics Now*

### Income

Incomes are expected to increase over the next 5 years at a more tempered pace than was experienced between 2000 and 2007 where per capita incomes increased at an annual rate of 4.5%. Per capita income growth between 2007 and 2012 is projected to occur at an annual rate of 2.8% and median incomes are projected to increase at an annual rate of 2.9%. These figures have not been adjusted for inflation meaning that 2012 projected income figures will not be representative of actual dollars available relative to an increased cost of goods and services.

**CITY OF SEATTLE INCOME GROWTH: 2000 - 2012**

	2000	2007	Annual Growth Rate	2012	Annual Growth Rate
	(Census)	(Est.)	00-07	(Proj.)	07-12
Per Capita (\$)	\$33,458	\$45,449	4.5%	\$52,198	2.8%
Average HH (\$)	\$67,731	\$82,913	2.9%	\$94,415	2.6%
Median HH (\$)	\$45,331	\$61,887	4.5%	\$71,483	2.9%

Source: *Demographics Now, Gardner Johnson, LLC*



### Magnolia Population (Zip Code 98199)

The population statistics for the Magnolia neighborhood come from the zip code area 98199 which can be viewed on page 3 of this document. Between 2000 and 2007, the population of Magnolia increased by 0.5% annually or 616 persons. During this period, the number of households increased by 494 or 0.8% annually. Declining Household size, from 2.12 persons per households to 2.07 persons per household, contributed a higher percentage increase in households than population during the period from 2000 to 2007.

Projections for the period from 2007 to 2012 show positive annual increases in both population and household growth, with increases of 0.7% and 0.9% respectively. Population is expected to increase by 677 persons and household growth is expected to increase by 447 households during the period from 2007 to 2012. Household size is expected to decline from 2.07 persons per household in 2007 to 2.05 persons per household in 2012

#### **MAGNOLIA POPULATION GROWTH: 2000 – 2012**

	<b>2000</b>	<b>2007</b>	<b>Annual Growth Rate</b>	<b>2012</b>	<b>Annual Growth Rate</b>
	<b>(Census)</b>	<b>(Est.)</b>	<b>00-07</b>	<b>(Proj.)</b>	<b>07-12</b>
Population	18,881	19,497	0.5%	20,174	0.7%
Households	8,911	9,405	0.8%	9,852	0.9%
Male	9,147	9,476	0.5%	9,845	0.8%
Female	9,734	10,022	0.4%	10,329	0.6%
Household Size	2.12	2.07		2.05	

*Source: Demographics Now, Gardner Johnson, LLC*

### Income

Incomes are expected to increase over the next 5 years at a more tempered pace than was experienced between 2000 and 2007 where per capita incomes increased at an annual rate of 4.4%. Per capita income growth between 2007 and 2012 is projected to occur at an annual rate of 2.5% and median incomes are projected to increase at an annual rate of 2.8%. These figures have not been adjusted for inflation meaning that 2012 projected income figures will not be representative of actual dollars available relative to an increased cost of goods and services.

Not surprisingly, Magnolia’s incomes are significantly higher than those of the entire Central Seattle Area with current estimates placing Magnolia’s median household income roughly 22% above Central Seattle. Magnolia’s population is made up of larger household sizes and slower population growth which can be credited to the established and wealthy nature of the neighborhood.



### MAGNOLIA INCOME GROWTH: 2000 - 2012

	2000 (Census)	2007 (Est.)	Annual Growth Rate 00-07	2012 (Proj.)	Annual Growth Rate 07-12
Per Capita (\$)	\$37,285	\$50,557	4.4%	\$57,135	2.5%
Average HH (\$)	\$79,000	\$104,171	4.0%	\$116,352	2.2%
Median HH (\$)	\$60,281	\$78,563	3.9%	\$90,197	2.8%

*Source: Demographics Now, Gardner Johnson, LLC*



## VI. LAND USE COMPOSITION ANALYSIS (MAGNOLIA)

The chart to the right and the graph below represent the total unit makeup of the Magnolia neighborhood. Magnolia is a primarily single family neighborhood with over 6000 units of single family housing and a total residential unit count of 8,803. Apartments make up the next largest land use with 1,577 units. Because of Magnolia's proximity to downtown, as well as its many waterfront view lots, condominiums and townhouses have not seen the same market acceptance as in other areas of Seattle such as Belltown and Capitol Hill. Condominium units make up just over 700 units of the neighborhood's residential stock and townhouses make up less than 200 units.

The Pie chart shown to the right breaks down the composition of Magnolia by land use type. Apartment uses are made up of all rentable units and represent 23% of the total land use makeup of the Magnolia neighborhood. 67% of all residential product in Magnolia, as reported by the King County Assessor's Office, is shown to be single family dwelling units. These percentages show a more general picture of the neighborhood than the previously, more detailed, breakdown by unit type.

Condominiums and Townhouses represent 10.1% of the total unit makeup of the neighborhood making residential multifamily the most marginal land use in the Magnolia neighborhood. The details of each of these land uses will be further broken down throughout the rest of the document including age, price range, location, and in some cases proximity to the Fort Lawton site.

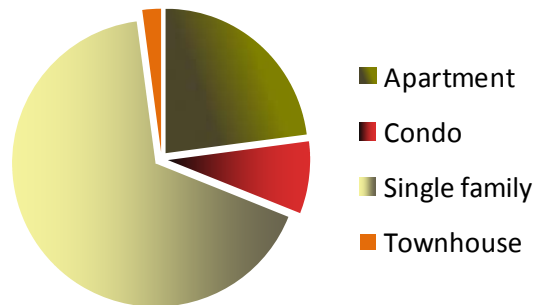
**MAGNOLIA UNIT COMPOSITION**

Unit type	Number of Units
4-Plex	188
Apartment	1429
Apartment(Mixed Use)	48
Condominium(Mixed Use)	62
Condominium(Residential)	654
Duplex	216
Single Family(C/I Zone)	44
Single Family(Res Use/Zone)	5840
Townhouse Plat	187
Triplex	135
<b>Grand Total</b>	<b>8803</b>

**MAGNOLIA**

Apartment	<b>23%</b>
Condo	8%
Single family	67%
Townhouse	2.1%

**Magnolia Housing Percentage by Unit Type**

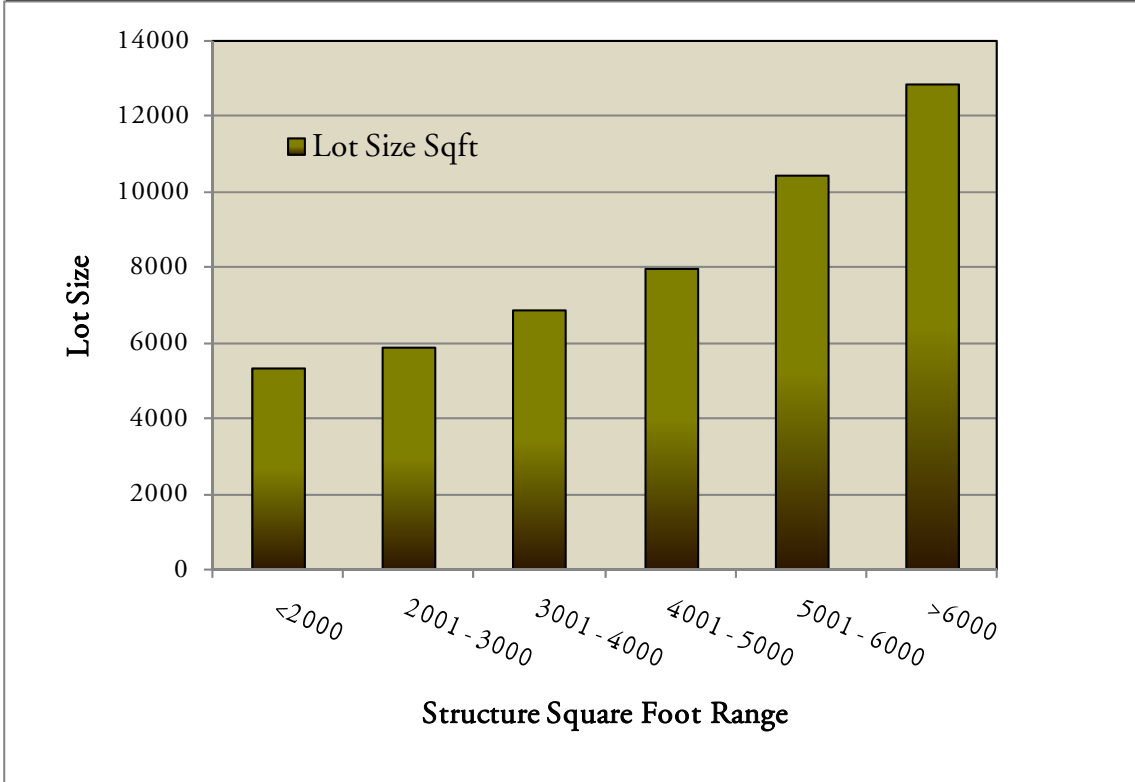


Source: King County Assessor



**AVERAGE LOT SIZES ASSOCIATED WITH AVERAGE SINGLE FAMILY STRUCTURE SIZES  
SINGLE FAMILY SALES FROM 2000 – 2007  
MAGNOLIA NEIGHBORHOOD, SEATTLE WA**

Structure Size Square FT	<2000	2001 - 3000	3001 - 4000	4001 - 5000	5001 - 6000	>6000
Lot Size Sqft	5337	5915	6849	7990	10445	12847
Average Sales/Yr	74	120	62	21	5	2



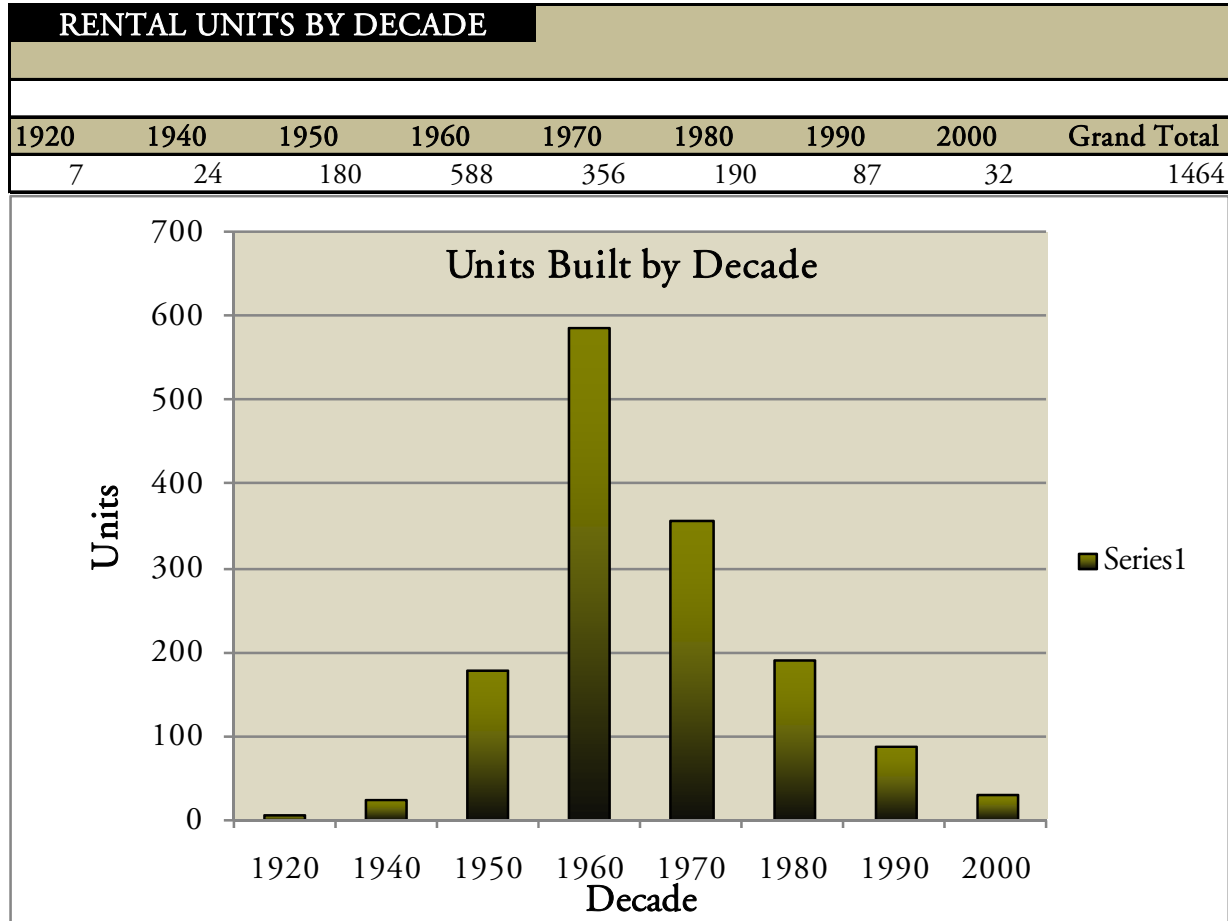
Source: King County Assessor

The Magnolia neighborhood’s single family composition averages 2,600 square feet per single family dwelling. The chart above breaks down the single family composition of Magnolia by square foot ranges--shown in thousand square foot increments--and the bars in the graph represent lot sizes which are associated with each square foot range. For example: all single family homes with square footage falling between 2001 and 3,000 square feet, show an average lot size of 5,915 square feet.

Unsurprisingly, as the square footage of the single family house increases, the average lot size also increases. As shown in the table above, the largest square foot categories show an exponential increase in average lot size with homes over 6000 square feet averaging 12,847 square feet in lot size. The average number of sales for each square foot category is also reflected in the second line of the chart above the graph. The greatest average sales number for the years 2000 – 2007 comes from single family homes which fall into the 2,001 – 3,000 square foot range.



## RENTAL UNITS BUILT BY DECADE MAGNOLIA NEIGHBORHOOD



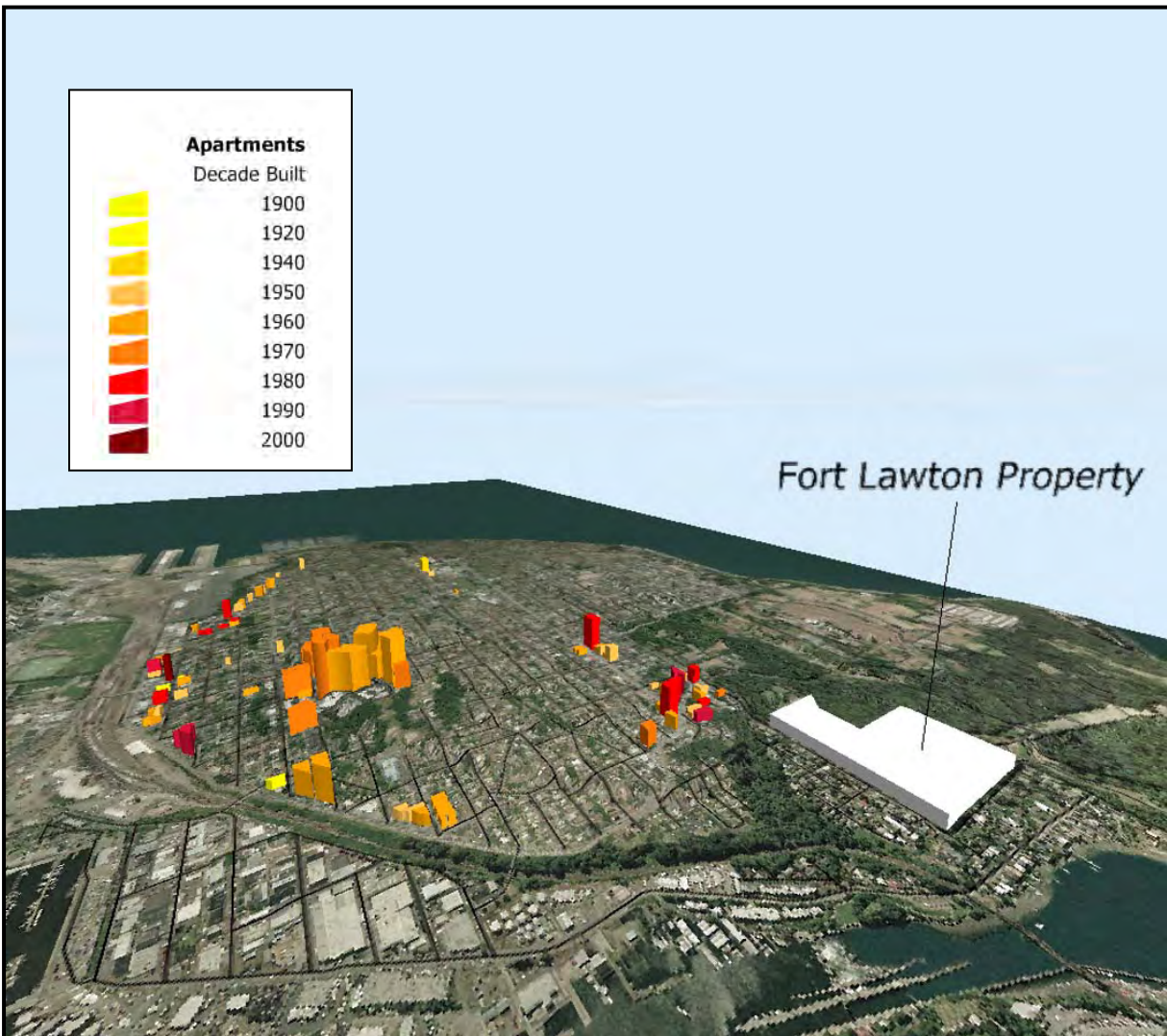
The chart above shows a breakdown of Magnolia apartment units and the decade in which they were built. The rental stock in Magnolia is dated, with most of the apartment units built before 1990 and very few--in fact only a single development--built after 2000. The apartment market is very much like the rest of the Magnolia area in that it is located in an area that is land poor with limited multifamily zoning. There are few places in Magnolia on which to build new construction rental apartments and, as such, very few new construction apartment projects will be brought to Magnolia.

The single new construction apartment project is a “luxury” apartment project named the Tres J’s. Luxury apartments expect high rental rates and might be considered, in the context of the Magnolia neighborhood, a niche product. Because land costs are driven by scarcity as well as prices for finished residential products, apartment rents must be set at the top of the market for new construction apartment buildings in order to justify higher costs for land in areas with high housing prices such as Magnolia.



The following map displays the location of the subject property and its relationship to the apartment buildings located within the subject area. Each of the parcels (shown in color) has been extruded by height, so the tallest shapes represent the buildings with the highest number of units. The apartment buildings are color coded to represent the decade in which they were built with the lightest yellow representing buildings built during the early 1900's and the darkest reds representing the buildings built during the most recent decades.

### SPATIAL ANALYSIS OF MAGNOLIA APARTMENT MARKET



Source: King County Assessor, Aerials Express

The majority of apartments built in Magnolia are located around more central retail areas and transportation corridors. No apartment buildings have been built near the subject property since before 1990. This again shows that as land values in Magnolia have seen increases in value, feasibility for apartments has begun to diminish.





## VII. RESIDENTIAL/CONDOMINIUM MARKET ANALYSIS (CENTRAL SEATTLE & MAGNOLIA)

### Central Seattle

The following chart highlights the Central Seattle single family sales market. Central Seattle is primarily a resale market as can be seen in the discrepancy between new construction and resale statistics from the first quarter of 2008. Central Seattle is an established urban area with little room for the sizeable single family developments, developments which typically occur where land is available in larger quantities such as suburban locations surrounding urban centers.

This trend explains the first quarter of 2008 sales records which show only 86 new construction sales for all of Central Seattle. This number is relatively small when compared to the 589 resale homes sold in the same market area over the same time period. The trend is even more pronounced in a neighborhood such as Magnolia with even higher resale prices than Central Seattle and one of the most well established single family markets in the city.

Premiums associated with new construction single family sales are also harder to gauge in a market area such as Central Seattle. As can be seen in the single family sales chart on the following page, sales prices for new construction single family homes were significantly higher than resale home prices. The average price for a new construction single family home was \$858,896 compared to an average resale price of \$633,395. This premium is a function of various costs associated with building a single new construction home on a single lot. Many new construction single family homes in Central Seattle are built as custom homes, tailored to suit the buyer who may have had to pay a high price for the lot. Acquiring a lot can be expensive because of existing structures which may have to be torn down in order to build the new construction home.

Because of the many variables associated with new construction homes in Central Seattle, the premium for a new construction home is in reality driven by costs rather than by value. To be sure, there is value in having a new structure in which to live, but many of the new construction home prices in both Central Seattle and Magnolia are driven by the costs associated with bringing a new construction home to an already established single family market.



**CENTRAL SEATTLE SINGLE FAMILY HOME SALES FIRST QUARTER, 2008**

<b>Single Family Home Sales</b>		<b>1Q08</b>		<b>YTD Total Sales</b>	
		<b>New</b>	<b>Resales</b>	<b>New</b>	<b>Resales</b>
<b>Price Range</b>					
Under \$124,999		0	0	0	0
\$124,999 - \$149,999		0	0	0	0
\$150,000 - \$174,999		0	0	0	0
\$175,000 - \$199,999		0	0	0	0
\$200,000 - \$224,999		0	1	0	1
\$225,000 - \$249,999		0	4	0	4
\$250,000 - \$274,999		0	8	0	8
\$275,000 - \$299,999		0	7	0	7
\$300,000 - \$324,999		2	12	2	12
\$325,000 - \$349,999		0	25	0	25
\$350,000 - \$374,999		1	31	1	31
\$375,000 - \$399,999		5	31	5	31
\$400,000 - \$449,999		7	77	7	77
\$450,000 - \$499,999		12	69	12	69
\$500,000 - \$549,999		11	64	11	64
\$550,000 - \$599,999		6	46	6	46
\$600,000 - \$699,999		6	74	6	74
\$700,000 - \$799,999		5	44	5	44
\$800,000 - \$899,999		7	26	7	26
\$900,000 - \$999,999		10	16	10	16
\$1,000,000 - & Over		14	54	14	54
<b>Total</b>		<b>86</b>	<b>589</b>	<b>86</b>	<b>589</b>
<b>Average Sales Price (All Sales)</b>				<b>\$633,395</b>	
<b>Average Sales Price (New Construction)</b>				<b>\$858,896</b>	

*Source: Northwest Multiple Listing Service, Gardner Johnson, LLC.*



Central Seattle attached home sales have been sluggish through the first quarter of 2008 with an average resale price of \$394,090 and an average new construction price of \$408,549. The total sales for new construction during this time period were 277 units and resale units totaled 464. New construction multifamily is more available than single family as the Central Seattle area takes on more population with a limited supply of residential land.

### CENTRAL SEATTLE ATTACHED HOME SALES FIRST QUARTER, 2008

Attached Home Sales		1Q08		YTD Total Sales	
		New	Resales	New	Resales
Price Range					
Under \$124,999		0	0	0	0
\$125,000 - \$149,999		0	0	0	0
\$150,000 - \$174,999		0	4	0	4
\$175,000 - \$199,999		0	14	0	14
\$200,000 - \$224,999		0	34	0	34
\$225,000 - \$249,999		6	45	6	45
\$250,000 - \$274,999		13	44	13	44
\$275,000 - \$299,999		10	31	10	31
\$300,000 - \$324,999		24	37	24	37
\$325,000 - \$349,999		9	42	9	42
\$350,000 - \$374,999		22	31	22	31
\$375,000 - \$399,999		32	32	32	32
\$400,000 - \$449,999		56	48	56	48
\$450,000 - \$499,999		40	34	40	34
\$500,000 - \$549,999		12	16	12	16
\$550,000 - \$599,999		17	13	17	13
\$600,000 - \$699,999		17	13	17	13
\$700,000 - \$799,999		6	8	6	8
\$800,000 - \$899,999		4	3	4	3
\$900,000 - \$999,999		0	3	0	3
\$1,000,000 & Over		9	12	9	12
Total		277	464	277	464
<i>Average Sales Price (All Sales)</i>				<b>\$394,090</b>	
<i>Average Sales Price (New Construction)</i>				<b>\$408,549</b>	

Source: Northwest Multiple Listing Service, Gardner Johnson, LLC.

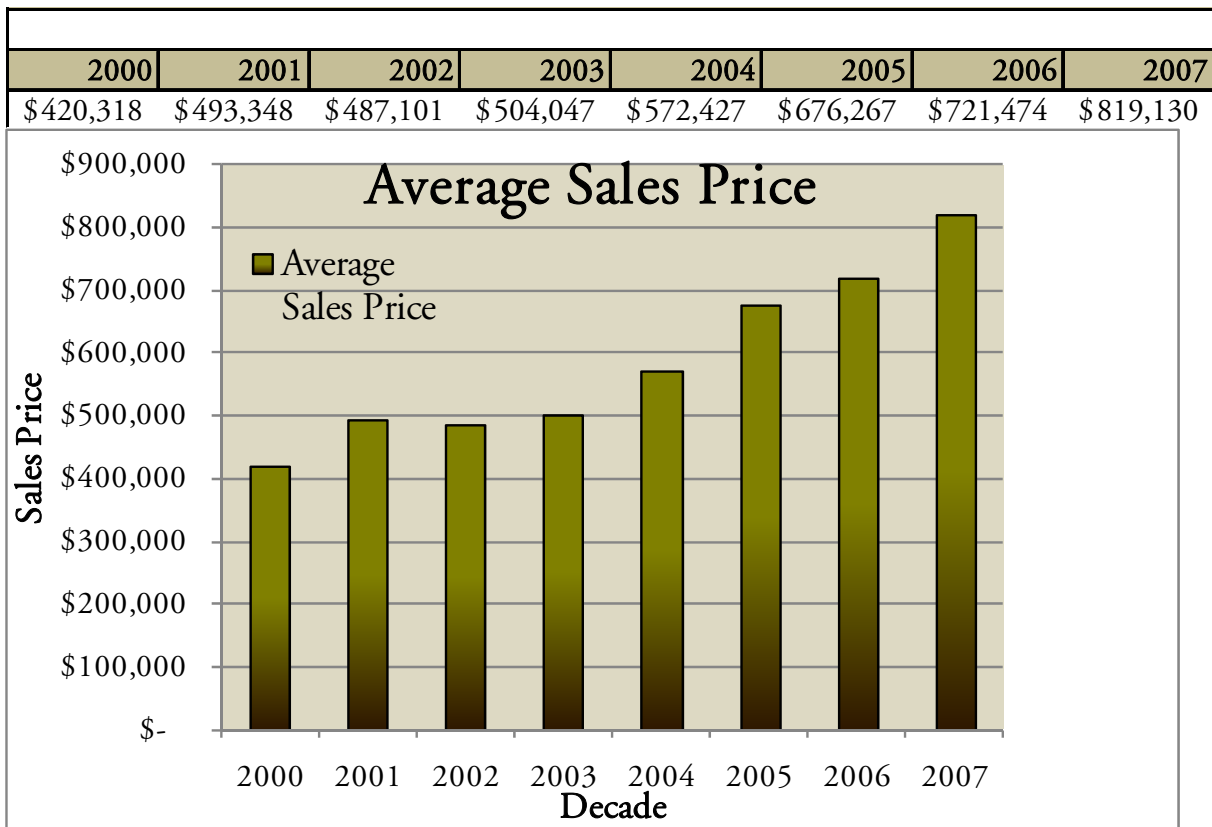


Magnolia Single Family

Magnolia single family sales have seen a 100% increase in value from the year 2000 through 2007. Magnolia is a well established residential neighborhood with limited supply and very little new construction product. Because of its proximity to downtown and ample waterfront property, Magnolia will continue to see prices which are above those of the Central Seattle market area. In 2007, the average price for a single family home in Magnolia was \$819,130. This price point is well above the current resale price of \$633,395 for all of Central Seattle.

Most of the sales reflected in the table below are resale units. The Fort Lawton property represents one of the few opportunities for larger scale development of multiple single family units. New construction statistics for true single family product are nearly nonexistent, with a few sales reflected in the statistics below coming from a limited supply of custom homes on single lots throughout the neighborhood. The same principles apply to Magnolia as they do to the entire Central Seattle Market. With a limited supply of vacant land for single family development, costs associated with tear downs and land acquisition are difficult to quantify in the realm of new construction home prices in this established market area.

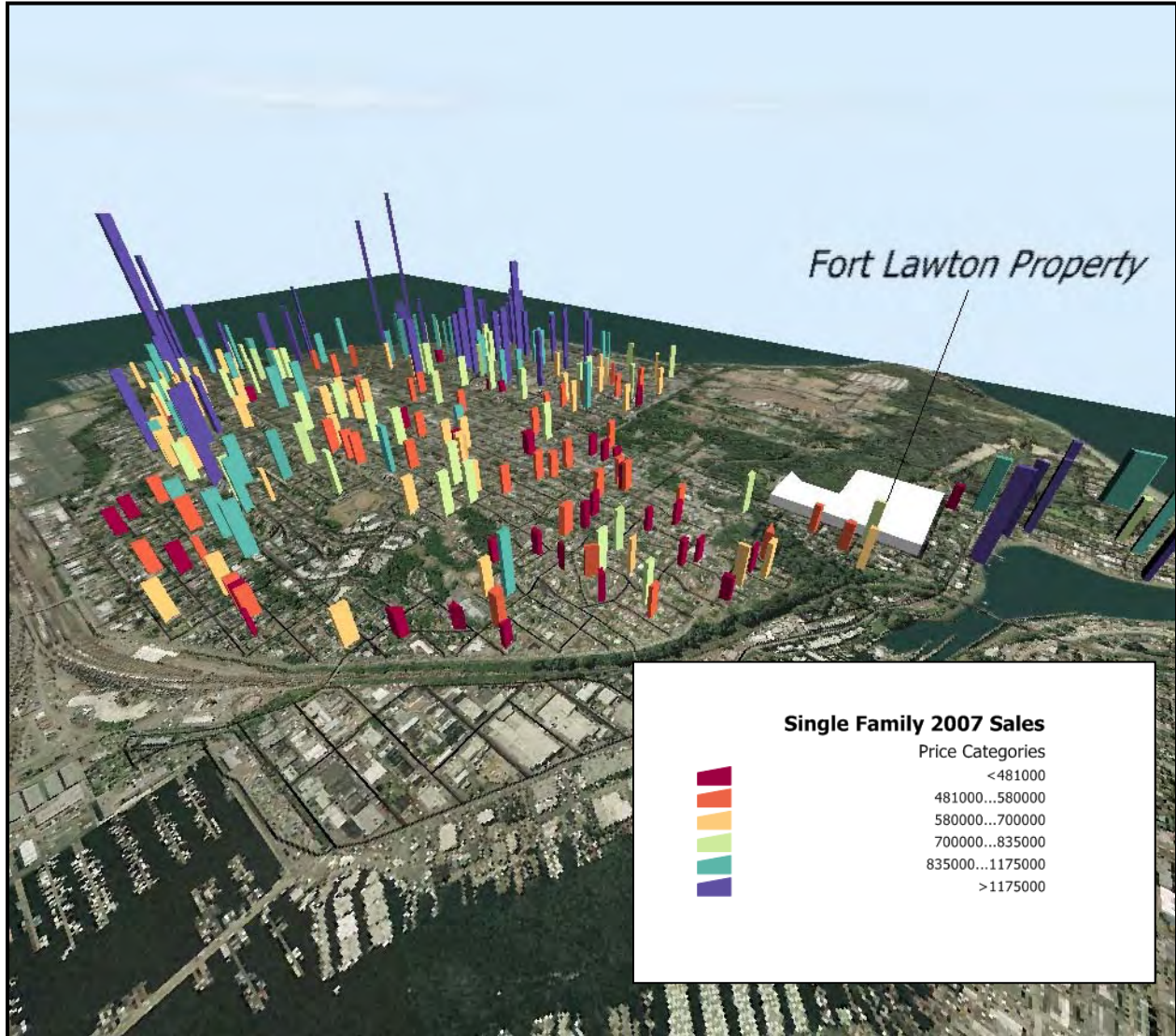
**AVERAGE SINGLE FAMILY SALES PRICES: 2000 - 2007  
MAGNOLIA**



Source: King County Assessor



## MAGNOLIA NEIGHBORHOOD MAP OF SINGLE FAMILY HOME SALES: 2007



*Source: King County Assessor, Aerials Express*

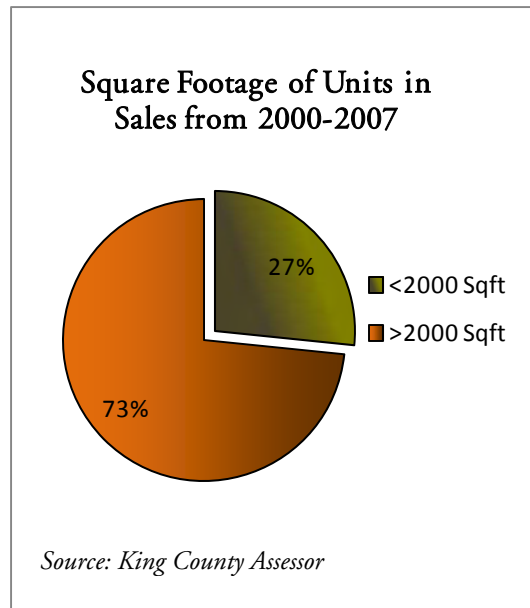
The map above shows single family home sales in Magnolia during the year 2007. Each of the colored extrusions represents a single family sale. The height of these parcel extrusions is dictated by the sales price of the single family home contained within that parcel; so the tallest extrusions represent the highest prices and the shortest represent the lowest. The various colors of each extrusion represent various price categories and are shown in the legend by color and category. Maroon represents all houses under \$481,000 and orange denotes houses selling between 481 and 580 thousand...all the way through purple which reflects single family sales of more than 1.17 million dollars.



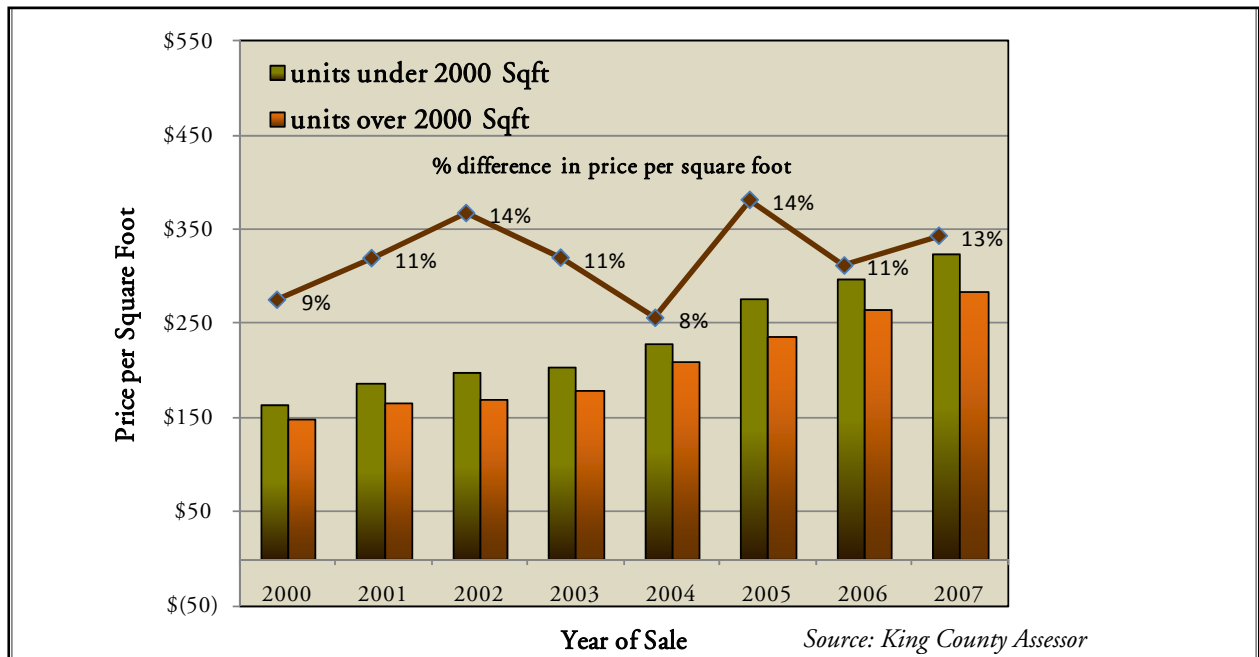
This “heat map” paints an easily understood breakdown of the market area and prices associated with various geographic locations throughout Magnolia. Not surprisingly, the more expensive homes are located along the waterfront and the least expensive homes are centrally located close to transit corridors and retail areas. Middle range prices are located in more central residential areas away from the waterfront areas.

Homes sales which were adjacent to the subject property ranged between \$500,000 and \$800,000 to the South and East of Fort Lawton. Properties located to the North of the subject property saw prices above \$800,000 with some sales reaching over one million dollars due primarily to the proximity to, or location along, the waterfront.

A further breakdown of the Magnolia single family market is shown in the chart on this page which compare smaller single family product vs. larger single family product on a price per square foot basis. Median prices were calculated for all single family units sold by year for two categories. These categories are segregated by units above and below 2,000 square feet. As a general rule, price per square foot tends to rise as the size of the unit declines and Magnolia is no exception.



### SINGLE FAMILY SQUARE FOOTAGE PRICE COMPARISON MAGNOLIA





Homes under 2,000 square feet are priced, on average, at 13% more per square foot than homes above 2,000 square feet. Median prices were used to calculate the difference in these two categories because of some natural overlap of products which are in close proximity to one another on a square foot basis.

One area of opportunity in the Magnolia neighborhood comes in the form of the discrepancy between large and small houses within the neighborhood. Most of Magnolia's housing stock was designed around the semi-suburban, single family neighborhood of the mid 20<sup>th</sup> century. As a result, smaller homes with smaller floor plans are not available to families who may want to move to Magnolia but can't afford a 3,000 square foot waterfront property. With only 27% of all of Magnolia's housing stock at less than 2,000 square feet, small lot single family units may represent a market segment which may not contain the supply with which to meet its demand.

### PLANNED AND PROPOSED SINGLE FAMILY DEVELOPMENTS MAGNOLIA NEIGHBORHOOD

Development Name	Location	Units	Dwelling Type	Status	App. Date	Ownership
2215 32nd Ave W	Seattle	15	Single Family	In for Permit	6/5/2007	Single Family
2215 32nd Ave W 3901 W Dravus St	Seattle	39	Single Family	In for Permit	2/2/2007	Single Family
<b>Totals/Averages</b>		<b>54</b>				

*Source: New Home Trends*

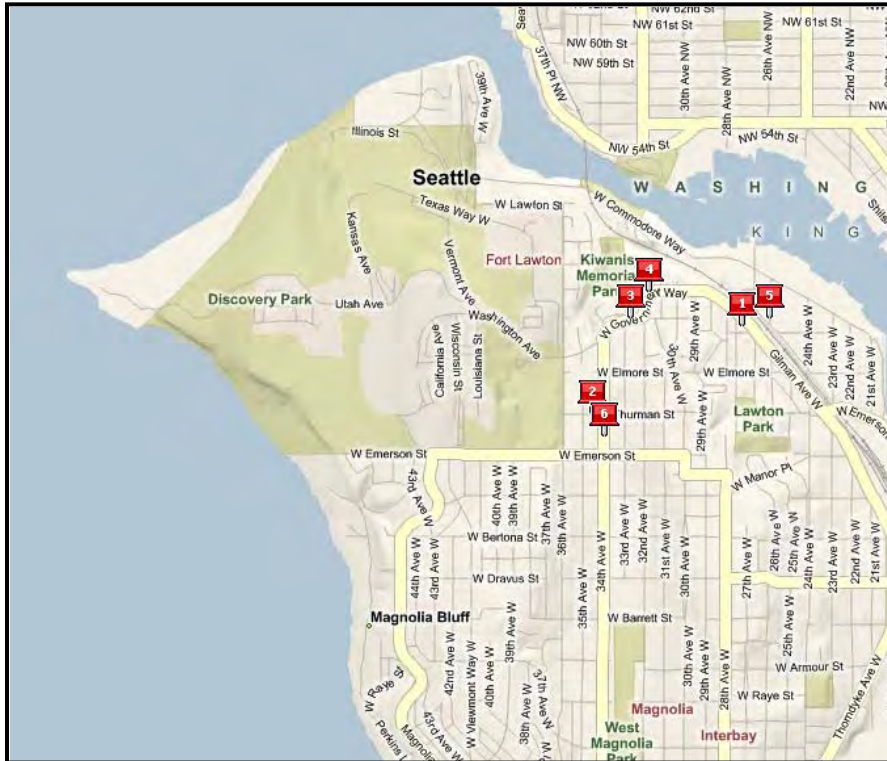
The table above shows planned and proposed single family developments in Magnolia. The largest of these developments is located to the South of the subject property at 3901 W. Dravus Street. Lexington Fine Homes is planning a thirty nine unit development at the site of an old elementary school and has been attempting to navigate the permitting and neighborhood process for the better part of four years. The difficulty Lexington has experienced is due to push back from the community regarding density and traffic which certain groups feels will cause an undue burden on traffic and quality of life surrounding the sight.

These two new construction developments have not completed the permitting process and as such cannot be guaranteed to come to market. Attempts by developers to build planned single family homes within the subject market area have been met with resistance from the surrounding community and therefore any planned and proposed housing developments will not necessarily be brought to market.



Magnolia Multifamily

MAP OF COMPARABLE MULTIFAMILY DEVELOPMENTS



Map #	Development	Location	Status	Dwelling Type	Total # of Units	Start of Sales	Monthly Abs. Rates	Total Price Range		Total Sq. Ft. Range		Total \$/Sq. Ft. Range		Est. Sellout
								Min.	Max.	Min.	Max.	Min.	Max.	
1	2715 W Jameson St 2715 W Jameson St	2914 E. Madison St.	Selling Homes	Townhome	9	4/1/2007	0.38	399000	475000	1150	1450	293	375	3/1/2009
2	3841 34th Ave W 34th Ave W	1810 11th Ave.	Not Yet Selling	Townhome	5	--	--	--	--	--	--	--	--	--
3	4266 33rd Ave W 33rd Ave W	1707 Boylston Ave.	Sold Out	Townhome	5	7/14/2006	1.16	449000	499000	1760	1760	255	284	
4	Blue Heron 3150 W Government Way	1426 E. Madison St.	Selling Homes	Mid Rise	30	5/31/2007	1.21	274990	549990	639	1058	368	603	9/1/2008
5	Candyce (Conversion) 4269 Gilman Ave W	530 Broadway E.	Selling Homes	Low Rise	10	7/13/2007	0.73	189950	275000	475	768	331	420	1/1/2011
6	Promenade at the Park (Conversion) 3855 34th Ave	1530 Eastlake Ave. E.	Selling Homes	Low Rise	19	2/27/2008	0.56	387000	387000	539	962	351	351	12/1/2008
<b>Totals/Averages</b>					<b>78</b>	<b>--</b>	<b>0.8</b>	<b>\$339,988</b>	<b>\$437,198</b>	<b>913</b>	<b>1200</b>	<b>\$320</b>	<b>\$407</b>	

Source: New Home Trends, Northwest Multiple Listing Service





The map on the previous page, along with the accompanying table, shows the comparable multifamily developments in proximity to the subject property. The comparable property set includes a number of townhome developments as well as two low rise conversion properties and one new construction mid-rise condominium development (The Blue Heron). The smallest units contained within these developments average 913 square feet and the largest units average 1,200 square feet. The total number of units surveyed was 78, weighted heavily by The Blue Heron which is made up of 30 condominium units.

The average price per square foot for these multifamily units is between \$320.00 and \$407.00 with an average price per square foot of \$363.00. The average absorption for these comparable products is 0.8 units per month. The lethargic absorption rate can be attributed to Magnolia's lack of acceptance of multifamily product as well as a slowing residential market throughout the region. With townhome developments of between 5 and 10 units, lower absorption poses less of a problem because these developments have fewer units to sell. In this regard, as multifamily projects increase the number of units per development, absorption plays an increasingly larger role in the success of the project.

#### PLANNED AND PROPOSED MULTIFAMILY UNITS MAGNOLIA

Development Name	Location	Units	Dwelling Type	Status	App. Date	Ownership
2200 32nd Ave W	Seattle	10	Townhome	In for Permit	6/5/2007	Condominium
2316 W Crockett St	Seattle	7	Townhome	In for Permit	2/2/2007	Unknown
<b>Totals/Averages</b>		<b>17</b>				

*Source: New Home Trends*

Planned and proposed multifamily units in Magnolia total seventeen units according to New Home Trends. The trend, or lack thereof, in multifamily development in Magnolia begs the question of why buyers in Seattle choose multifamily and in what locations these buyers expect to find such product. Availability of land and zoning must be cited in the case of Magnolia as being barriers to multifamily development, with little zoning for high density product and a lack of concentrated mixed use development, both the for sale and apartment multifamily markets in Magnolia lack feasibility. This can be seen in the relative lack of development in the market area through one of the biggest residential booms in Seattle's history. From 1999 to present, Magnolia has added around 225 multifamily units in projects containing five or more units. While this number does not include infill townhomes containing four or less units, it is a fairly accurate picture of the development history of Magnolia over the past eight and a half years. With roughly 25 units per year being brought to the Magnolia multifamily market, any larger scale development could face barriers to acceptance in a multifamily market which is neither deep nor robust.



## MAGNOLIA AND CAPITOL HILL MARKET COMPARISON

Neighborhood	Multi Family			Single Family		
	Average Size (Square Feet)	Average Price	Price/Square Foot	Average Size (Square Feet)	Average Price	Price/Square Foot
<b>Magnolia</b>	921	\$ 300,310.00	\$ 326.07	2610	\$ 819,000.00	\$ 313.79
<b>Capitol Hill</b>	801	\$ 342,309.00	\$ 427.35	2410	\$ 757,000.00	\$ 314.11

*Source: King County Assessor, Northwest Multiple Listing Service*

The table above shows a price comparison between the Magnolia and Capitol Hill neighborhoods. The Magnolia Neighborhood includes zip code 98199 and Capitol Hill contains zip codes 98122 and 98102. These neighborhoods are very different in terms of their unit composition with Capitol Hill representing a strong multifamily composition and Magnolia a very strong single family composition. The prices for units located within Capitol Hill show an average unit price of \$342,309 while Magnolia's prices are closer to the \$300,000 mark.

This comparison also shows a distinct difference in unit size and a significant difference in price per square foot for multifamily units in both market areas. The average price per square foot in Capitol Hill is \$427.35 and the average price per square foot in Magnolia is \$326.07. The average single family price per square foot between the two neighborhoods is roughly equivalent and Magnolia's single family homes prices average approximately \$60,000 more than Capitol Hill's. Clearly the price of Magnolia's multifamily units as well as its market acceptance is not driven solely by the lack of affordability of its single family prices.

Home buyers choose multifamily living as a more affordable alternative to single family development, but they also choose multifamily living for its proximity to job centers and retail, entertainment and service amenities. Magnolia lacks these amenities in whole or in part and the difference can be seen in the numbers between Magnolia and Capitol Hill where market acceptance and the value of multifamily development is driven by many of the amenities which are not found in Magnolia.

For the reasons detailed above, our recommendations strongly support a unit mix which primarily consists of detached units with a smaller percentage of multifamily townhome products making up the remainder of the recommended unit mix.



## VIII. GENERAL LIMITING CONDITIONS

This report has been prepared to answer specific questions, based on background information and assumptions provided by you, concerning a specific development or project. Use of this report should therefore be limited to the purpose you identified, as recited in the Executive Summary. You are warned NOT to rely on this report, or the data contained therein, to analyze other developments or projects not identified in the Executive Summary, as the specific factual contexts and assumptions may differ.

The information on which this report's analysis and conclusions are based have been gathered from third party sources which Gardner-Johnson, LLC. believes to be reliable. However, because of the possibility of human or mechanical errors by our sources, Gardner-Johnson LLC. does not guarantee the accuracy, adequacy, or completeness of any information obtained from third parties. Likewise, analysis based on such information cannot be guaranteed, as different input data could yield different results.

Some of the raw data for this report may have come from you, your organization, employees or independent contractors. Gardner-Johnson LLC. assumes that such information is accurate and reliable, and has not attempted to independently verify it.

Gardner-Johnson LLC. is sometimes requested to forecast market conditions in specific areas at specific times in the future. Such predictions are inherently speculative, and cannot be guaranteed.

Gardner-Johnson's clients are sophisticated business people and organizations. This report has been prepared to assist you in making a business decision concerning the purchase, sale or development of real estate. Although we believe this report's contents to be accurate as of the date of publication, ultimately you must exercise your own business judgment about whether to pursue a given project, or take a specific course of action. This report is intended to assist your decision-making process, *not* replace it. You are strongly encouraged to consult other sources, and to critically review this report's contents and conclusions.

THIS REPORT IS PROVIDED BY THE GARDNER-JOHNSON, LLC. WITHOUT WARRANTIES, EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Gardner-Johnson LLC. is not responsible for any damages whatsoever, including lost profits, interruption of business, personal injury and/or any damage or consequential damage without limitation, incurred before, during or after the use of this report. Under no circumstances will Gardner-Johnson, LLC. be liable for any direct, indirect, general, special or consequential damages related to or arising from use of this report.



## IX. COPYRIGHT INFORMATION

All written materials contained in this report, including data tables, graphs etc. are subject to copyright(s), which are the sole property of Gardner-Johnson, LLC. You shall acquire no rights in or to any such materials, whatsoever. This report is provided pursuant to a non-exclusive license for you to use said copyrighted materials subject to the terms of this license, and subject to such other guidelines and limitations as may be imposed by Gardner-Johnson, LLC. from time to time. By accepting and using this report, you agree not to reproduce or duplicate these materials (except as permitted herein), and not to distribute this report or its contents to any third party.

Gardner-Johnson, LLC. hereby authorizes you (meaning the original purchaser of this report, as identified in the Executive Summary) to make photocopies of this report for use within your organization, in connection with the project or development identified in the Executive Summary. These reports may be released to individuals or organizations outside your organization only for the purpose of obtaining such third parties' input about the project. Third parties will be requested to return all copies of this report to you when they have completed their work, and will be instructed to not distribute this report to anybody else or retain copies for their own files.

Your acceptance and use of this report constitutes your acknowledgement and agreement that Gardner-Johnson, LLC. retains all ownership rights to its original work, and to any and all changes, additions, alterations or improvements, and any derivative works are, and shall be, the property of Gardner-Johnson, LLC. You agree to execute such documents as requested by Gardner-Johnson, LLC. to effect an assignment to Gardner-Johnson, LLC. of any rights that you might acquire in such original work.

The sale of Gardner-Johnson's copyrighted material is strictly forbidden. It is a violation of this agreement to loan, rent, lease, borrow, or transfer the use of such copyrighted materials to any other entity or parties, except as specifically permitted herein.



## EXHIBITS

EXHIBIT 1.01

REAL GROSS DOMESTIC PRODUCT AND RELATED MEASURES  
PERCENT CHANGE FROM PRECEDING PERIOD  
SEASONALLY ADJUSTED ANNUAL RATES

	PERIOD												I 08												
	2001	2002	2003	2004	I 03	II 03	III 03	IV 03	I 04	II 04	III 04	IV 04		I 05	II 05	III 05	IV 05	I 06	II 06	III 06	IV 06	I 07	II 07	III 07	IV 07
<b>Gross domestic product (GDP)</b>	0.8	1.6	2.5	3.9	1.2	3.5	7.5	2.7	3.9	4.0	3.1	2.6	3.4	3.3	4.2	1.8	5.6	2.6	2.0	2.5	0.7	3.8	4.9	0.6	0.6
<b>Personal consumption expenditures</b>	2.5	2.7	2.8	3.9	2.1	3.6	5.8	2.3	4.7	2.9	3.9	4.3	2.7	4.2	3.9	0.8	4.8	2.6	2.8	4.2	4.2	1.4	2.8	2.8	2.3
Durable goods	4.3	7.1	5.8	6.4	0.4	16.8	16.7	0.7	6.1	1.7	8.7	6.1	2.4	12.8	9.0	-12.3	19.8	-0.1	6.4	4.4	8.7	1.7	4.5	2.0	2.0
Nondurable goods	2.0	2.5	3.2	3.6	3.8	2.3	7.7	1.8	4.3	1.7	3.7	5.4	5.2	4.9	3.4	3.9	5.9	1.4	1.5	5.9	3.2	-0.5	2.2	1.2	1.2
Services	2.4	1.9	1.9	3.5	1.5	1.8	2.9	2.8	4.6	3.8	3.1	3.4	1.6	2.3	3.2	2.0	1.6	3.7	2.8	3.4	3.8	2.3	2.8	2.8	2.8
<b>Gross private domestic investment</b>	-7.9	-2.6	3.6	9.8	-1.3	3.3	17.7	9.3	4.8	21.7	2.0	5.1	8.2	-3.6	5.2	16.2	7.8	1.0	-0.8	-15.2	-9.6	4.6	5.0	-14.6	-4.7
Fixed investment	-3.0	-5.2	3.4	7.3	-0.4	10.6	13.6	5.5	2.2	11.7	7.6	4.9	7.8	10.5	6.3	2.8	8.2	-1.6	-1.2	-9.1	-3.9	3.2	-0.7	-4.0	-9.7
Nonresidential	-4.2	-9.2	1.0	5.9	-2.6	10.7	9.4	2.8	1.7	7.2	10.3	8.3	6.0	5.2	5.9	5.2	13.7	4.4	10.0	-3.1	2.6	11.0	9.3	6.0	6.0
Structures	-2.3	-17.1	-4.1	2.2	-6.9	14.7	-0.8	-4.7	3.3	6.9	3.1	-2.0	5.3	-2.0	-7.0	12.0	8.7	20.3	15.7	-0.8	4.8	26.2	16.4	12.4	-6.2
Equipment and software	-4.9	-6.2	2.8	7.3	-1.0	9.3	13.2	5.6	1.2	7.3	13.0	12.3	6.3	7.9	11.0	2.8	15.6	-1.4	7.7	-4.8	1.7	4.7	6.2	3.1	-0.7
Residential	0.4	4.8	8.4	9.9	4.1	10.5	22.2	10.6	3.1	19.8	3.2	-0.6	11.1	20.0	7.1	-0.9	-0.3	-11.1	-18.7	-19.8	-15.8	-11.8	-20.5	-25.2	-26.7
<b>Net exports of goods and services</b>	-5.4	-2.3	1.3	9.2	-5.3	-1.7	11.4	20.8	7.2	6.2	4.8	9.9	4.7	9.4	3.2	9.6	14.0	6.2	6.8	10.6	0.7	7.5	19.1	6.5	5.5
Exports	-6.1	-4.0	1.8	9.0	2.0	-1.2	8.8	19.8	7.1	6.4	8.3	6.1	5.5	12.8	3.7	11.5	17.3	6.0	9.4	8.4	0.2	6.6	26.2	3.9	5.2
Goods	-3.7	1.9	0.0	9.7	-20.0	-2.8	17.5	23.1	7.5	5.6	-2.8	19.2	2.9	2.0	2.1	5.5	6.7	6.7	0.8	16.3	1.9	9.6	4.0	13.2	6.1
Services	-2.7	3.4	4.1	10.8	-5.0	4.1	3.7	17.6	10.2	16.0	4.4	12.0	4.1	1.4	2.5	13.2	9.1	1.4	5.6	-2.6	5.5	-2.7	4.4	-1.4	2.5
Imports	-3.2	3.7	4.9	10.9	-3.9	8.6	0.6	17.2	10.1	17.7	4.7	12.6	4.9	2.0	2.7	14.1	9.4	-0.1	7.1	-4.1	6.0	-2.9	4.8	-2.6	2.4
Goods	-0.3	2.1	0.0	10.0	-10.6	-15.7	21.2	19.6	10.9	7.6	3.1	9.0	-0.2	-1.5	1.2	8.3	7.4	9.9	-2.6	6.2	2.8	-1.7	1.7	5.5	3.5
Services	3.4	4.4	2.5	1.9	-1.4	6.1	1.5	0.7	2.9	2.2	1.3	-1.9	1.6	1.1	3.4	-1.1	4.9	0.8	1.7	3.4	1.0	4.1	3.8	2.0	2.0
<b>Government consumption expenditures and gross investment</b>	3.9	7.0	6.8	4.3	0.1	19.7	0.4	3.1	7.2	2.5	5.0	-5.2	3.4	0.4	9.6	-4.6	8.8	-4.5	1.3	4.6	-3.9	6.0	7.1	0.5	4.6
Federal	3.9	7.4	8.7	5.9	-4.4	36.3	-5.3	8.1	9.1	2.0	9.1	-9.1	4.5	2.9	11.2	-9.9	8.9	-2.0	-1.2	12.3	-7.4	8.5	10.1	-0.5	6.0
National defense	3.9	6.3	3.4	1.2	9.0	-6.4	12.4	-6.0	3.6	3.5	-2.9	3.4	1.2	-4.4	6.2	7.1	8.5	-9.3	6.5	-9.6	3.6	0.9	1.1	2.8	1.8
Non-defense	3.2	3.1	0.2	0.5	-2.2	-0.8	2.1	-0.6	0.5	2.1	-0.9	0.1	0.6	1.5	-0.1	1.0	2.7	4.0	1.9	2.7	3.9	3.0	1.9	2.8	0.5
State and local																									

## EXHIBIT 1.02

### EMPLOYMENT AND DEVELOPMENT TRENDS MAJOR WESTERN METROPOLITAN AREAS

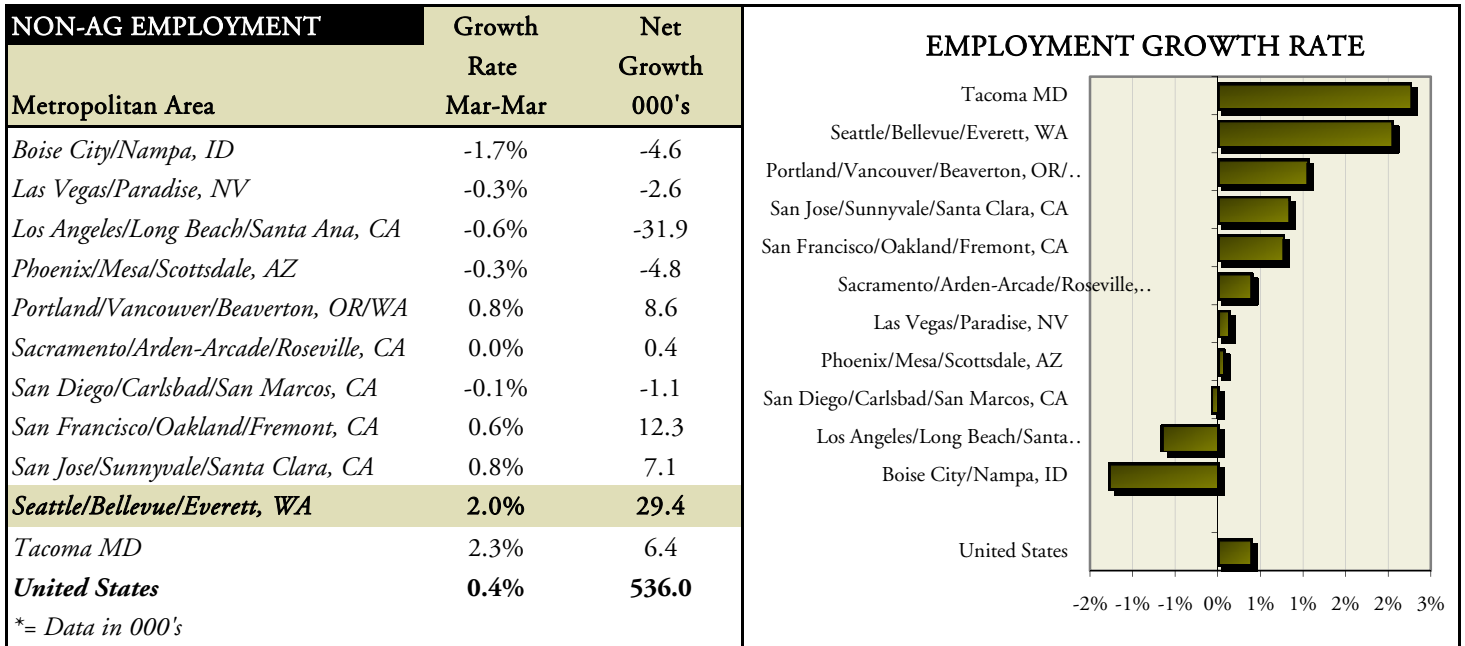
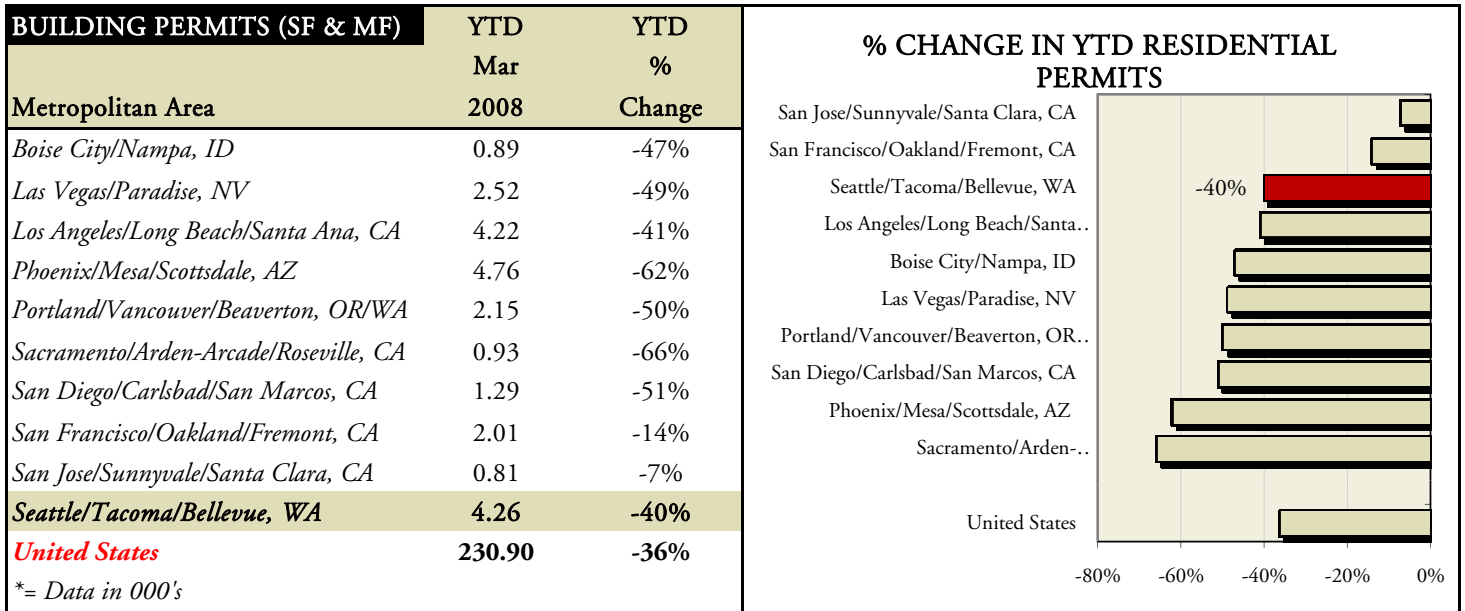
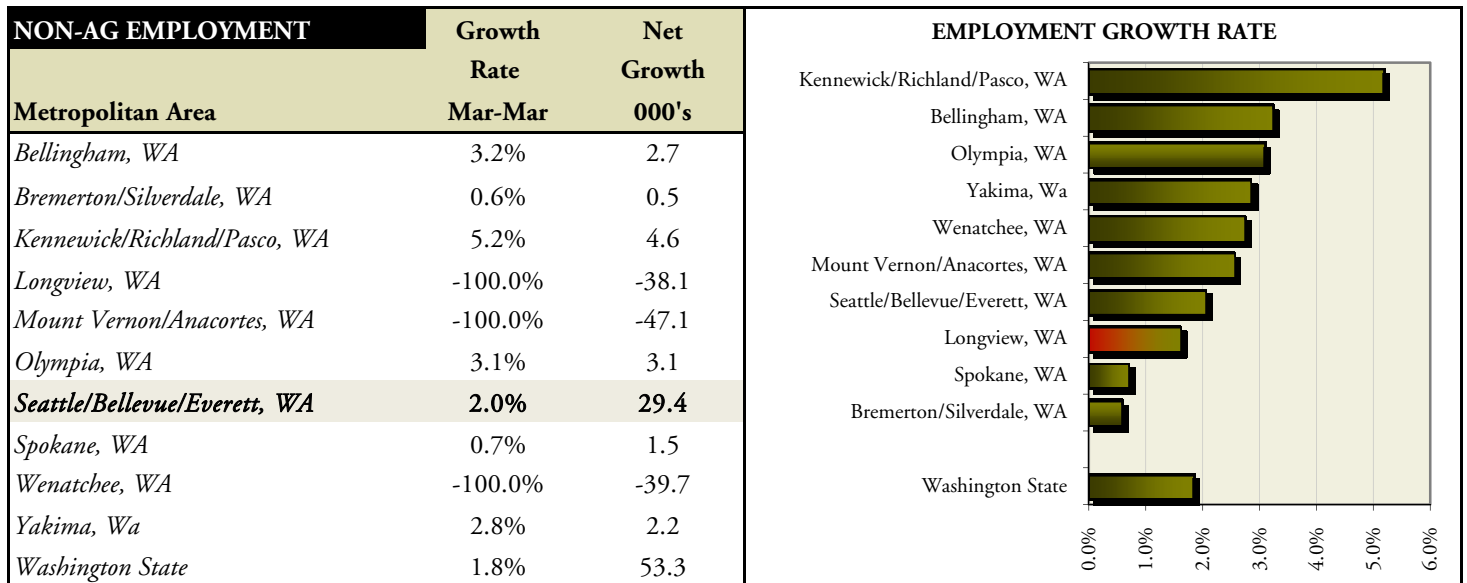
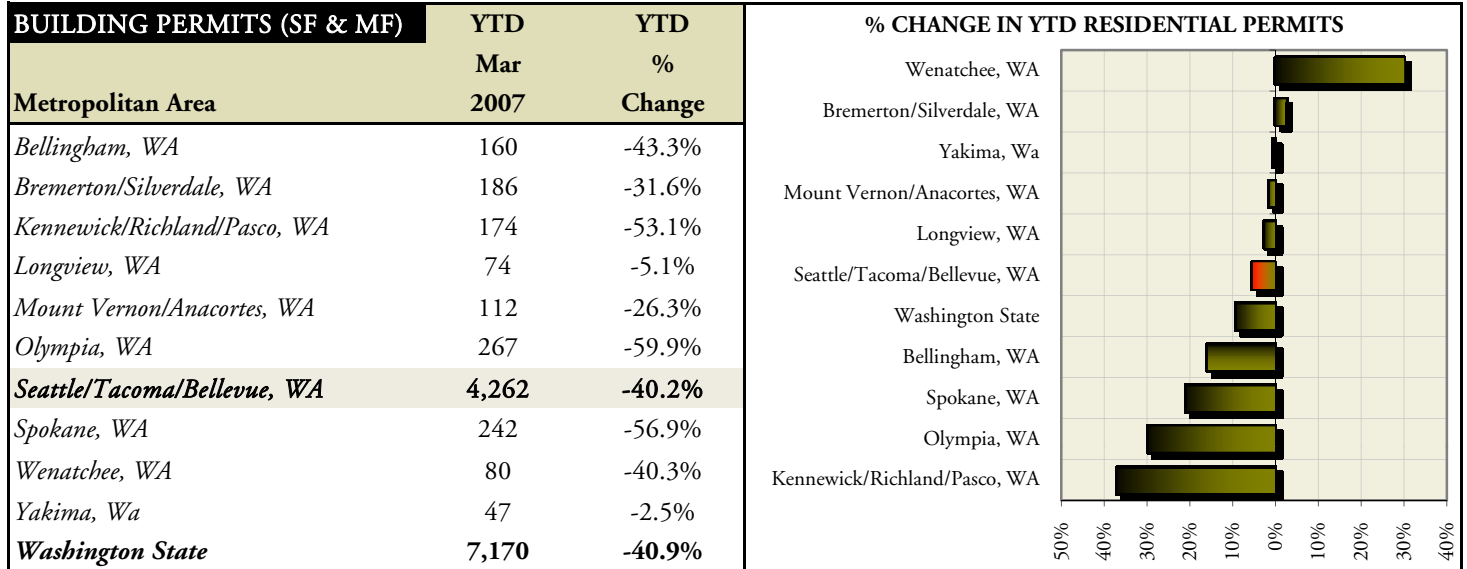


EXHIBIT 1.02, Cont.

EMPLOYMENT AND DEVELOPMENT TRENDS  
WASHINGTON METROPOLITAN AREAS





# EXHIBIT 1.03

## DOMESTIC MORTGAGE AND MARKET DATA FREDDIE MAC'S PRIMARY MORTGAGE MARKET SURVEY

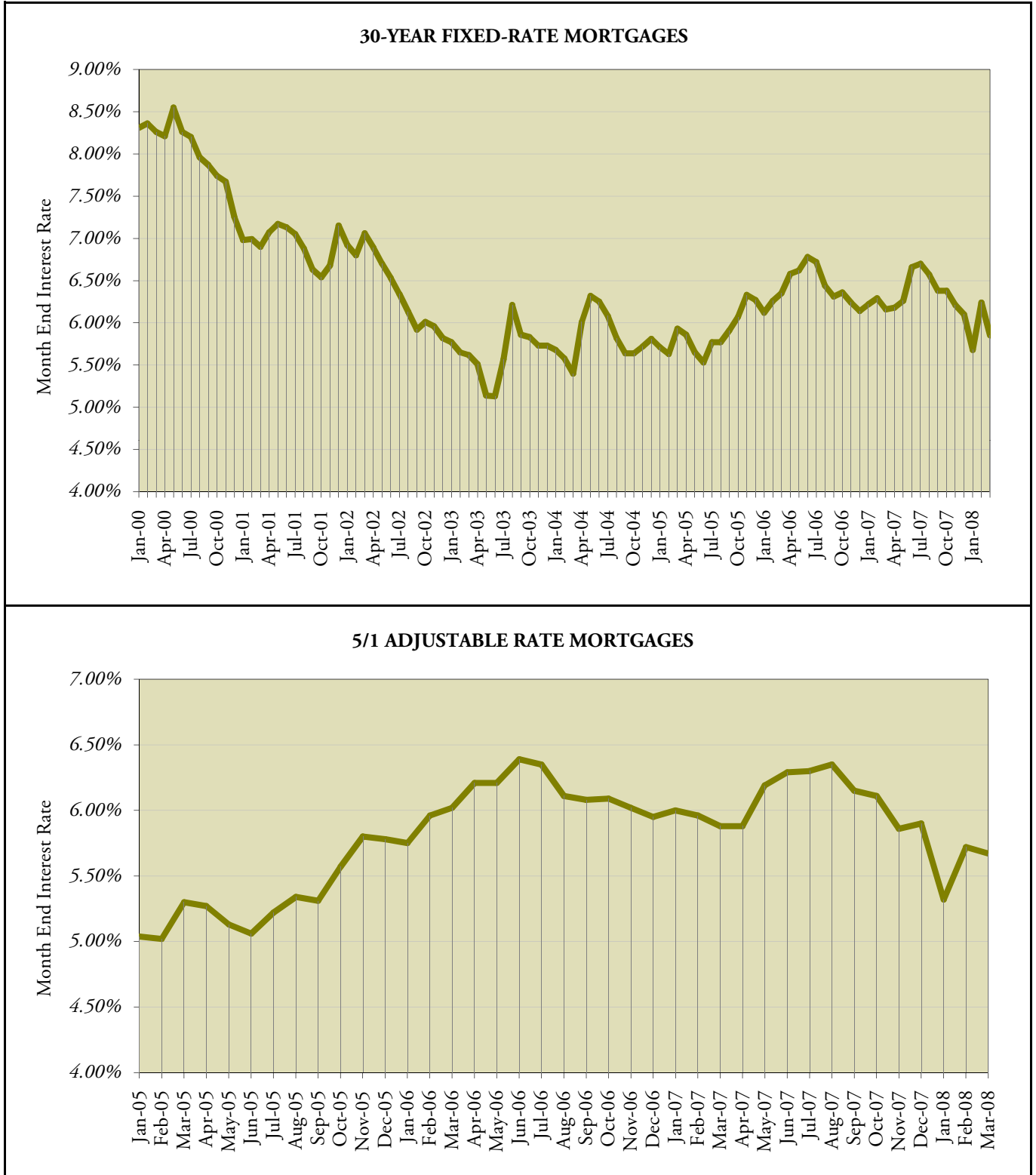


EXHIBIT 1.04

HOUSING OPPORTUNITY INDEX  
WESTERN REGION METROPOLITAN AREAS  
Ranked by Affordability

Metropolitan Area	HOI 2008 1Q		2008 1Q		2008 1Q	
	Share of Homes Affordable for Median Income	Median Family Income	Median Sales Price	Median Price	Affordability Rank	Regional Rank
Bellingham, WA	42.4	\$63,000	\$247,000	\$247,000	173	31
Bend, OR	30.1	\$58,200	\$268,000	\$268,000	199	49
Boise City-Nampa, ID	47.9	\$60,900	\$225,000	\$225,000	157	21
Bremerton-Silverdale, WA	43.4	\$69,900	\$263,000	\$263,000	169	29
Denver-Aurora, CO	65.5	\$71,800	\$211,000	\$211,000	95	7
Las Vegas, NV	46.2	\$63,900	\$245,000	\$245,000	163	26
Los Angeles-Long Beach, CA	10.5	\$59,800	\$412,000	\$412,000	223	68
Mount Vernon, WA	29.4	\$59,500	\$275,000	\$275,000	200	50
Olympia, WA	47.0	\$66,300	\$240,000	\$240,000	159	23
Phoenix, AZ	60.1	\$64,200	\$210,000	\$210,000	113	11
Portland-Vancouver, OR	28.8	\$63,800	\$270,000	\$270,000	177	33
Reno-Sparks, NV	47.6	\$69,500	\$261,000	\$261,000	158	22
Riverside-San Bernardino, CA	26.9	\$62,000	\$288,000	\$288,000	205	53
Sacramento, CA	49.7	\$71,000	\$262,000	\$262,000	148	18
Salt Lake City, UT	46.5	\$65,300	\$256,000	\$256,000	160	24
San Diego, CA	25.2	\$72,100	\$368,000	\$368,000	208	56
San Francisco-Oakland, CA	12.7	\$94,300	\$680,000	\$680,000	221	67
San Jose, CA	23.1	\$97,800	\$544,000	\$544,000	210	58
Seattle-Tacoma-Bellevue, WA	<b>32.9</b>	<b>\$81,400</b>	<b>\$367,000</b>	<b>\$367,000</b>	<b>193</b>	<b>44</b>
Spokane WA	64.6	\$56,700	\$165,000	\$165,000	99	8
Tacoma, WA	44.1	\$66,200	\$250,000	\$250,000	167	28
NATIONAL	53.8	\$61,500	\$219,000	\$219,000	--	--

Note - The NAHB/Wells Fargo HOI is a measure of the percentage of homes sold in a given area that are affordable to families earning that area's median income during a specific quarter

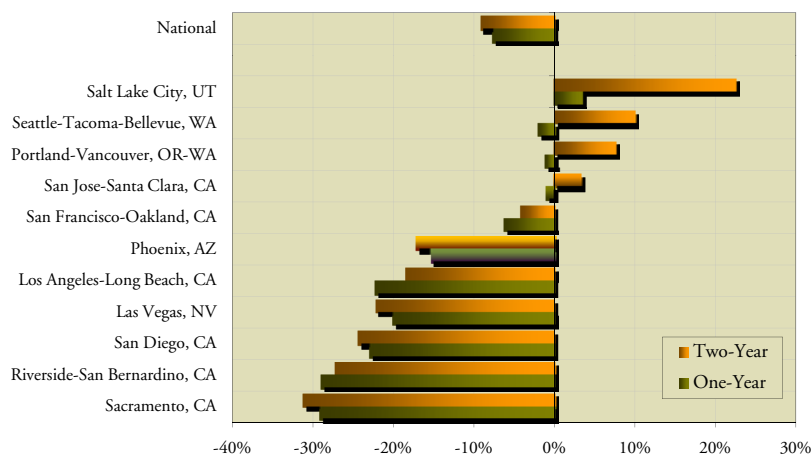
EXHIBIT 1.05

RELATIVE EXISTING SINGLE-FAMILY HOME PRICE TRENDS  
MAJOR WEST COAST MARKETS  
First Quarter, 2008

Metropolitan Area	Median Price	Home Price Escalation		
		Quarter	1-Yr.*	2-Yr.*
<i>Las Vegas, NV</i>	\$247,600	-9.5%	-20.1%	-22.2%
<i>Los Angeles-Long Beach, CA</i>	\$459,400	-9.9%	-22.3%	-18.5%
<i>Phoenix, AZ</i>	\$222,200	-8.1%	-15.4%	-17.2%
<i>Portland-Vancouver, OR-WA</i>	\$286,600	-1.3%	-1.1%	7.6%
<i>Riverside-San Bernardino, CA</i>	\$287,100	-15.1%	-29.0%	-27.3%
<i>Sacramento, CA</i>	\$258,500	-13.1%	-29.3%	-31.2%
<i>Salt Lake City, UT</i>	\$225,700	-1.5%	3.5%	22.5%
<i>San Diego, CA</i>	\$459,000	-12.2%	-22.9%	-24.4%
<i>San Francisco-Oakland, CA</i>	\$701,700	-9.7%	-6.2%	-4.1%
<i>San Jose-Santa Clara, CA</i>	\$780,000	-7.7%	-1.0%	3.3%
<i>Seattle-Tacoma-Bellevue, WA</i>	\$372,300	<b>-1.4%</b>	<b>-2.1%</b>	<b>10.0%</b>
<b>National</b>	\$196,300	-4.8%	-7.7%	-9.2%

\* Year over year from most recent quarter surveyed

MEDIAN SINGLE-FAMILY HOME PRICE ESCALATION RATE



MEDIAN SINGLE-FAMILY HOME PRICE

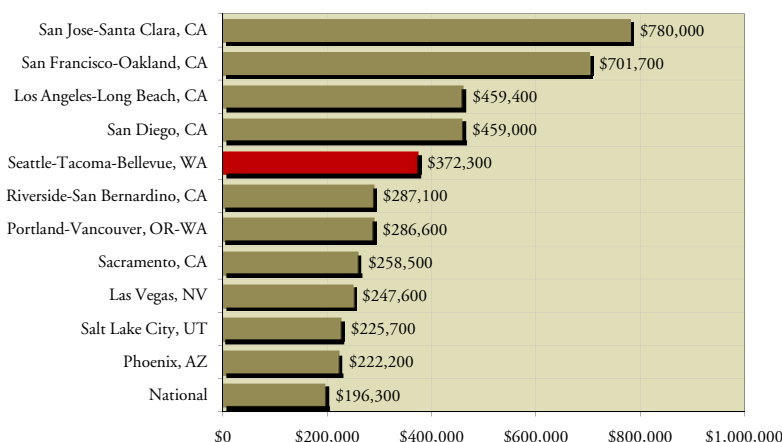
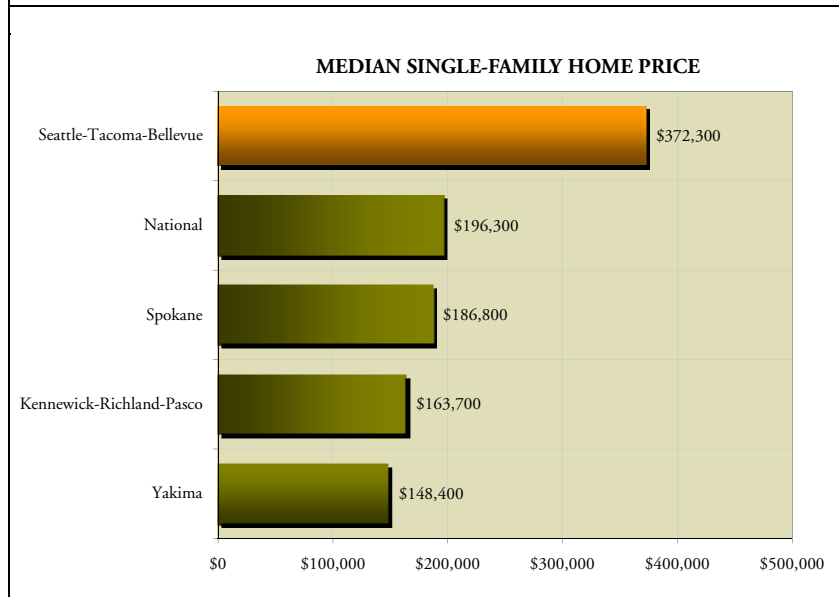
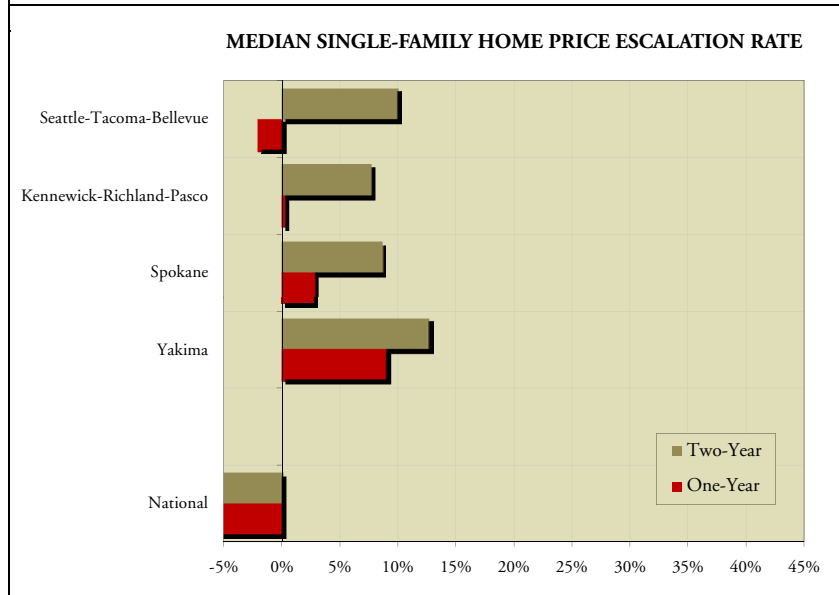


EXHIBIT 1.05

RELATIVE EXISTING SINGLE-FAMILY HOME PRICE TRENDS  
 MAJOR WEST COAST MARKETS  
 First Quarter, 2008

Metropolitan Area	Median Price	Home Price Escalation		
		Quarter	1-Yr.*	2-Yr.**
<i>Kennewick-Richland-Pasco</i>	\$163,700	-5.0%	0.2%	7.7%
<i>Seattle-Tacoma-Bellevue</i>	\$372,300	-1.4%	-2.1%	10.0%
<i>Spokane</i>	\$186,800	-3.8%	2.8%	8.5%
<i>Yakima</i>	\$148,400	-13.0%	9.0%	12.7%
<b>National</b>	<b>\$196,300</b>	<b>-4.8%</b>	<b>-7.5%</b>	<b>-9.2%</b>

\* Year over year from most recent quarter surveyed



SOURCE: National Association of Realtors and Washington Center for Real Estate Research

EXHIBIT 1.06

RELATIVE CONDOMINIUM HOME PRICE TRENDS  
MAJOR WEST COAST MARKETS

First Quarter, 2008

Metropolitan Area	Median Price	Home Price Escalation		
		Quarter	1-Yr.	2-Yr.
<i>Las Vegas, NV</i>	\$160,300	-10.2%	-20.8%	-20.6%
<i>Los Angeles-Long Beach, CA</i>	\$343,700	-5.3%	-14.8%	-13.5%
<i>Phoenix, AZ</i>	\$189,800	3.7%	4.6%	4.3%
<i>Portland-Vancouver, OR-WA</i>	\$214,600	3.5%	11.7%	2.0%
<i>Sacramento, CA</i>	\$147,200	-31.3%	-33.4%	-38.0%
<i>Salt Lake City-Ogden, UT</i>	\$162,400	-0.6%	-1.3%	18.0%
<i>San Diego, CA</i>	\$294,200	-10.0%	-19.5%	-20.3%
<i>San Francisco/Bay Area, CA</i>	\$546,700	-8.2%	-6.5%	-9.3%
<b><i>Seattle-Bellevue-Everett, WA</i></b>	<b>\$347,000</b>	<b>3.9%</b>	<b>7.0%</b>	<b>13.9%</b>
<b><i>National</i></b>	<b>\$216,900</b>	<b>-1.9%</b>	<b>-3.0%</b>	<b>-2.3%</b>

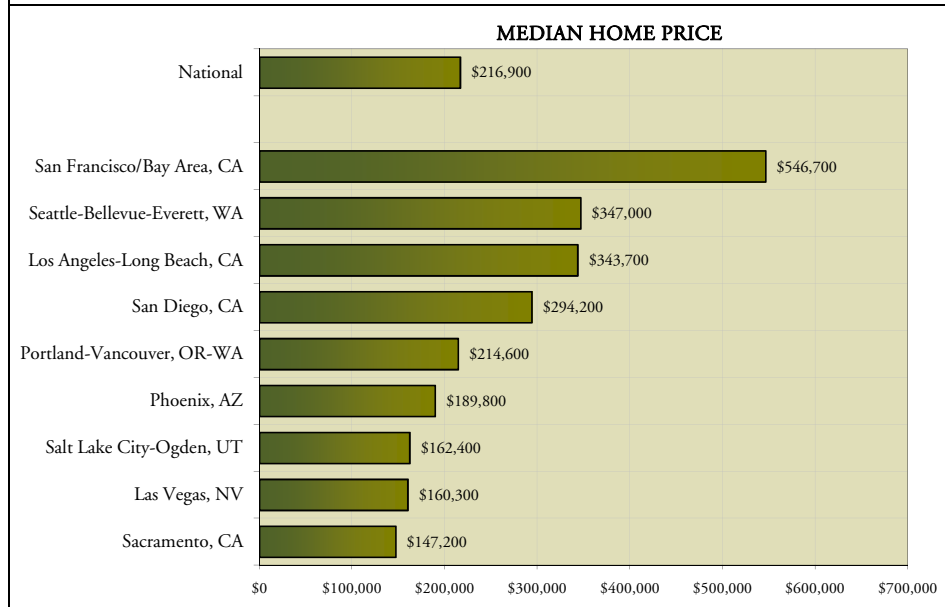
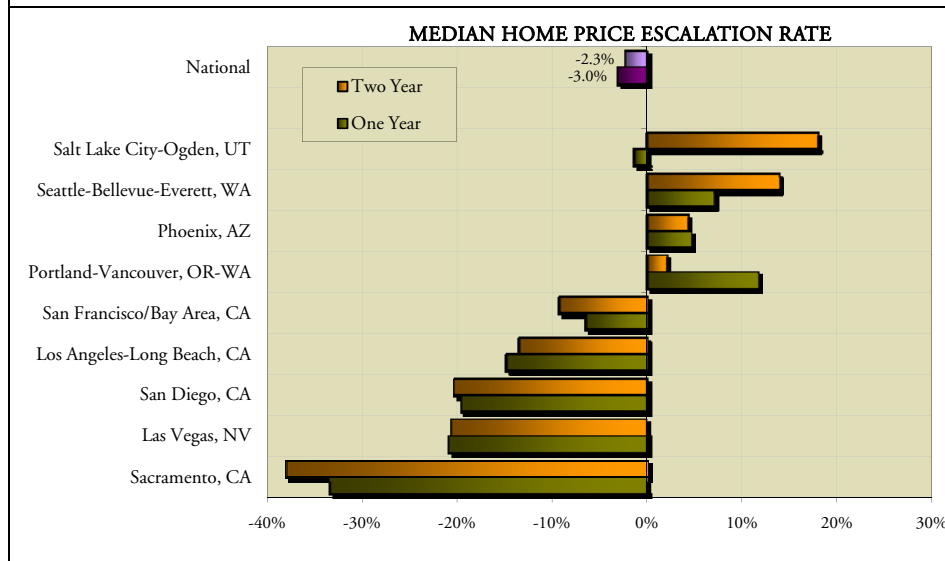
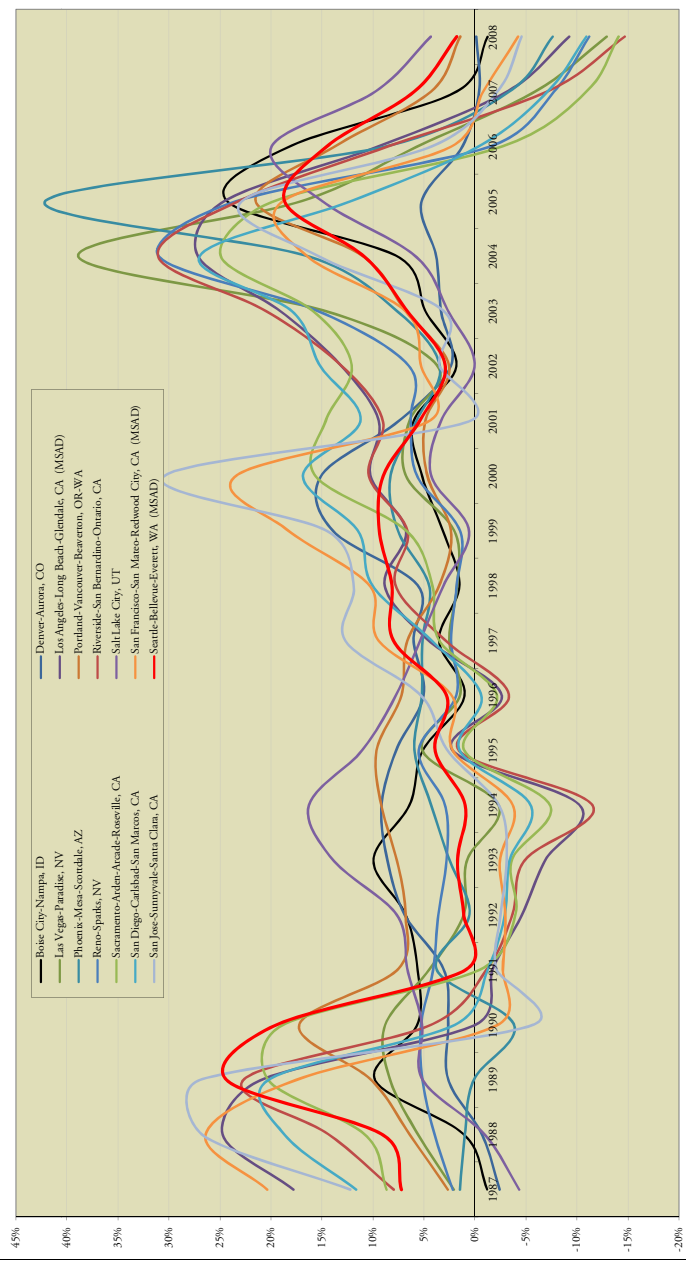


EXHIBIT 1.07a

SINGLE FAMILY HOUSE APPRECIATION TREND 1/  
OFFICE OF FEDERAL HOUSING ENTERPRISE OVERSIGHT  
WEST COAST METROPOLITAN AREAS  
FIRST QUARTER 2008

Year	Boise City-Nampa, ID	Denver-Aurora, CO	Las Vegas-Paradise, NV	Los Angeles-Long Beach-Glendale, CA (MSAD)	Phoenix-Mesa-Scottsdale, AZ	Portland-Vancouver-Beaverton, OR-WA	Reno-Sparks, NV	Riverside-San Bernardino-Ontario, CA	Sacramento-Arden-Accade-Roseville, CA	Salt Lake City, UT	San Diego-Carlsbad-San Marcos, CA	San Francisco-San Mateo-Redwood City, CA (MSAD)	San Jose-Sunnyvale-Santa Clara, CA	Seattle-Bellevue-Everett, WA (MSAD)
1987	-1.2%	-2.4%	2.1%	17.8%	1.5%	2.7%	2.2%	8.0%	8.7%	-4.3%	11.6%	20.4%	12.2%	7.2%
1988	1.1%	-0.7%	5.6%	24.7%	1.0%	6.4%	4.0%	10.8%	10.8%	-1.0%	18.7%	26.4%	26.8%	9.1%
1989	9.8%	2.6%	8.3%	20.9%	0.1%	10.2%	5.1%	22.7%	20.3%	5.1%	20.2%	17.5%	26.9%	24.4%
1990	5.7%	2.6%	8.8%	0.0%	-3.8%	17.2%	5.3%	4.3%	18.8%	5.2%	2.0%	-2.2%	-5.7%	19.5%
1991	5.6%	3.0%	4.5%	-1.7%	3.7%	7.6%	4.1%	-1.1%	-0.8%	6.6%	-1.2%	-2.7%	-2.1%	0.9%
1992	6.8%	6.9%	1.1%	-4.6%	0.5%	6.8%	3.6%	-3.7%	-4.0%	7.6%	-2.9%	-3.0%	-2.5%	1.1%
1993	10.0%	8.6%	0.8%	-6.9%	-4.9%	7.7%	2.8%	-4.0%	-3.6%	13.9%	-3.4%	-4.8%	-5.1%	1.7%
1994	6.4%	9.2%	-2.3%	-10.3%	4.3%	9.2%	2.9%	-1.5%	-7.4%	16.3%	-5.5%	-3.7%	-2.4%	1.0%
1995	5.1%	7.7%	5.2%	-2.6%	5.2%	9.6%	1.8%	1.6%	1.0%	11.0%	1.5%	2.2%	2.7%	3.9%
1996	1.0%	5.0%	1.5%	-2.6%	5.2%	7.2%	1.8%	-3.3%	-2.2%	7.7%	-0.6%	2.3%	5.3%	2.8%
1997	3.5%	6.0%	2.5%	4.5%	5.2%	6.6%	2.3%	2.9%	3.5%	5.4%	4.2%	9.5%	12.7%	8.0%
1998	1.5%	5.6%	1.7%	8.8%	4.5%	3.5%	1.8%	7.8%	4.2%	3.1%	10.0%	10.3%	11.9%	8.1%
1999	3.2%	13.9%	2.0%	6.8%	7.5%	2.3%	1.5%	6.6%	6.7%	0.6%	11.5%	18.3%	14.5%	9.4%
2000	5.2%	15.1%	6.8%	10.2%	8.3%	4.7%	5.7%	10.4%	15.6%	4.3%	16.9%	23.4%	30.5%	9.0%
2001	6.0%	7.5%	6.4%	9.4%	5.7%	4.9%	6.3%	9.0%	14.6%	3.3%	11.2%	4.5%	3.5%	5.4%
2002	1.8%	2.4%	3.7%	13.1%	3.4%	2.5%	6.5%	13.0%	12.1%	0.0%	15.2%	5.3%	3.5%	2.9%
2003	4.9%	3.3%	14.6%	19.1%	7.6%	6.8%	15.4%	20.5%	15.9%	2.6%	17.9%	6.8%	3.0%	6.6%
2004	7.6%	3.8%	38.9%	27.2%	16.4%	11.0%	31.0%	31.1%	24.9%	5.8%	27.0%	16.4%	15.3%	10.9%
2005	24.3%	5.2%	17.1%	24.6%	42.1%	21.5%	23.5%	32.2%	19.7%	14.9%	12.2%	18.8%	22.9%	18.7%
2006	18.2%	1.2%	5.6%	9.5%	8.8%	13.7%	-1.5%	8.5%	-2.7%	19.9%	-0.4%	2.3%	4.2%	14.5%
2007	1.8%	-0.4%	-5.9%	-3.2%	-3.6%	4.3%	-7.8%	-7.1%	-11.0%	9.8%	-7.1%	-0.8%	-2.2%	5.9%
2008	-1.2%	-0.1%	-12.9%	-9.2%	-7.6%	1.4%	-11.2%	-14.7%	-14.1%	4.3%	-10.9%	-4.2%	-4.6%	1.8%

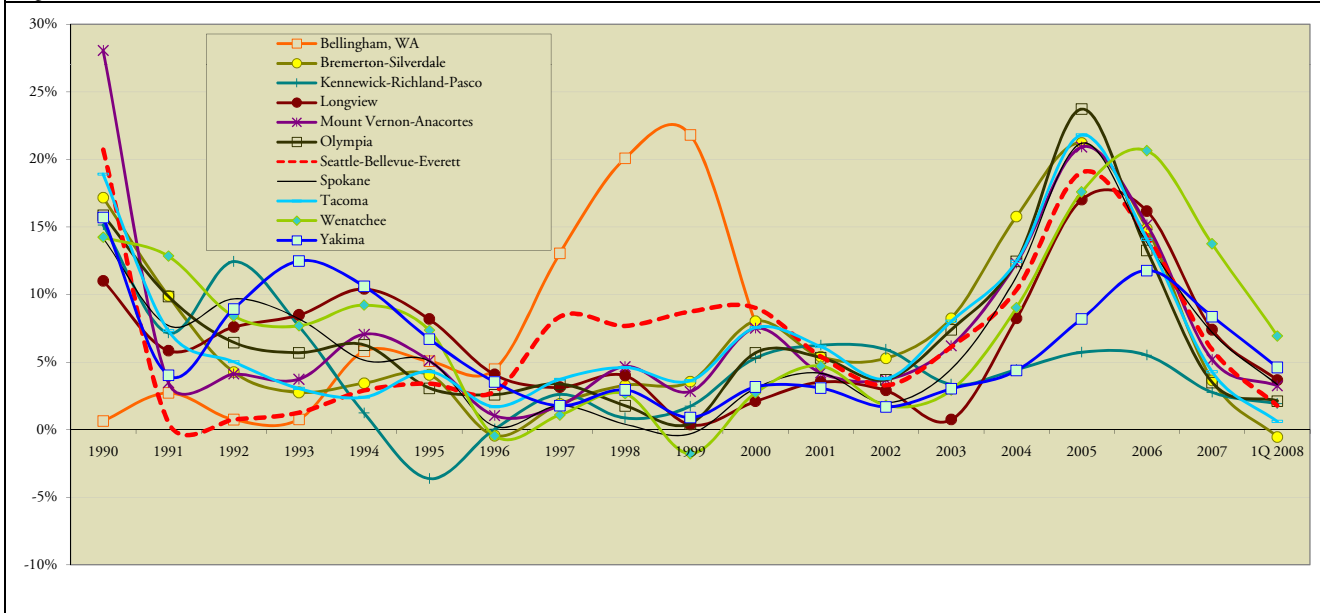


1/ Data reflects same home trends for homes applying for conventional conforming mortgages obtained through the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Federal National Mortgage Association (Fannie Mae).  
2/ Year over year appreciation compared to prior year's index value at the end of the same period.  
National Mortgage Association (Fannie Mae). This data is a weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or refinance on the same properties.  
SOURCE: Office of Federal Housing Enterprise Oversight

EXHIBIT 1.07b

SINGLE FAMILY HOUSE APPRECIATION TREND 1/  
OFFICE OF FEDERAL HOUSING ENTERPRISE OVERSIGHT  
WASHINGTON STATE  
FIRST QUARTER 2008

Year	Bellingham	Bremerton-Silverdale	Kennewick-Richland-Pasco	Longview	Mount Vernon-Anacortes	Olympia	Seattle-Bellevue-Everett	Spokane	Tacoma	Wenatchee	Yakima
1987	2.6%	2.3%	-0.4%	0.0%	3.2%	5.7%	7.6%	-0.8%	2.9%	1.7%	4.3%
1988	12.6%	2.5%	-6.1%	13.2%	4.8%	2.8%	8.9%	2.5%	7.0%	-0.2%	-0.2%
1989	22.3%	18.0%	27.3%	11.2%	25.0%	13.5%	25.3%	9.1%	13.9%	6.1%	4.8%
1990	26.8%	17.2%	15.2%	11.0%	28.1%	15.9%	20.7%	14.1%	18.9%	14.2%	15.7%
1991	3.3%	9.9%	7.2%	5.8%	3.5%	9.9%	0.5%	7.7%	7.3%	12.8%	4.0%
1992	8.5%	4.3%	12.4%	7.6%	4.1%	6.5%	0.8%	9.7%	5.0%	8.4%	8.9%
1993	4.7%	2.8%	7.7%	8.5%	3.7%	5.7%	1.3%	8.2%	3.1%	7.7%	12.5%
1994	2.6%	3.4%	1.2%	10.4%	7.1%	6.3%	2.9%	5.1%	2.4%	9.2%	10.6%
1995	4.9%	4.1%	-3.6%	8.2%	5.1%	3.1%	3.4%	5.1%	4.3%	7.3%	6.7%
1996	0.6%	-0.4%	0.0%	4.1%	1.0%	2.6%	2.8%	0.3%	1.7%	-0.5%	3.5%
1997	2.7%	1.9%	2.6%	3.1%	1.8%	3.9%	8.4%	1.8%	3.7%	1.1%	1.8%
1998	0.7%	3.3%	0.9%	4.0%	4.7%	1.8%	7.7%	0.4%	4.6%	2.6%	2.9%
1999	0.8%	3.6%	1.7%	0.4%	2.8%	0.4%	8.7%	-0.3%	3.6%	-1.8%	0.9%
2000	5.8%	8.0%	5.3%	2.1%	7.5%	5.7%	9.0%	3.1%	7.6%	2.7%	3.2%
2001	5.1%	5.4%	6.2%	3.5%	4.2%	5.3%	5.4%	4.2%	6.2%	4.7%	3.1%
2002	4.5%	5.3%	5.9%	2.9%	3.7%	3.7%	3.3%	2.0%	3.8%	1.8%	1.7%
2003	13.1%	8.2%	3.3%	0.7%	6.2%	7.4%	6.1%	4.5%	8.0%	2.9%	3.0%
2004	20.1%	15.8%	4.4%	8.2%	12.3%	12.5%	10.3%	11.3%	12.5%	9.0%	4.4%
2005	21.8%	21.2%	5.7%	17.0%	20.9%	23.7%	19.0%	21.2%	21.8%	17.6%	8.2%
2006	7.8%	14.9%	5.5%	16.2%	15.2%	13.3%	14.3%	13.8%	14.1%	20.6%	11.8%
2007	4.6%	3.6%	2.8%	7.4%	5.2%	3.5%	5.9%	7.2%	4.3%	13.7%	8.4%
1Q 2008	1.4%	-0.5%	1.9%	3.7%	3.2%	2.1%	1.8%	3.3%	0.6%	6.9%	4.6%



1/ Data reflects same home trends for homes applying for conventional conforming mortgages obtained through the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Federal National Mortgage Association (Fannie Mae).

2/ Year over year appreciation compared to prior year's index value at the end of the same period

National Mortgage Association (Fannie Mae). This data is a weighted, repeat-sales index, meaning that it measures average price changes in repeat sales or refinancings on the same properties.

SOURCE: Office of Federal Housing Enterprise Oversight

EXHIBIT 1.08

BOEING EARNINGS, DELIVERIES AND EMPLOYMENT

First Quarter, 2008

Quarterly Financial Results (millions \$)			
	Mar-08	Mar-07	% Δ
<b>Revenues</b>			
Commercial Airplanes	\$8,161	\$7,555	8.0%
Integrated Defense Systems Total	\$7,575	\$7,717	-1.8%
Engagement & Mobility Systems	\$3,256	\$3,327	-2.1%
Network & Space Systems	\$2,693	\$2,778	-3.1%
Support Systems	\$1,626	\$1,612	0.9%
Capital Corp Less Acct. Differences	\$254	\$93	173.1%
Operating Revenues	\$15,990	\$15,365	4.1%
<b>Earnings (Loss) from Operations</b>			
Commercial Airplanes	\$983	\$706	39.2%
Integrated Defense Systems Total	\$860	\$784	9.7%
Engagement & Mobility Systems	\$389	\$433	-10.2%
Network & Space Systems	\$267	\$148	80.4%
Support Systems	\$204	\$203	0.5%
Capital Corp & Acct. Adjust.	(\$44)	(\$181)	-75.7%
Earnings from Operations	\$1,799	\$1,309	37.4%
<b>Net Earnings</b>			
Overall	\$1,211	\$877	38.1%

Contractual Backlog (billions \$)			
	Mar-08	Mar-07	% Change
Commercial Airplanes	\$271.2	\$255.2	6.3%
Integrated Defense Systems Total	\$44.4	\$41.8	6.2%
Engagement & Mobility Systems	\$23.1	\$23.0	0.4%
Network & Space Systems	\$10.5	\$9.2	14.1%
Support Systems	\$10.8	\$9.6	12.5%
<b>Total Contractual Backlog</b>	\$315.6	\$297.0	6.3%
<b>Unobligated Backlog</b>	\$30.6	\$30.2	1.3%
<b>Total Backlog</b>	\$346.2	\$327.2	5.8%
<b>Workforce</b>	161,500	159,300	1.4%

Commercial Jet Deliveries											
	3rd 2005	4th 2005	1st 2006	2nd 2006	3rd 2006	4th 2006	1st 2007	2nd 2007	3rd 2007	4th 2007	1st 2008
717	3	4	2	3	0	0	0	0	0	0	0
737 - Next Generation	47	52	72	70	81	79	83	86	81	80	87
747	2	4	4	4	3	3	3	4	5	4	4
767	2	3	3	3	3	3	3	3	3	3	3
777	8	10	17	17	13	18	17	21	20	25	21
<b>Total</b>	<b>62</b>	<b>73</b>	<b>98</b>	<b>97</b>	<b>100</b>	<b>103</b>	<b>106</b>	<b>114</b>	<b>109</b>	<b>112</b>	<b>115</b>

DISTRIBUTION OF REVENUES AND EARNINGS BY BUSINESS SEGMENT/1Q 2008		
Support Systems	16.84%	
Network & Space Systems	20.36%	
Engagement & Mobility Systems	47.37%	
Commercial Airplanes	51.04%	

CONTRACTUAL BACKLOG BY BUSINESS SEGMENT		
Support Systems	\$9.6	\$10.8
Network & Space Systems	\$9.2	\$10.5
Engagement & Mobility Systems	\$23.0	\$23.1
Commercial Airplanes	\$255.2	\$271.2



EXHIBIT 1.09

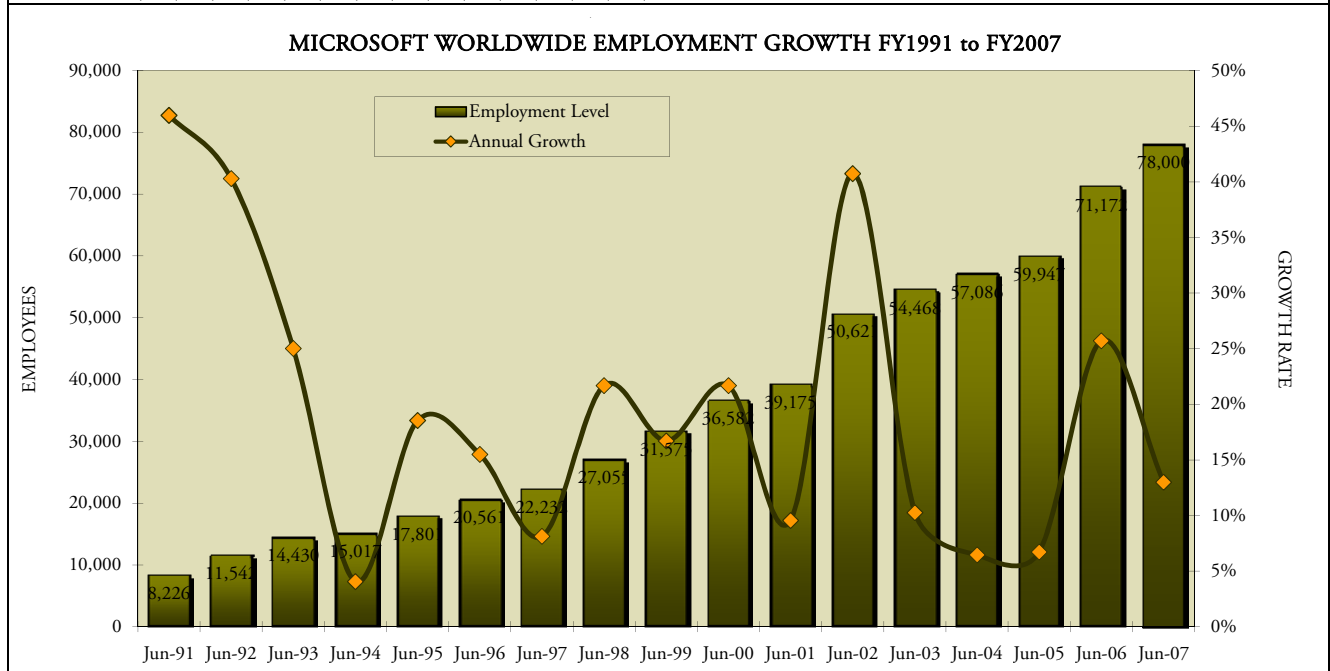
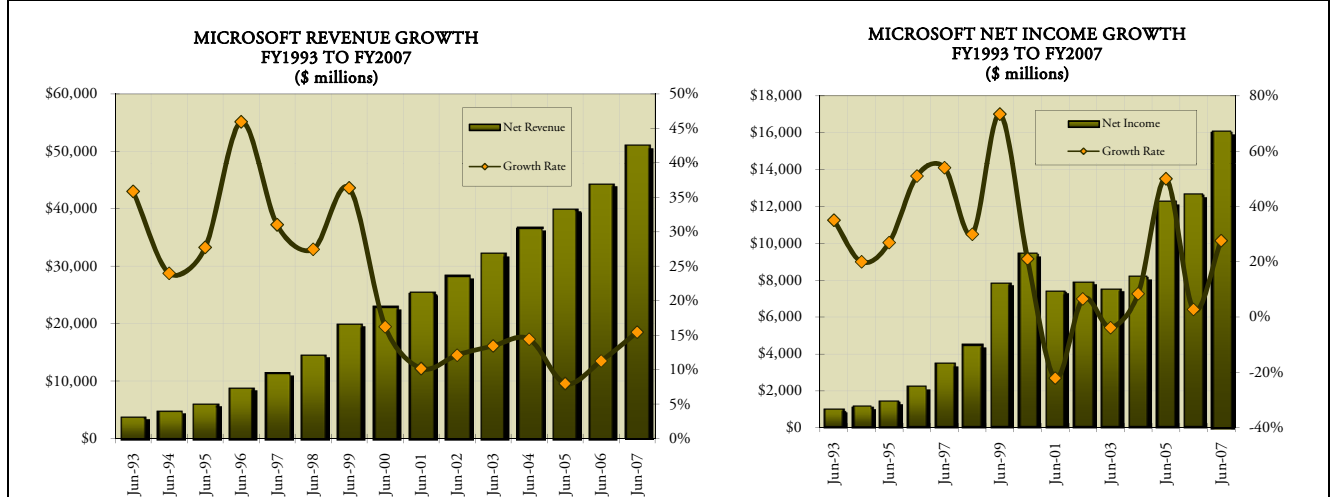
MICROSOFT EARNINGS and EMPLOYMENT  
4th Quarter 2007

	Three Months Ended		
	Mar-08	Mar-07	% Δ
<b>Revenues</b>			
Client	\$4,025	\$5,274	-23.7%
Server Platforms	\$3,255	\$2,748	18.4%
Online Server Business	\$843	\$603	39.8%
Business Division	\$4,745	\$4,872	-2.6%
Entertainment & Devices	\$1,576	\$936	68.4%
Unallocated & Other	\$10	\$10	-
<b>Total</b>	<b>\$14,454</b>	<b>\$14,443</b>	<b>-0.1%</b>
<b>Operating Expenses</b>	<b>\$10,045</b>	<b>\$7,854</b>	<b>-21.8%</b>
<b>Operating Income</b>	<b>\$4,409</b>	<b>\$6,589</b>	<b>49.4%</b>
<b>Other Income or Loss</b>	<b>(\$21)</b>	<b>(\$1,627)</b>	<b>n/a</b>
<b>Net Earnings</b>			
Overall	\$4,388	\$4,962	13.1%
Per Share (Diluted)	\$0.47	\$0.50	6.4%

**12-Month Revenue Growth by Division**

(\$ millions except per share data)



# EXHIBIT 1.10

## EMPLOYMENT GROWTH PATTERNS SEATTLE/BELLEVUE/EVERETT METROPOLITAN AREA Seattle-Bellevue-Everett MSA

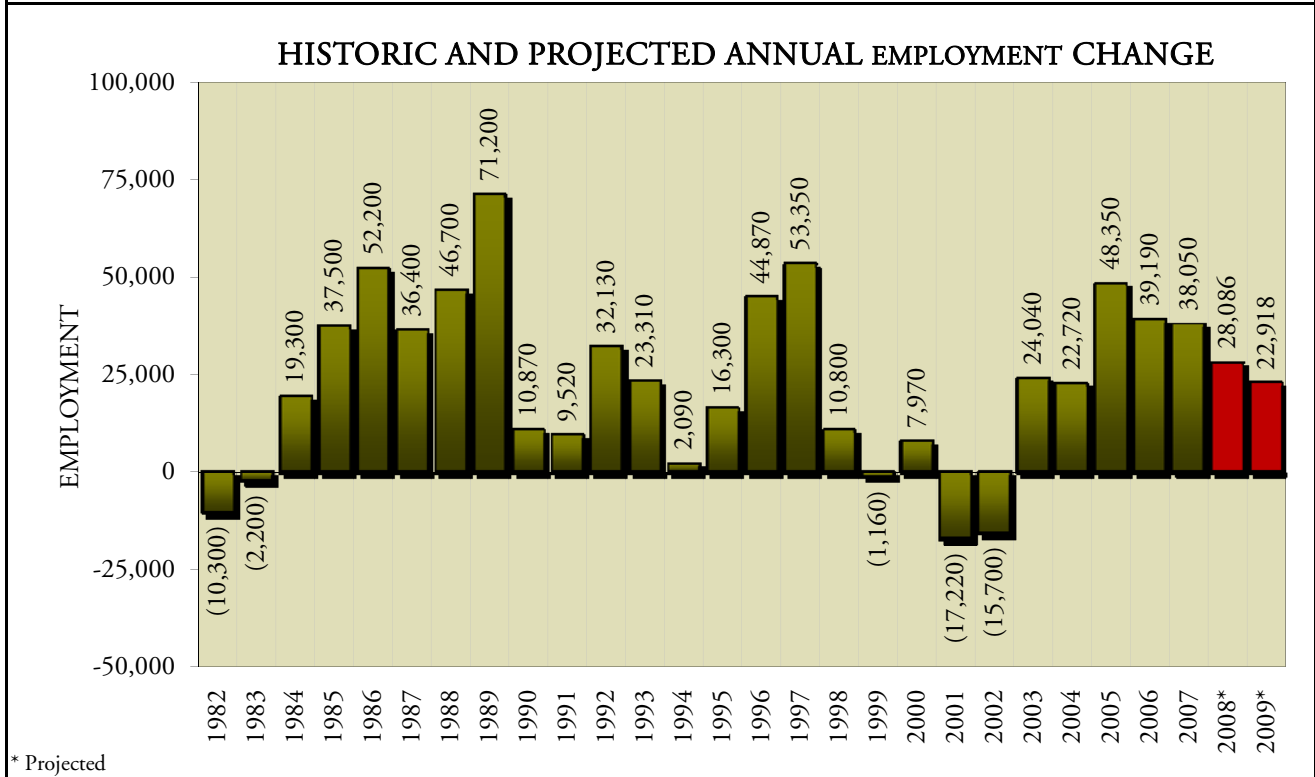
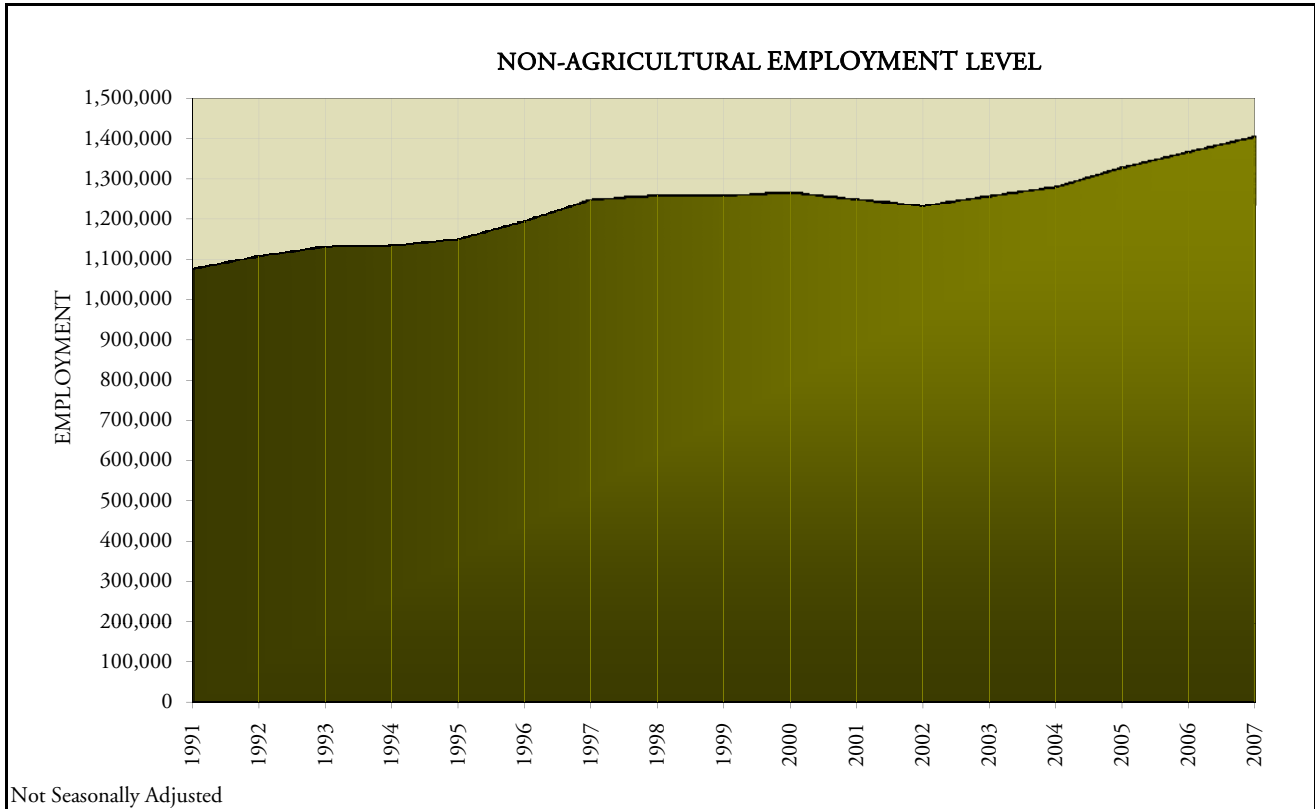
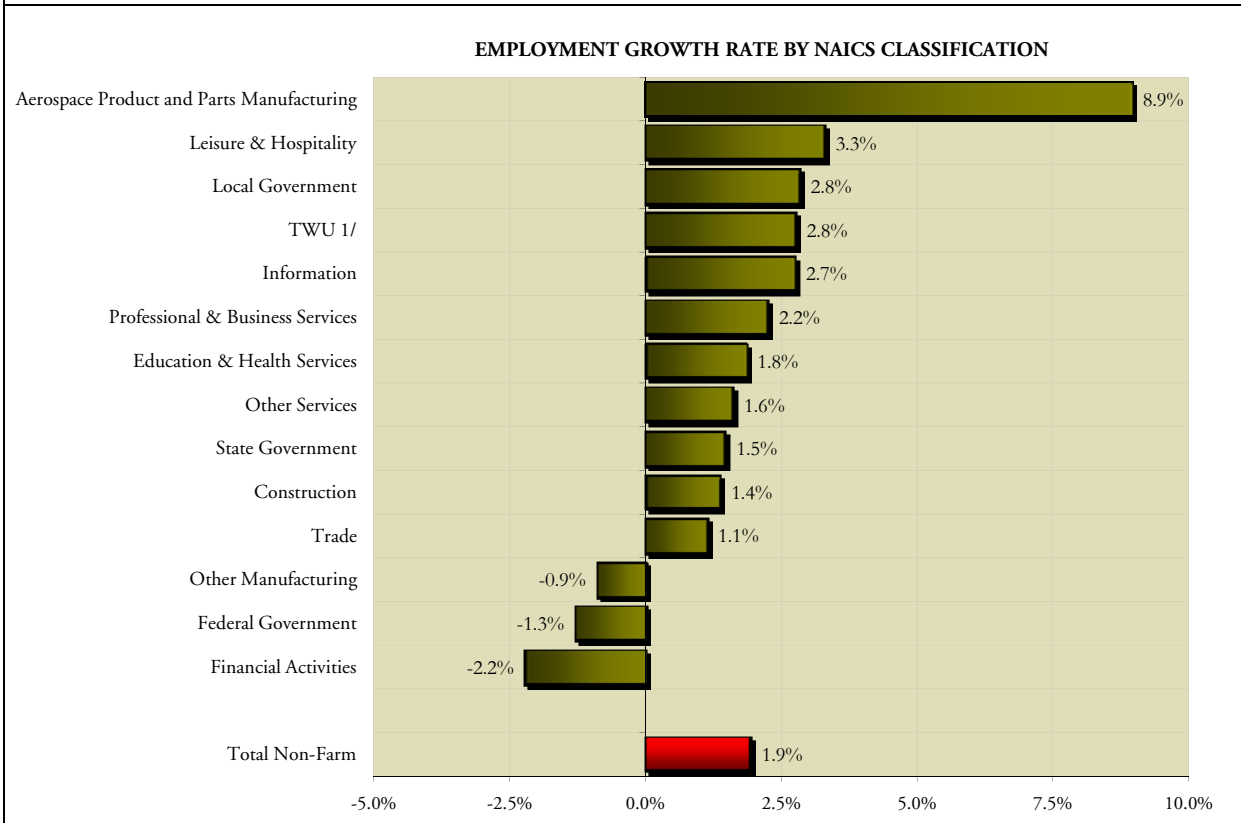
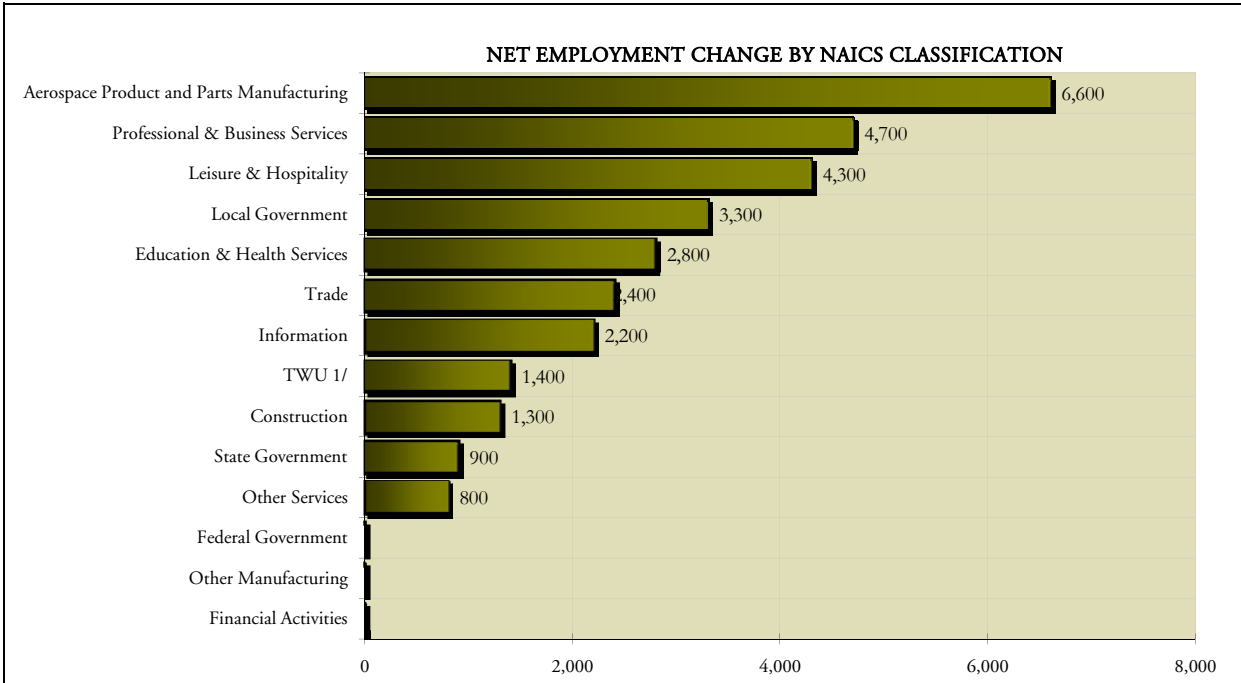


EXHIBIT 1.11

DISTRIBUTION OF EMPLOYMENT BY BROAD SECTOR  
 Seattle MSA  
 (Mar 2007 to Mar 2008)

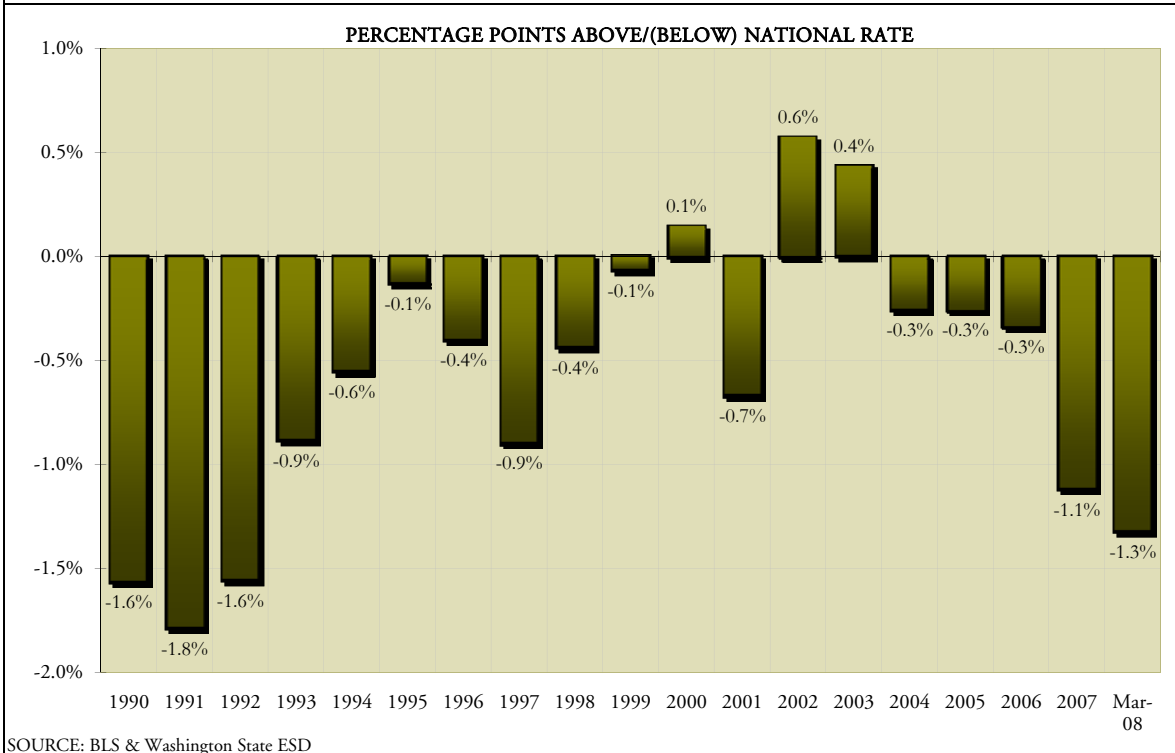
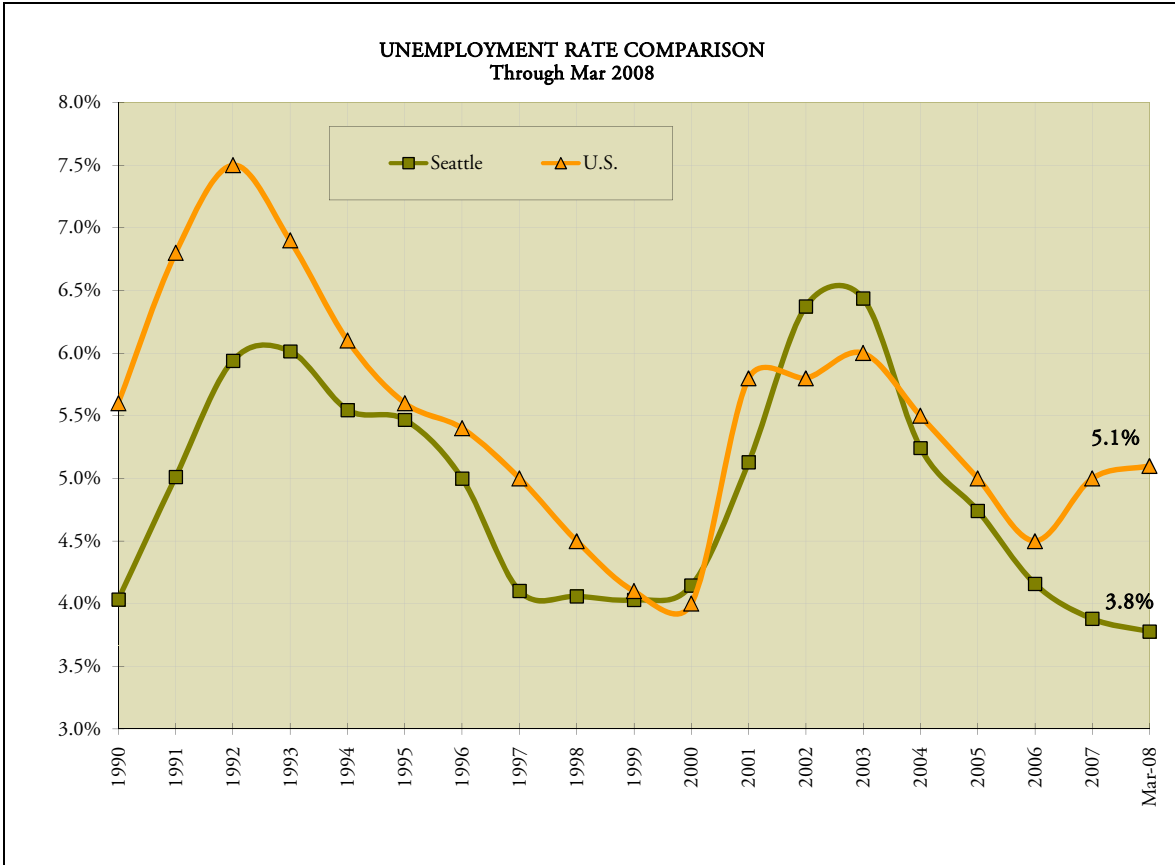


1/ Transportation, Warehousing and Utilities

SOURCE: State of Washington Employment Security and Gardner Johnson

EXHIBIT 1.12

HISTORICAL UNEMPLOYMENT RATE TRENDS  
SEATTLE-BELLEVUE-EVERETT PMSA



SOURCE: BLS & Washington State ESD

EXHIBIT 1.13

EMPLOYMENT GROWTH FORECASTS BY SECTOR  
SEATTLE-BELLEVUE-EVERETT METROPOLITAN AREA

Metropolitan Area Forecast

Seattle Metro Area Employment Sector	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Construction	72,100	77,800	86,600	93,600	103,800	106,645	109,167	111,337	113,550	115,808
Manufacturing	152,900	147,600	156,500	164,200	170,000	174,834	178,756	181,693	184,681	187,721
Wholesale Trade	67,900	70,100	70,700	72,200	73,600	74,514	75,447	76,398	77,361	78,337
Retail Trade	138,300	150,700	153,900	153,300	156,700	158,905	160,937	162,788	164,660	166,555
Transportation, Warehousing & Utilities	49,900	51,200	49,800	52,000	52,500	53,269	54,166	55,196	56,246	57,317
Information	70,900	73,000	75,400	80,300	83,600	85,797	87,873	89,817	91,807	93,843
Financial Activities	89,700	90,700	90,800	90,400	92,200	93,086	93,924	94,712	95,507	96,309
Professional & Business Services	178,500	187,100	199,600	208,800	215,700	222,812	230,021	237,320	244,851	252,621
Educational & Health Services	134,500	141,900	146,100	149,400	153,600	156,435	159,190	161,857	164,570	167,329
Leisure & Hospitality	114,900	124,000	129,000	132,100	135,600	137,958	140,212	142,355	144,531	146,740
Other Services	47,900	49,400	50,500	50,300	51,000	51,795	52,586	53,375	54,175	54,987
Government	199,800	200,200	199,400	199,500	204,200	206,646	209,061	211,441	213,849	216,284
<b>Total</b>	<b>1,317,300</b>	<b>1,363,700</b>	<b>1,408,300</b>	<b>1,446,100</b>	<b>1,492,500</b>	<b>1,522,696</b>	<b>1,551,337</b>	<b>1,578,289</b>	<b>1,605,789</b>	<b>1,633,849</b>
<i>Rate</i>		3.5%	3.3%	2.7%	3.2%	2.0%	1.9%	1.7%	1.7%	1.7%

King County Forecast

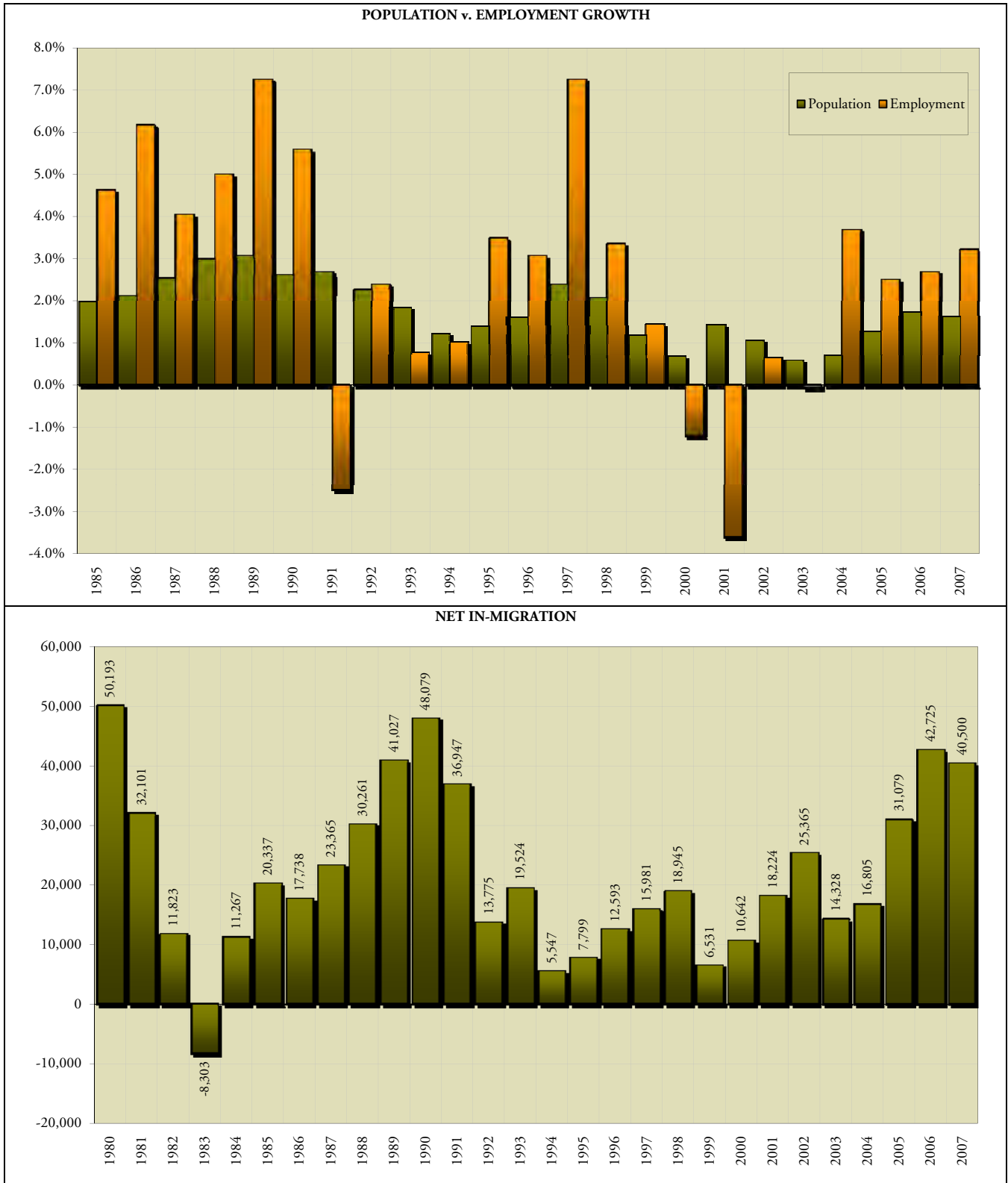
Employment Sector	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Construction	55,000	60,900	66,700	72,000	78,700	80,792	82,681	84,349	86,050	87,786
Manufacturing	108,100	104,400	109,900	114,100	112,300	115,340	118,005	120,264	122,566	124,913
Wholesale Trade	61,900	63,500	63,900	64,700	64,900	65,708	66,542	67,401	68,272	69,153
Retail Trade	111,900	121,600	123,000	120,900	123,500	125,187	126,750	128,184	129,635	131,102
Transportation, Warehousing & Utilities	46,700	47,500	46,000	47,900	48,000	48,702	49,527	50,480	51,451	52,441
Information	67,300	68,900	71,200	75,100	77,400	79,515	81,543	83,472	85,447	87,468
Financial Activities	77,500	78,000	77,800	77,400	79,400	80,137	80,851	81,543	82,241	82,944
Professional & Business Services	162,100	168,700	179,600	187,500	192,400	198,736	205,174	211,711	218,456	225,416
Educational & Health Services	113,900	120,800	124,500	126,700	128,900	131,231	133,477	135,634	137,826	140,054
Leisure & Hospitality	96,800	104,300	108,000	110,100	112,500	114,497	116,402	118,207	120,040	121,902
Other Services	39,500	40,800	41,900	42,100	42,300	42,962	43,627	44,294	44,972	45,660
Government	164,300	163,800	162,600	163,200	165,200	167,126	169,046	170,960	172,895	174,852
<b>Total</b>	<b>1,105,000</b>	<b>1,143,200</b>	<b>1,175,100</b>	<b>1,201,700</b>	<b>1,225,500</b>	<b>1,249,933</b>	<b>1,273,625</b>	<b>1,296,499</b>	<b>1,319,851</b>	<b>1,343,691</b>
<i>Rate</i>		3.5%	2.8%	2.3%	2.0%	2.0%	1.9%	1.8%	1.8%	1.8%

Snohomish County Forecast

Employment Sector	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Construction	17,000	16,900	19,900	21,600	25,100	25,853	26,486	26,988	27,500	28,022
Manufacturing	41,400	43,200	46,600	50,100	57,700	59,494	60,750	61,429	62,115	62,808
Wholesale Trade	6,200	6,600	6,800	7,500	8,700	8,806	8,905	8,997	9,090	9,184
Retail Trade	28,500	29,100	30,900	32,400	33,200	33,718	34,187	34,604	35,026	35,453
Transportation, Warehousing & Utilities	3,300	3,700	3,800	4,100	4,500	4,567	4,639	4,717	4,795	4,876
Information	3,300	4,100	4,200	5,200	6,200	6,282	6,330	6,345	6,360	6,375
Financial Activities	12,300	12,700	13,000	13,000	12,800	12,950	13,073	13,169	13,267	13,364
Professional & Business Services	17,600	18,400	20,000	21,300	23,300	24,077	24,847	25,610	26,395	27,205
Educational & Health Services	20,400	21,100	21,600	22,700	24,700	25,205	25,712	26,223	26,744	27,275
Leisure & Hospitality	18,600	19,700	21,000	22,000	23,100	23,460	23,810	24,148	24,491	24,838
Other Services	8,600	8,600	8,600	8,200	8,700	8,833	8,959	9,080	9,203	9,327
Government	36,200	36,400	36,800	36,300	39,000	39,520	40,014	40,481	40,954	41,431
<b>Total</b>	<b>213,400</b>	<b>220,500</b>	<b>233,200</b>	<b>244,400</b>	<b>267,000</b>	<b>272,762</b>	<b>277,713</b>	<b>281,790</b>	<b>285,938</b>	<b>290,158</b>
<i>Rate</i>		3.3%	5.8%	4.8%	9.2%	2.2%	1.8%	1.5%	1.5%	1.5%

EXHIBIT 1.14

SUMMARY OF RECENT AND PROJECTED POPULATION TRENDS  
SEATTLE-BELLEVUE-EVERETT PMSA  
1980-2007 Projected



SOURCE: Washington State Employment Security, State of Washington Office of Financial Management

EXHIBIT 1.15

DISTRIBUTION OF POPULATION GROWTH  
1982 - 2007

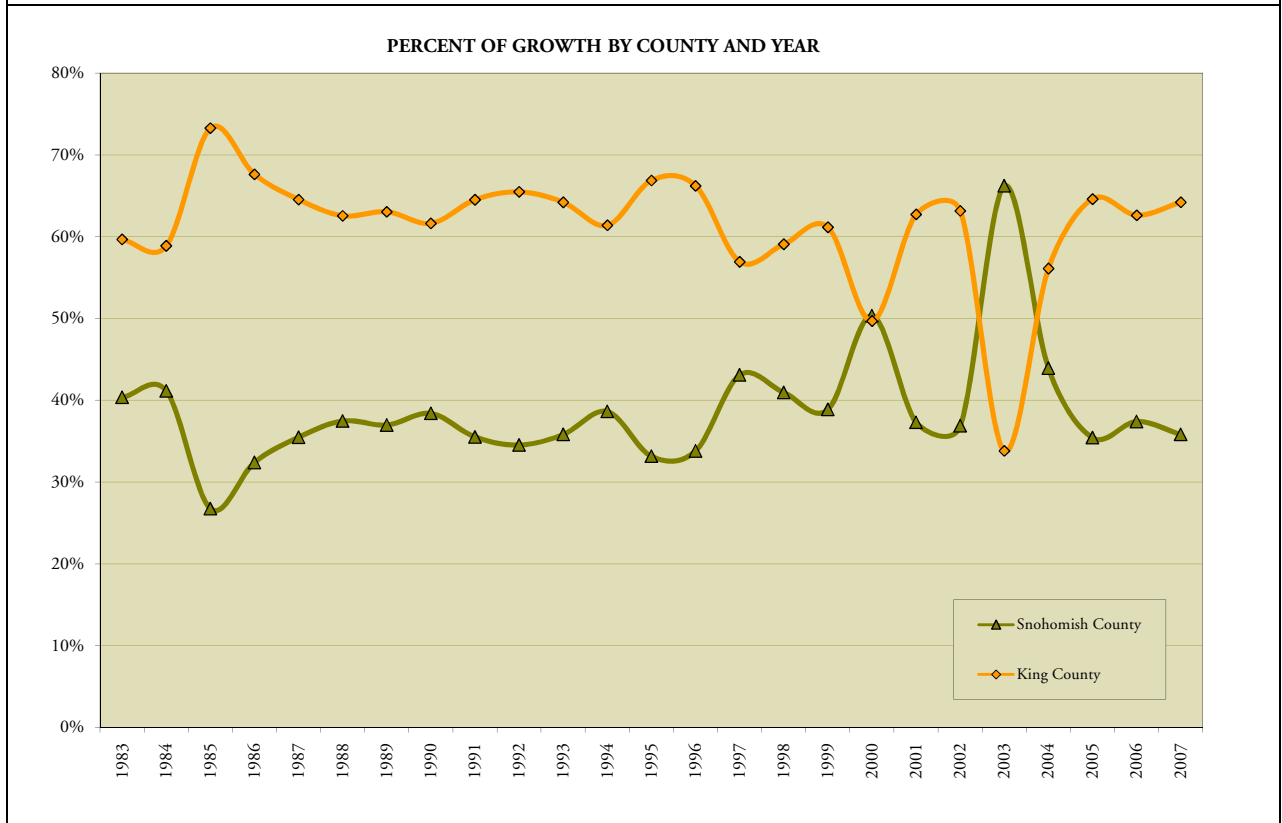
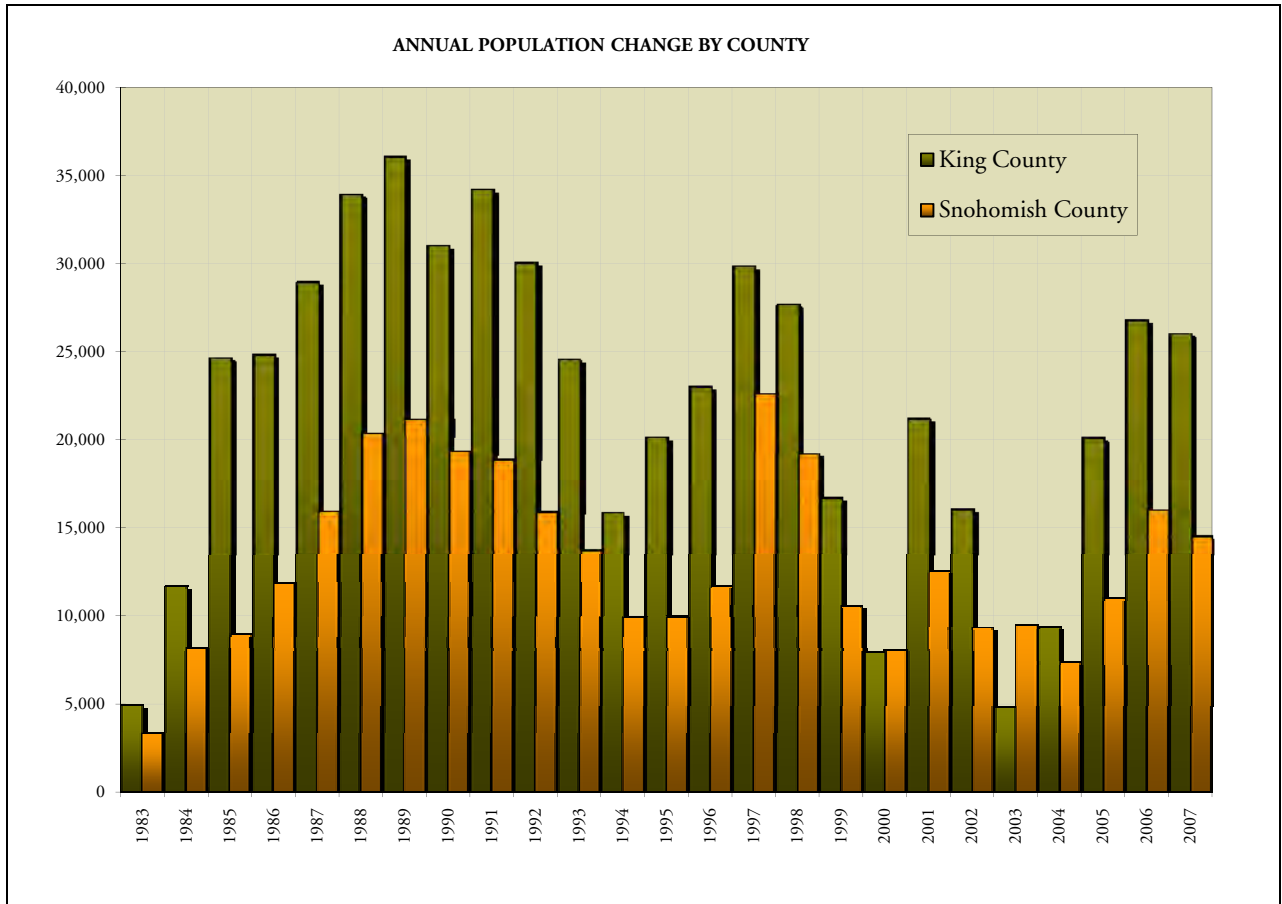
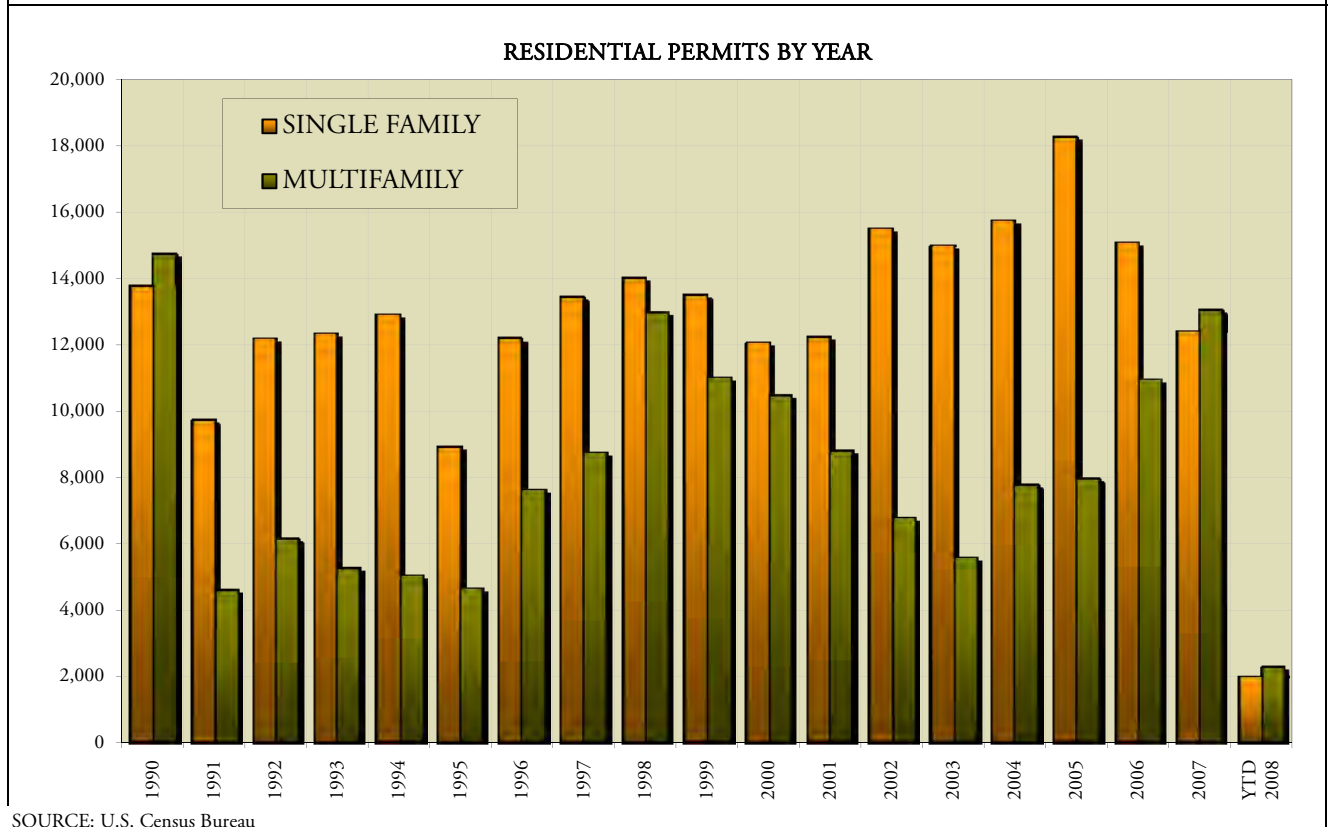


EXHIBIT 1.16

RESIDENTIAL BUILDING PERMIT TRENDS  
SEATTLE-BELLEVUE-EVERETT PMSA  
1984 through March 2008

Year	King County		Snohomish County		Pierce County		Greater Metro Area	
	Single	Multi	Single	Multi	Single	Multi	Single	Multi
1984	6,172	7,371	2,898	1,634	2,705	708	11,775	9,713
1985	6,252	8,943	3,425	2,969	1,789	2,486	11,466	14,398
1986	7,199	8,381	3,548	2,513	3,058	2,330	13,805	13,224
1987	6,890	10,797	3,911	1,739	3,536	1,693	14,337	14,229
1988	7,003	11,138	4,232	4,505	2,583	2,312	13,818	17,955
1989	8,594	10,845	4,792	4,747	4,273	2,356	17,659	17,948
1990	6,515	9,274	3,356	3,874	3,912	1,601	13,783	14,749
1991	4,518	2,736	2,288	604	2,939	1,263	9,745	4,603
1992	5,242	3,759	3,024	902	3,909	1,471	12,175	6,132
1993	4,688	3,081	3,361	1,058	4,280	1,130	12,329	5,269
1994	4,479	2,554	4,384	1,103	4,058	1,389	12,921	5,046
1995	2,784	2,439	2,961	986	3,180	1,233	8,925	4,658
1996	4,496	5,682	3,968	947	3,727	989	12,191	7,618
1997	5,347	6,359	4,162	1,401	3,931	995	13,440	8,755
1998	5,294	8,132	4,314	3,553	4,433	1,302	14,041	12,987
1999	4,635	7,043	4,384	3,025	4,512	966	13,531	11,034
2000	4,483	7,243	3,821	2,290	3,753	935	12,057	10,468
2001	4,352	5,615	3,787	1,609	4,103	1,588	12,242	8,812
2002	5,783	4,768	4,973	1,071	4,750	941	15,506	6,780
2003	6,354	3,503	4,249	1,343	4,400	755	15,003	5,601
2004	6,435	4,972	4,921	1,243	4,383	1,563	15,739	7,778
2005	7,047	5,715	5,719	940	5,515	1,311	18,281	7,966
2006	5,771	8,456	4,557	1,105	4,763	1,396	15,091	10,957
2007	5,220	10,252	3,619	1,241	3,567	1,561	12,406	13,054
<b>YTD 2008</b>	<b>890</b>	<b>1,896</b>	<b>584</b>	<b>193</b>	<b>512</b>	<b>187</b>	<b>1,986</b>	<b>2,276</b>
<i>Average Annual</i>	<i>5,648</i>	<i>6,627</i>	<i>3,944</i>	<i>1,933</i>	<i>3,836</i>	<i>1,428</i>	<i>13,428</i>	<i>9,989</i>



SOURCE: U.S. Census Bureau



EXHIBIT 1.17

SHARE OF RESIDENTIAL PERMIT ACTIVITY  
BY COUNTY AND YEAR  
1990 through Mar 2008

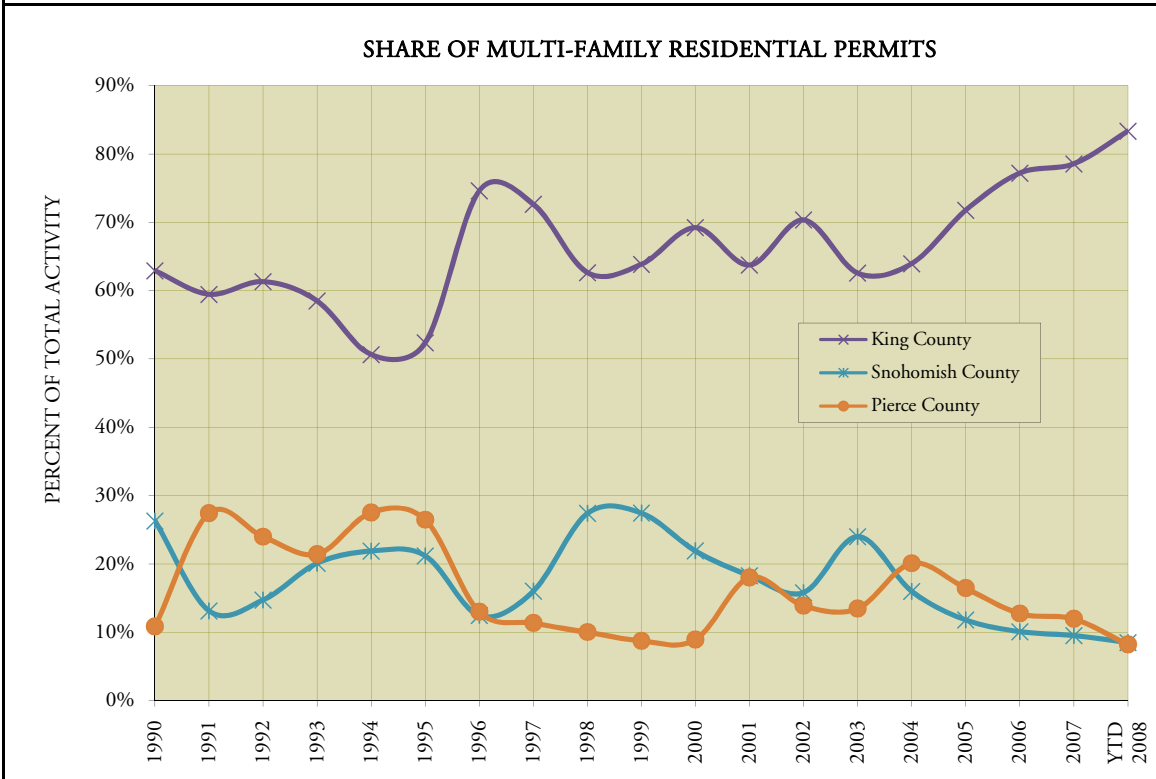
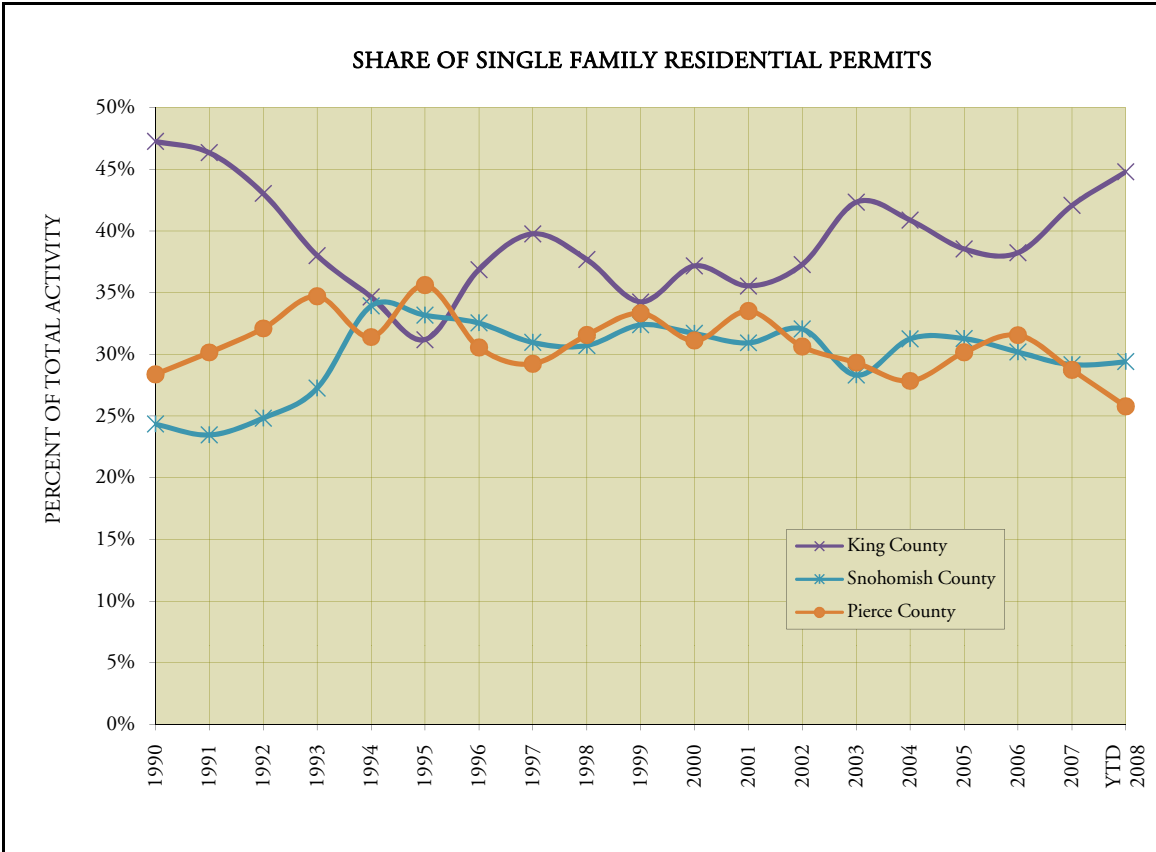


EXHIBIT 1.18

SUMMARY OF RESIDENTIAL UNITS PERMITTED BY YEAR  
KING COUNTY, WASHINGTON  
2001 through Dec. 2007

Jurisdiction	2000		2001		2002		2003		2004		2005		2006		2007		YTD 2008		
	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	
Algona	13	0	10	0	42	0	28	0	11	0	15	0	13	0	16	0	1	0	
Auburn	214	144	141	198	244	0	243	56	405	653	288	376	138	250	234	89	41	23	
Beaux Arts Village	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	0	1	0	
Bellevue	188	219	120	343	150	268	121	0	130	61	171	367	238	805	165	998	31	455	
Black Diamond	14	0	5	0	6	0	15	0	7	0	3	0	9	0	33	0	1	0	
Bothell	41	202	44	4	79	40	121	90	42	136	138	45	322	0	203	5	23	6	
Burien	33	0	28	0	15	8	28	11	22	0	38	99	106	0	38	124	4	0	
Carnation	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Clyde Hill	16	0	10	0	15	0	11	0	17	0	12	0	17	0	19	0	1	0	
Covington	49	0	227	0	159	200	356	0	269	0	97	0	30	0	81	120	21	0	
Des Moines	0	0	19	0	19	0	31	0	57	0	83	0	30	0	23	3	8	0	
Duvall	97	0	120	88	81	0	43	0	33	0	51	0	36	2	30	0	5	0	
Enumclaw	15	0	23	0	24	6	19	13	8	2	10	12	26	6	28	0	4	0	
Federal Way	41	28	22	15	152	50	115	12	112	0	278	0	192	0	128	112	10	8	
Hunts Point	4	0	3	0	3	0	3	0	3	0	2	0	2	0	3	0	1	0	
Issaquah	81	21	46	462	132	59	501	18	692	152	486	178	324	337	165	332	18	0	
Kenmore	33	115	0	0	77	27	145	72	99	41	147	0	190	2	78	2	20	0	
Kent	302	251	320	126	346	0	301	0	254	24	266	320	325	0	254	2	46	0	
King Co. Unincorp	1,525	1,148	1,392	359	2,051	410	1,966	1,000	2,275	342	1,889	512	1,572	195	1,355	433	218	0	
Kirkland	75	106	163	248	137	154	172	18	191	76	227	23	236	160	221	141	35	7	
Lake Forest Park	8	0	15	0	6	0	11	0	33	0	13	0	16	0	5	0	0	0	
Medina	16	0	11	0	10	0	9	0	15	0	16	0	20	0	21	0	3	0	
Mercer Island	74	78	62	23	30	96	31	0	55	295	66	159	57	112	57	195	8	0	
Newcastle	110	167	69	0	96	21	131	0	95	42	113	0	79	0	62	24	5	0	
Normandy Park	7	0	6	0	8	0	5	0	8	0	13	0	2	0	38	0	6	0	
North Bend	4	0	2	0	0	0	4	0	5	0	6	0	2	0	2	0	0	0	
Pacific	2	0	20	0	26	10	24	0	43	0	47	0	58	0	44	0	7	0	
Redmond	118	61	146	287	177	292	268	181	203	143	323	24	206	87	237	135	52	168	
Renton	417	468	446	291	470	178	552	115	474	120	518	371	439	258	362	957	56	248	
Seatac	23	0	29	0	28	0	29	156	36	0	45	32	68	85	45	197	8	7	
Seattle	449	4,403	484	3,162	886	2,884	914	1,791	754	2,790	533	3,185	482	6,149	775	5,939	205	974	
Shoreline	72	12	62	3	81	2	68	0	39	136	55	0	108	8	68	0	11	0	
Skykomish	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	
Snoqualmie	167	68	69	0	155	60	194	40	366	0	267	0	330	0	329	0	31	0	
Tukwila	63	0	55	0	62	0	35	0	40	0	40	0	47	0	45	0	3	0	
Woodinville	14	0	0	0	0	0	0	0	148	0	71	0	44	0	40	444	1	0	
Yarrow Point	4	0	2	0	4	0	5	0	8	0	4	0	7	0	14	0	5	0	
<b>KING COUNTY</b>																			
<b>TOTALS:</b>	<b>4,290</b>	<b>7,491</b>	<b>4,172</b>	<b>5,609</b>	<b>5,776</b>	<b>4,765</b>	<b>6,499</b>	<b>3,573</b>	<b>6,951</b>	<b>5,013</b>	<b>7,047</b>	<b>5,715</b>	<b>5,771</b>	<b>8,456</b>	<b>5,220</b>	<b>10,252</b>	<b>890</b>	<b>1,896</b>	

EXHIBIT 1.18 Cont.

SUMMARY OF RESIDENTIAL UNITS PERMITTED BY YEAR  
SNOHOMISH COUNTY AREA  
2001 through Dec. 2007

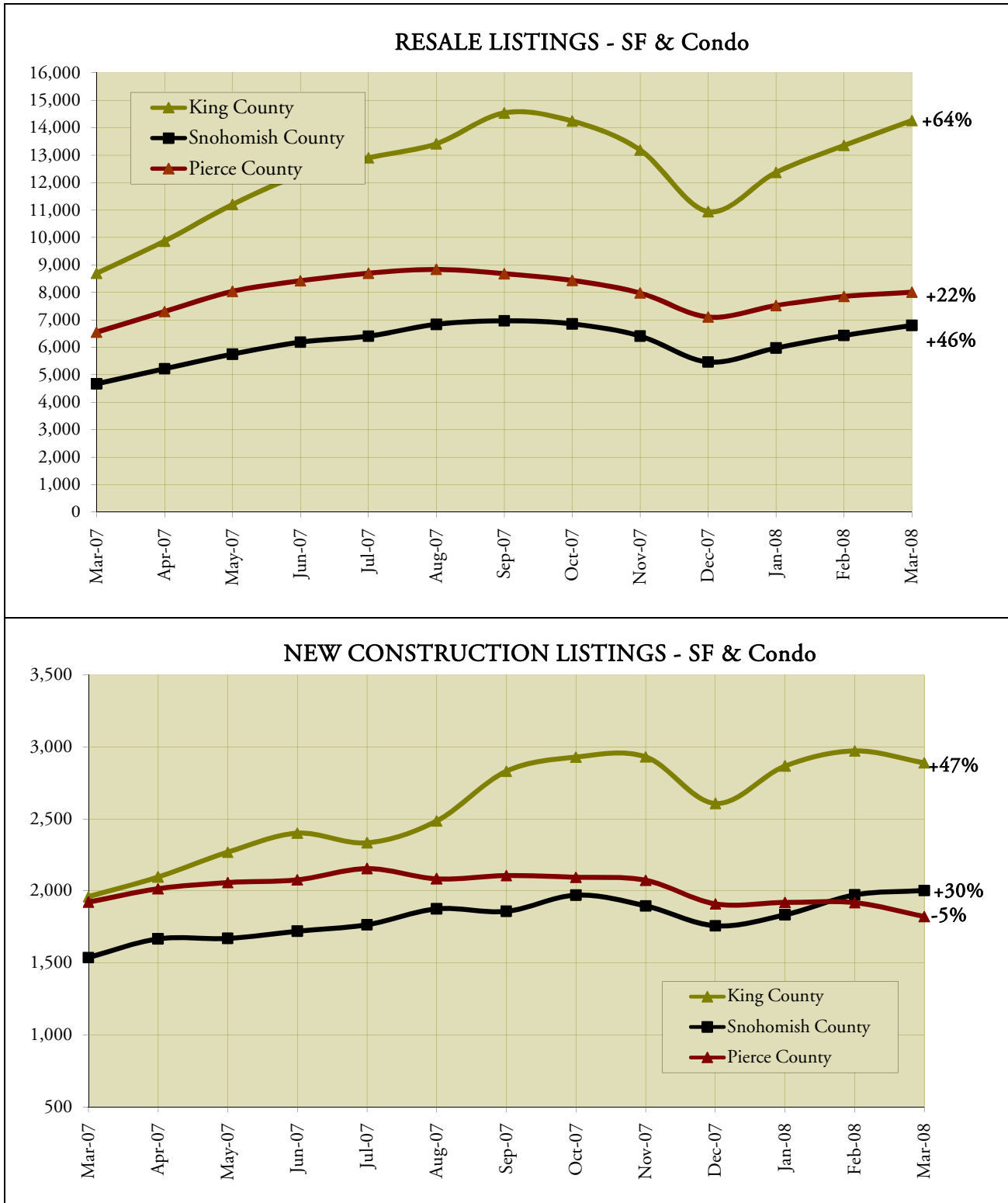
Jurisdiction	2000		2001		2002		2003		2004		2005		2006		2007		YTD 2008	
	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi
Arlington	161	6	233	12	258	19	287	20	320	33	323	26	231	18	154	14	20	2
Brier	35	0	15	0	16	0	18	0	21	0	22	0	16	0	12	0	1	0
Darrington	20	0	6	0	8	0	7	0	10	0	9	0	8	0	7	0	0	0
Edmonds	70	91	74	92	80	78	91	89	121	175	99	71	72	102	59	114	2	8
Everett	116	697	112	499	133	150	199	146	167	336	175	283	126	307	86	276	12	47
Gold Bar	24	0	24	0	26	0	30	0	32	0	30	0	20	0	11	0	1	0
Granite Falls	42	0	41	0	46	0	51	0	50	0	15	0	44	0	45	13	2	0
Lake Stevens	75	12	75	12	82	14	93	22	105	26	105	22	76	18	51	20	7	2
Lynnwood	146	85	66	25	64	20	73	35	80	40	80	60	59	67	37	67	6	16
Marysville	383	21	388	20	419	30	357	39	376	50	354	10	195	2	372	52	52	6
Mill Creek	14	0	63	226	12	167	60	306	13	14	54	0	50	0	117	36	18	0
Monroe	188	19	156	4	167	4	188	6	209	8	210	10	151	4	105	6	13	0
Mountlake Terrace	34	74	37	73	38	70	15	10	16	10	17	10	11	10	6	5	1	0
Mukilteo	122	77	111	88	121	66	136	71	150	69	149	70	109	74	73	81	9	15
Snohomish	24	20	5	3	3	3	2	45	1	24	8	29	5	27	3	20	0	4
Sno. Co. Unincorp	2,359	1,149	2,261	513	2,454	467	2,492	482	3,087	387	3,907	274	3,263	390	2,403	454	430	77
Stanwood	78	62	52	43	57	47	65	66	71	61	69	67	52	80	34	77	4	16
Sultan	43	4	44	2	50	6	57	6	63	10	64	8	46	6	30	6	4	0
Woodway	15	0	24	0	27	0	28	0	29	0	29	0	23	0	14	0	2	0
<b>SNOHOMISH COUNTY TOTALS:</b>	<b>3,949</b>	<b>2,317</b>	<b>3,787</b>	<b>1,612</b>	<b>4,061</b>	<b>1,141</b>	<b>4,249</b>	<b>1,343</b>	<b>4,921</b>	<b>1,243</b>	<b>5,719</b>	<b>940</b>	<b>4,557</b>	<b>1,105</b>	<b>3,619</b>	<b>1,241</b>	<b>584</b>	<b>193</b>

SUMMARY OF RESIDENTIAL UNITS PERMITTED BY YEAR  
PIERCE COUNTY AREA  
2001 through Dec. 2007

Jurisdiction	2000		2001		2002		2003		2004		2005		2006		2007		YTD 2008	
	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi	Single	Multi
Bonney Lake	83	16	297	0	346	2	291	76	217	4	190	16	262	16	248	10	40	0
Buckley	84	7	33	7	14	0	6	0	9	2	4	0	7	2	25	0	1	0
Carbonado	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
DuPont	64	15	149	32	161	12	218	0	271	296	246	27	143	108	163	28	47	0
Eatonville	27	8	12	0	32	0	19	0	47	2	34	0	28	0	17	2	1	0
Edgewood	0	0	0	0	0	0	24	0	28	0	38	0	36	0	22	0	6	2
Fife	38	0	4	0	4	42	33	0	104	210	367	82	514	190	189	0	6	0
Fircrest	4	20	3	14	15	8	29	18	43	14	94	0	25	0	10	0	0	0
Gig Harbor	23	0	4	0	41	4	24	2	38	0	21	0	8	0	74	141	2	0
Lakewood	55	0	44	3	185	0	48	8	46	6	32	46	30	35	31	88	11	28
Milton	34	47	13	2	18	26	11	112	11	118	10	107	6	115	27	0	5	0
Orting	14	0	53	0	116	0	36	9	78	3	267	0	210	4	116	2	0	0
Pierce Co. Unincorp	2,621	469	2,709	434	3,112	237	3,168	318	2,797	357	3,442	371	2,711	415	2,124	393	326	30
Puyallup	48	279	87	393	171	80	51	16	62	226	141	240	50	24	62	21	16	0
Roy	4	0	1	0	1	0	2	0	0	0	1	0	1	0	8	0	0	0
Ruston	5	0	1	0	3	0	1	0	4	0	0	60	5	6	8	0	2	0
South Prairie	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Steilacoom	19	6	24	0	15	0	18	4	19	4	16	0	15	0	10	0	1	0
Sumner	60	0	57	0	81	0	90	0	100	0	101	0	42	60	24	71	4	8
Tacoma	478	54	486	713	331	200	277	180	404	321	391	340	603	413	362	781	39	119
University Place	70	14	124	8	103	16	52	12	127	0	118	22	63	8	44	24	5	0
Wilkeson	1	3	2	0	1	0	2	0	4	0	0	0	4	0	3	0	0	0
<b>PIERCE COUNTY TOTALS:</b>	<b>3,732</b>	<b>938</b>	<b>4,103</b>	<b>1,606</b>	<b>4,750</b>	<b>627</b>	<b>4,400</b>	<b>755</b>	<b>4,411</b>	<b>1,563</b>	<b>5,515</b>	<b>1,311</b>	<b>4,763</b>	<b>1,396</b>	<b>3,567</b>	<b>1,561</b>	<b>512</b>	<b>187</b>

EXHIBIT 1.19

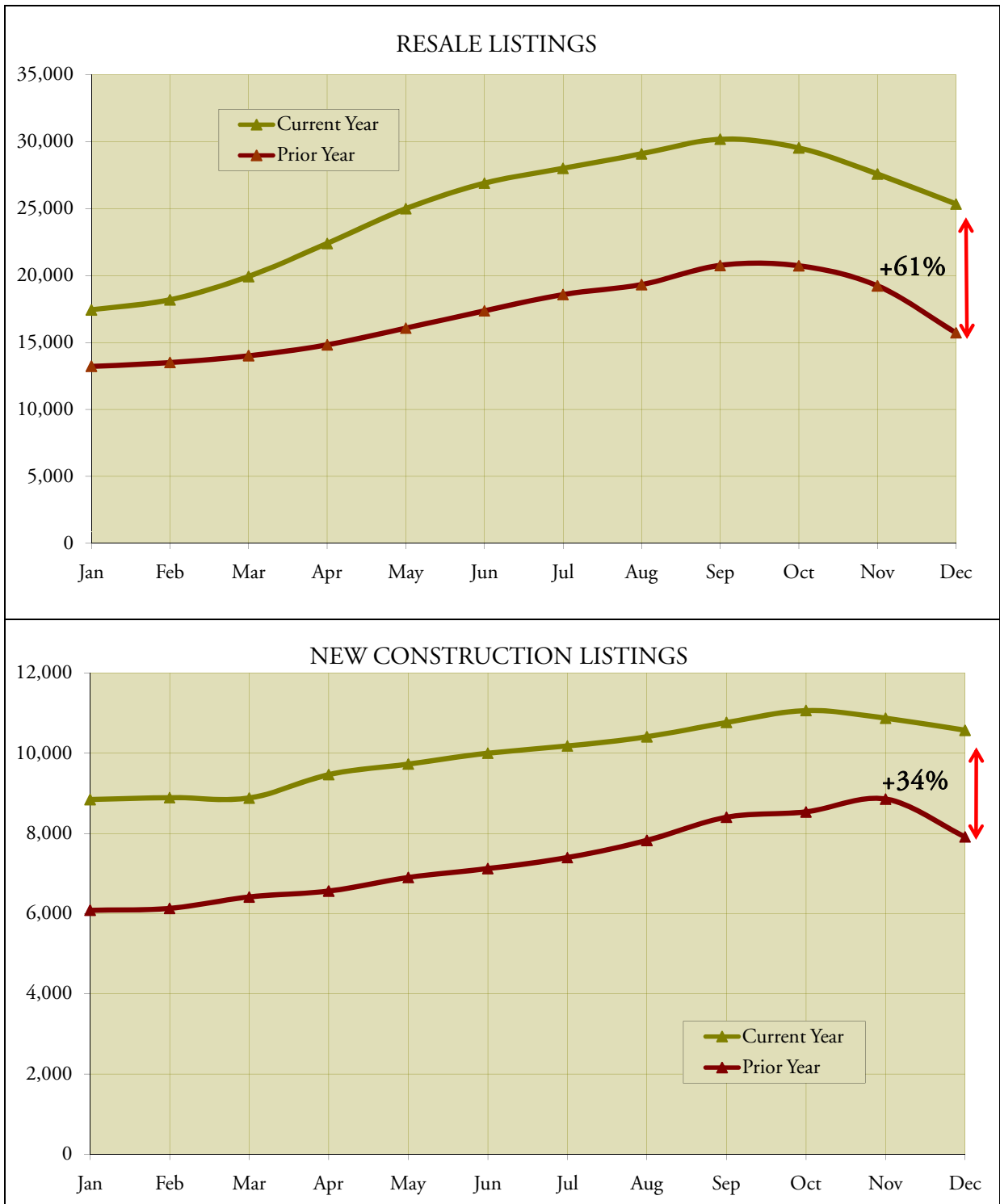
STANDING INVENTORY  
BY COUNTY



Note: Typically not all new construction listings are added to the NWMLS, specifically condominiums.  
Data, therefore may be somewhat skewed.  
Percentages represent YOY change in inventory.

**EXHIBIT 1.20**

**STANDING INVENTORY  
BY METRO AREA**



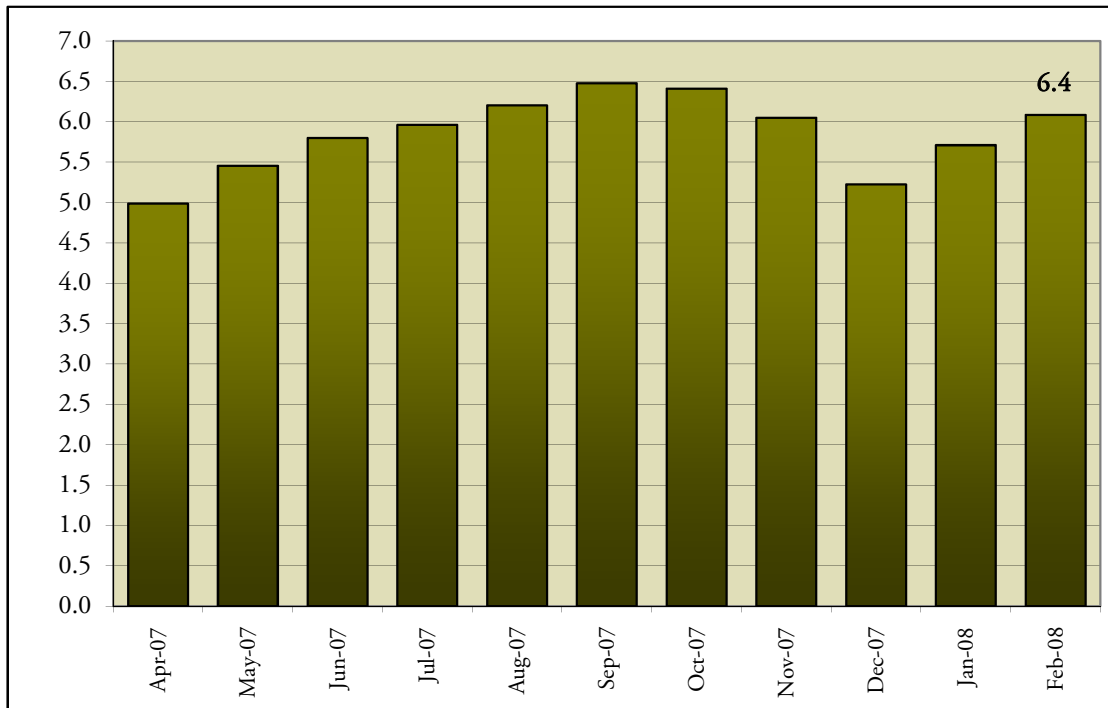
Note: Typically not all new construction listings are added to the NWMLS, specifically condominiums.  
Data, therefore may be somewhat skewed.

SOURCE: NWMLS

**EXHIBIT 1.21**

**MONTHS OF INVENTORY  
BY METRO AREA**

	<b>King County</b>	<b>Snohomish County</b>	<b>Pierce County</b>	<b>Metro Area</b>
April-07	4.5	4.8	6.0	5.0
May-07	5.0	5.2	6.4	5.5
June-07	5.4	5.5	6.6	5.8
July-07	5.6	5.6	6.8	6.0
August-07	5.9	6.0	6.8	6.2
September-07	6.5	6.1	6.8	6.5
October-07	6.4	6.1	6.6	6.4
November-07	6.0	5.7	6.5	6.1
December-07	5.1	5.0	5.7	5.2
January-08	5.7	5.4	6.0	5.7
February-08	6.1	5.8	6.3	6.1
<b>March-08</b>	<b>6.5</b>	<b>6.1</b>	<b>6.4</b>	<b>6.4</b>



Note: Typically not all new construction listings are added to the NWMLS, specifically condominiums. Data, therefore may be somewhat skewed.

SOURCE: NWMLS



## EXHIBIT 2.02

### GENERAL DEMOGRAPHIC PROFILE CENTRAL SEATTLE

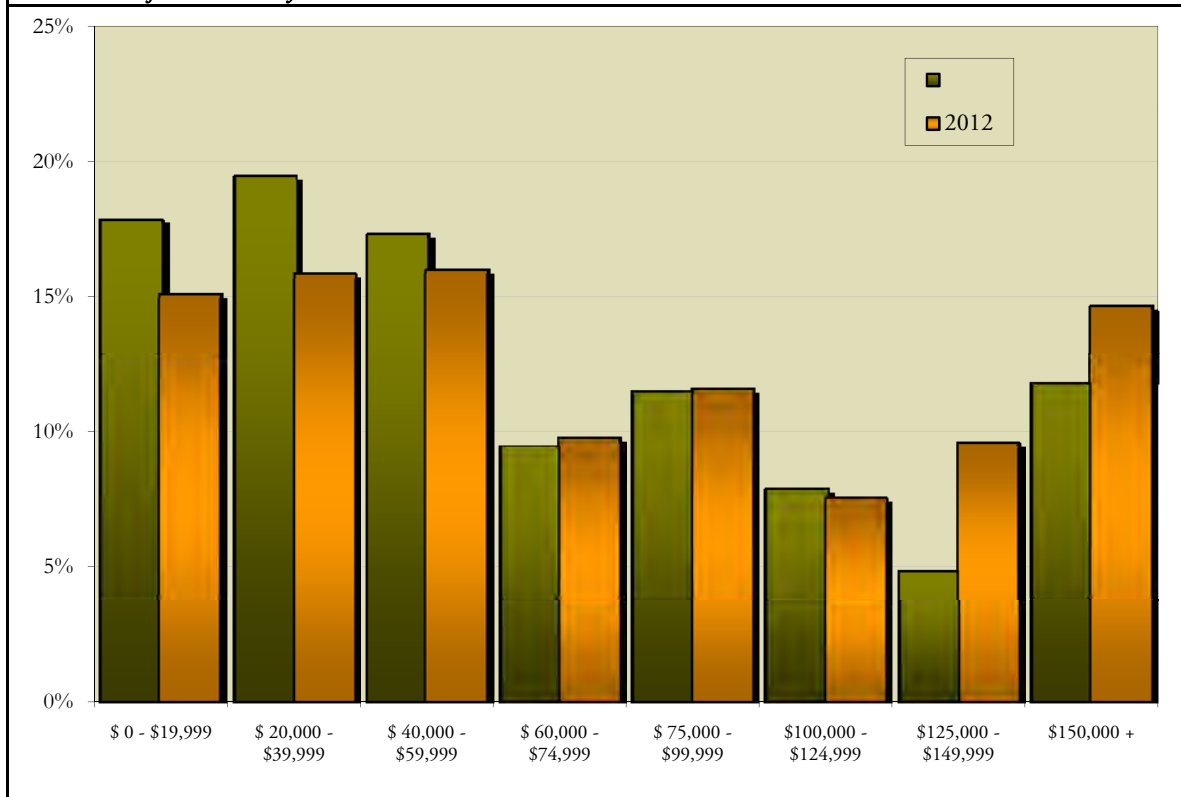
*Population, Households, and Population Makeup*

	2000 (Census)	2007 (Est.)	Annual Growth Rate 00-07	2012 (Proj.)	Annual Growth Rate 07-12
Population	294,657	308,538	0.7%	320,588	0.8%
Households	145,555	156,881	1.1%	165,657	1.1%
Male	149,364	157,354	0.7%	163,820	0.8%
Female	145,293	151,184	0.6%	156,767	0.7%
Household Size	2.02	1.97		1.94	

*Income\**

Per Capita (\$)	\$33,458	\$45,449	4.5%	\$52,198	2.8%
Average HH (\$)	\$67,731	\$82,913	2.9%	\$94,415	2.6%
Median HH (\$)	\$45,331	\$61,887	4.5%	\$71,483	2.9%

*Distribution of Households by Annual Income 2007, 2012*



Source: Demographics Now, Gardner Johnson



EXHIBIT 2.03

AGE BY INCOME DISTRIBUTION OF HOUSEHOLDS AND  
PROJECTED OWNERSHIP HOUSING DEMAND  
CENTRAL SEATTLE  
2007-2012

Household Income Range <sup>1</sup>	Total	Age of Householder						
		15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 +
<b>2007</b>								
\$ 0 - \$19,999	28,007	4,257	5,068	4,152	4,359	4,068	2,772	3,331
\$ 20,000 - \$39,999	30,474	3,889	7,913	5,433	5,031	3,345	2,127	2,735
\$ 40,000 - \$59,999	27,157	2,250	7,167	5,571	4,852	3,398	1,811	2,108
\$ 60,000 - \$74,999	14,895	889	3,951	3,029	3,046	1,922	1,054	1,005
\$ 75,000 - \$99,999	18,026	893	4,342	3,833	3,937	2,595	1,139	1,287
\$100,000 - \$124,999	12,365	506	2,688	2,636	2,923	1,720	940	953
\$125,000 - \$149,999	7,518	317	1,358	1,725	1,943	1,164	456	556
\$150,000 +	18,437	643	3,051	3,754	4,599	3,483	1,387	1,520
<b>Overall</b>	<b>156,881</b>	<b>13,645</b>	<b>35,538</b>	<b>30,132</b>	<b>30,692</b>	<b>21,693</b>	<b>11,686</b>	<b>13,494</b>
<b>2012</b>								
\$ 0 - \$19,999	25,014	3,559	3,756	3,301	3,903	4,361	3,362	2,772
\$ 20,000 - \$39,999	26,212	3,409	5,982	4,246	4,379	3,440	2,495	2,261
\$ 40,000 - \$59,999	26,463	2,328	6,081	5,002	4,663	3,921	2,399	2,069
\$ 60,000 - \$74,999	16,225	1,078	4,000	2,964	3,193	2,369	1,592	1,029
\$ 75,000 - \$99,999	19,174	1,079	4,195	3,682	4,071	3,255	1,609	1,282
\$100,000 - \$124,999	12,484	596	2,582	2,291	2,818	1,932	1,342	923
\$125,000 - \$149,999	15,839	724	2,627	3,241	4,013	2,776	1,345	1,114
\$150,000 +	24,247	965	3,606	4,440	5,807	5,039	2,423	1,967
<b>Overall</b>	<b>165,657</b>	<b>13,738</b>	<b>32,828</b>	<b>29,168</b>	<b>32,848</b>	<b>27,092</b>	<b>16,567</b>	<b>13,416</b>
<b>NET CHANGE</b>								
\$ 0 - \$19,999	-2,993	-698	-1,312	-851	-456	293	590	-559
\$ 20,000 - \$39,999	-4,263	-480	-1,931	-1,186	-653	94	368	-474
\$ 40,000 - \$59,999	-694	78	-1,086	-569	-189	523	588	-39
\$ 60,000 - \$74,999	1,329	189	49	-65	147	448	538	24
\$ 75,000 - \$99,999	1,148	186	-147	-150	134	660	470	-5
\$100,000 - \$124,999	118	90	-106	-345	-105	212	402	-30
\$125,000 - \$149,999	8,321	407	1,268	1,517	2,070	1,612	890	557
\$150,000 +	5,810	322	555	686	1,208	1,556	1,036	447
<b>Overall</b>	<b>8,776</b>	<b>94</b>	<b>-2,711</b>	<b>-964</b>	<b>2,155</b>	<b>5,399</b>	<b>4,881</b>	<b>-78</b>

Source: Demographics Now, Gardner Johnson

EXHIBIT 2.04

PROJECTED HOUSING DEMAND BY INCOME COHORTS  
 DEMAND FOR FOR-SALE PRODUCT  
 CENTRAL SEATTLE  
 2007-2012

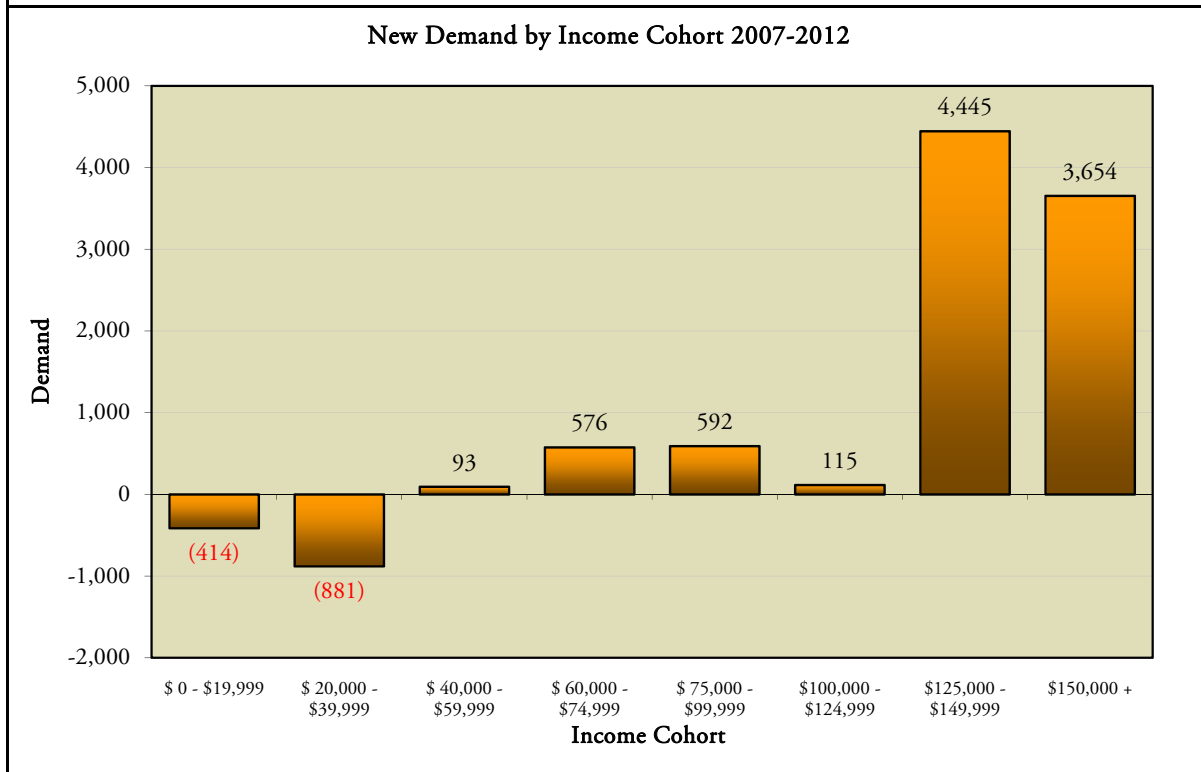
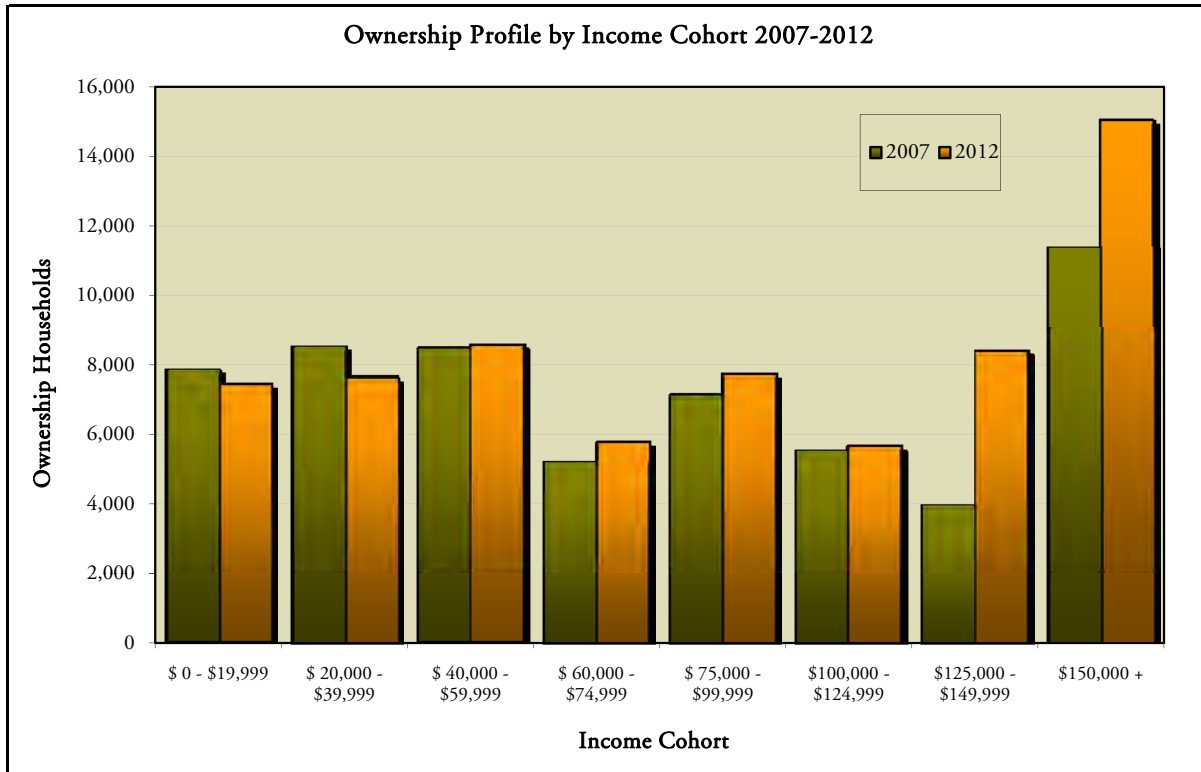


EXHIBIT 2.05

PROJECTED HOUSING DEMAND BY AGE COHORTS  
DEMAND FOR FOR-SALE PRODUCT  
CENTRAL SEATTLE  
2007-2012

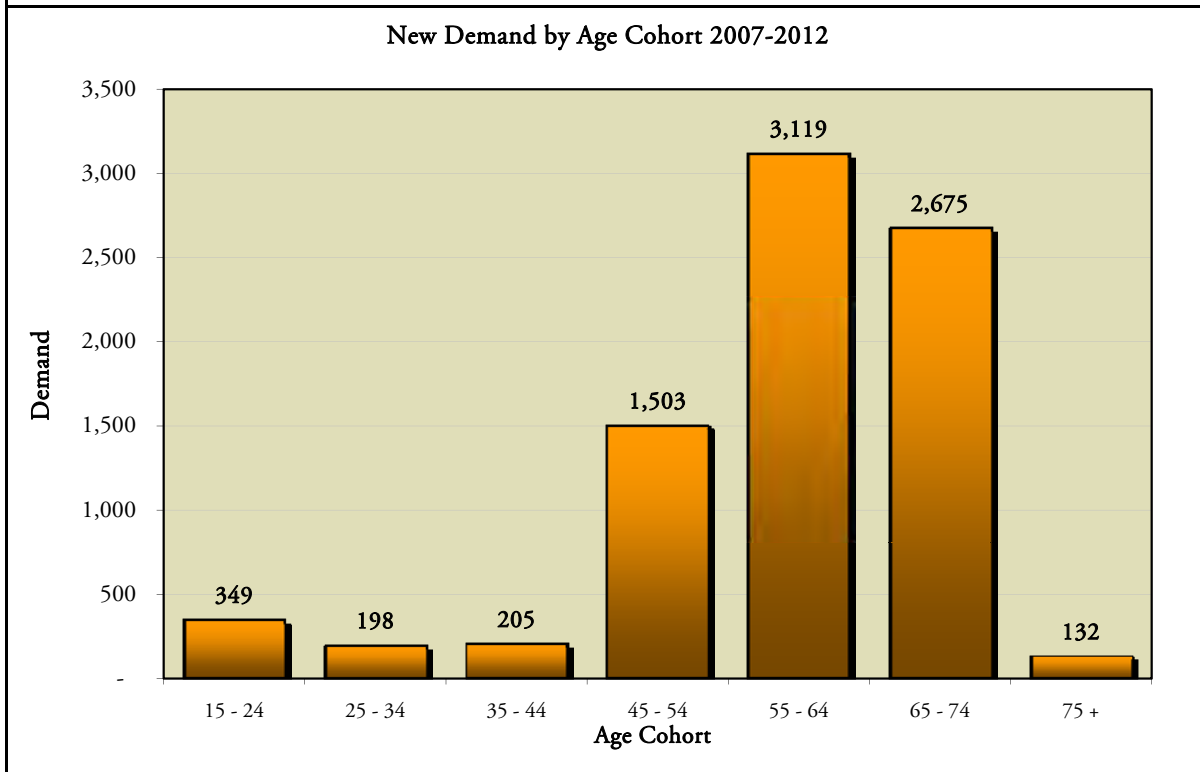
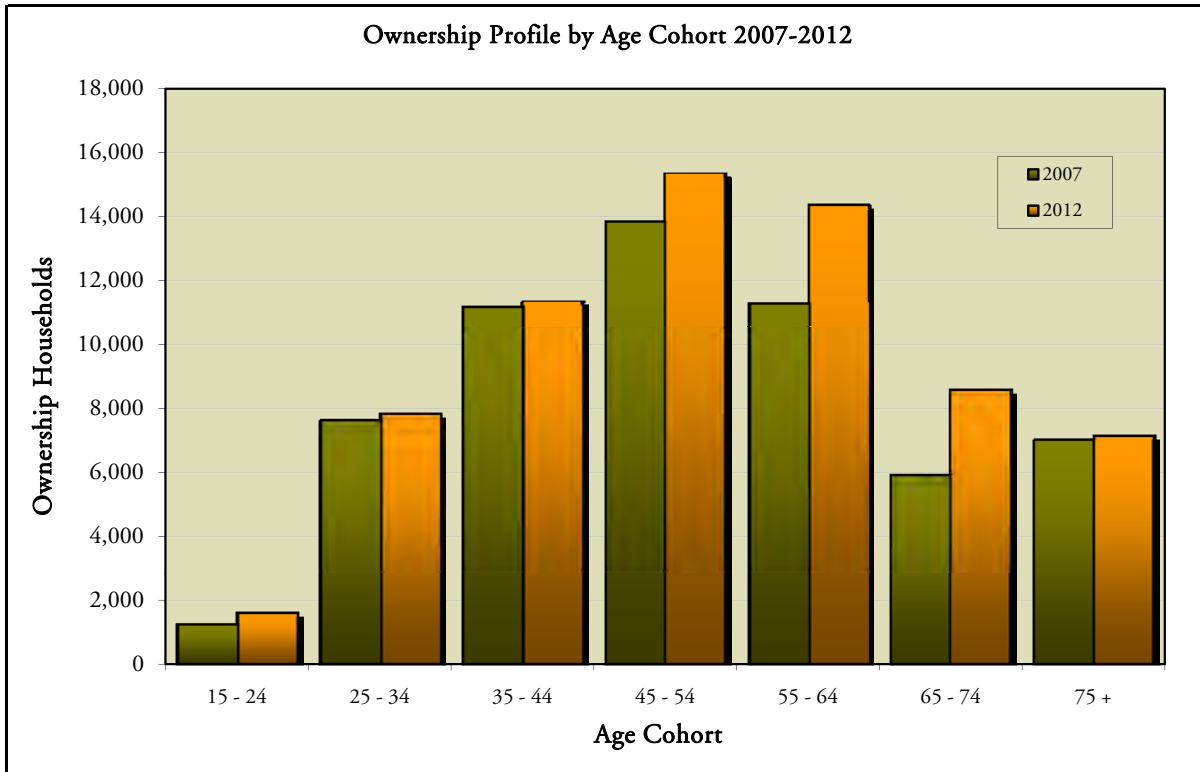


EXHIBIT 2.06

AGE BY INCOME DISTRIBUTION OF HOUSEHOLDS AND  
PROJECTED RENTAL HOUSING DEMAND  
CENTRAL SEATTLE  
2007-2012

Household Income Range <sup>1</sup>	Total	Age of Householder						
		15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 +
<b>2007</b>								
\$ 0 - \$19,999	28,007	4,257	5,068	4,152	4,359	4,068	2,772	3,331
\$ 20,000 - \$39,999	30,474	3,889	7,913	5,433	5,031	3,345	2,127	2,735
\$ 40,000 - \$59,999	27,157	2,250	7,167	5,571	4,852	3,398	1,811	2,108
\$ 60,000 - \$74,999	14,895	889	3,951	3,029	3,046	1,922	1,054	1,005
\$ 75,000 - \$99,999	18,026	893	4,342	3,833	3,937	2,595	1,139	1,287
\$100,000 - \$124,999	12,365	506	2,688	2,636	2,923	1,720	940	953
\$125,000 - \$149,999	7,518	317	1,358	1,725	1,943	1,164	456	556
\$150,000 +	18,437	643	3,051	3,754	4,599	3,483	1,387	1,520
<b>Overall</b>	<b>156,881</b>	<b>13,645</b>	<b>35,538</b>	<b>30,132</b>	<b>30,692</b>	<b>21,693</b>	<b>11,686</b>	<b>13,494</b>
<b>2012</b>								
\$ 0 - \$19,999	25,014	3,559	3,756	3,301	3,903	4,361	3,362	2,772
\$ 20,000 - \$39,999	26,212	3,409	5,982	4,246	4,379	3,440	2,495	2,261
\$ 40,000 - \$59,999	26,463	2,328	6,081	5,002	4,663	3,921	2,399	2,069
\$ 60,000 - \$74,999	16,225	1,078	4,000	2,964	3,193	2,369	1,592	1,029
\$ 75,000 - \$99,999	19,174	1,079	4,195	3,682	4,071	3,255	1,609	1,282
\$100,000 - \$124,999	12,484	596	2,582	2,291	2,818	1,932	1,342	923
\$125,000 - \$149,999	15,839	724	2,627	3,241	4,013	2,776	1,345	1,114
\$150,000 +	24,247	965	3,606	4,440	5,807	5,039	2,423	1,967
<b>Overall</b>	<b>165,657</b>	<b>13,738</b>	<b>32,828</b>	<b>29,168</b>	<b>32,848</b>	<b>27,092</b>	<b>16,567</b>	<b>13,416</b>
<b>NET CHANGE</b>								
\$ 0 - \$19,999	-2,993	-698	-1,312	-851	-456	293	590	-559
\$ 20,000 - \$39,999	-4,263	-480	-1,931	-1,186	-653	94	368	-474
\$ 40,000 - \$59,999	-694	78	-1,086	-569	-189	523	588	-39
\$ 60,000 - \$74,999	1,329	189	49	-65	147	448	538	24
\$ 75,000 - \$99,999	1,148	186	-147	-150	134	660	470	-5
\$100,000 - \$124,999	118	90	-106	-345	-105	212	402	-30
\$125,000 - \$149,999	8,321	407	1,268	1,517	2,070	1,612	890	557
\$150,000 +	5,810	322	555	686	1,208	1,556	1,036	447
<b>Overall</b>	<b>8,776</b>	<b>94</b>	<b>-2,711</b>	<b>-964</b>	<b>2,155</b>	<b>5,399</b>	<b>4,881</b>	<b>-78</b>

Source: Demographics Now, Gardner Johnson

EXHIBIT 2.07

PROJECTED HOUSING DEMAND BY INCOME COHORTS  
 DEMAND FOR RENTAL PRODUCT  
 CENTRAL SEATTLE  
 2007-2012

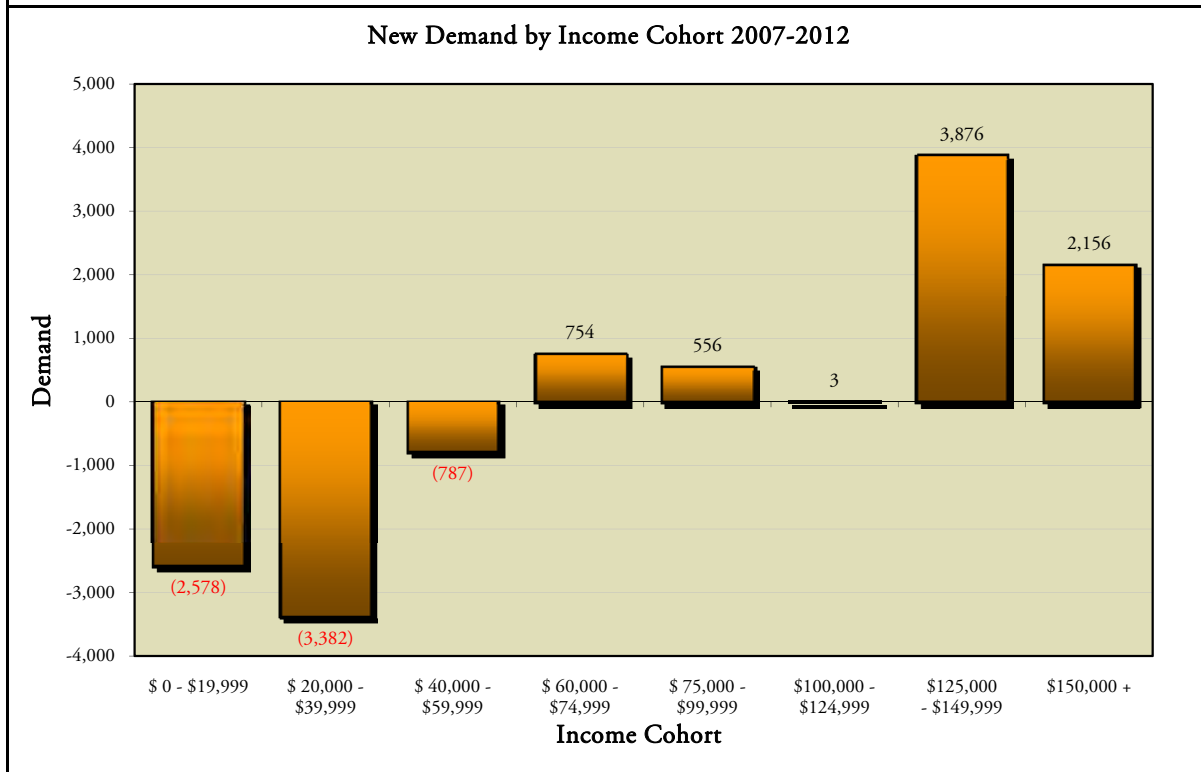
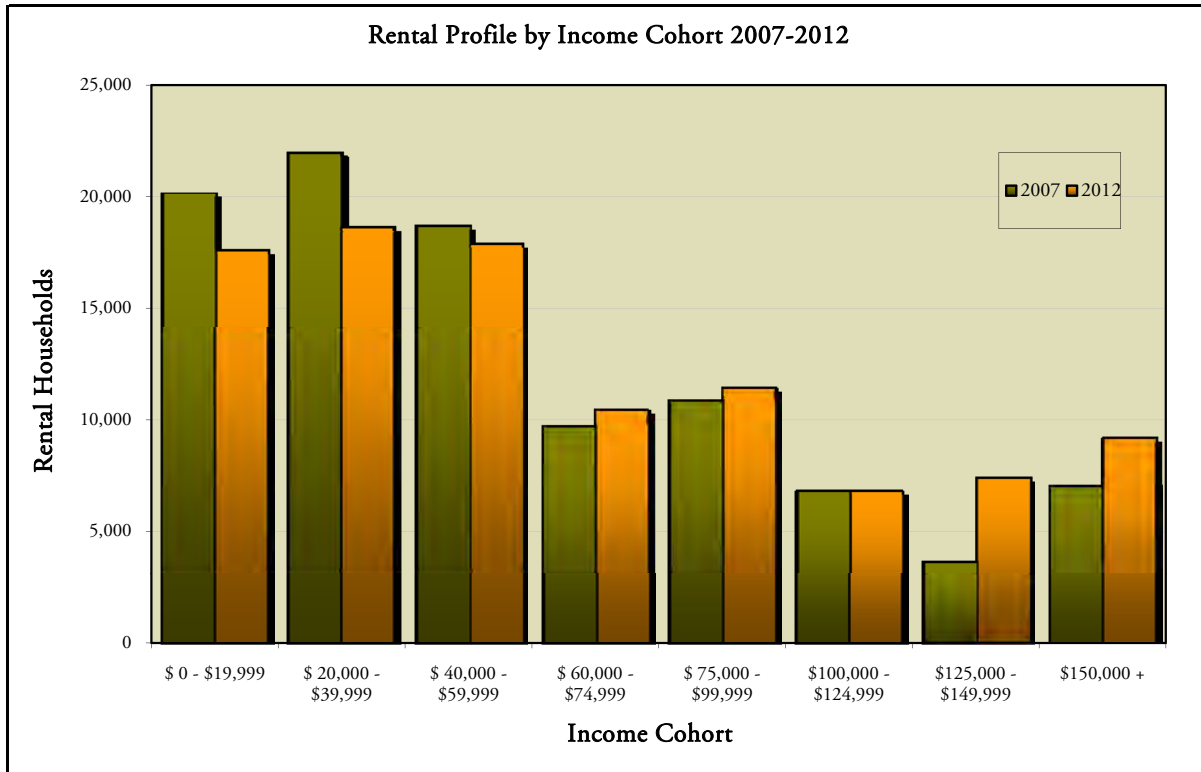
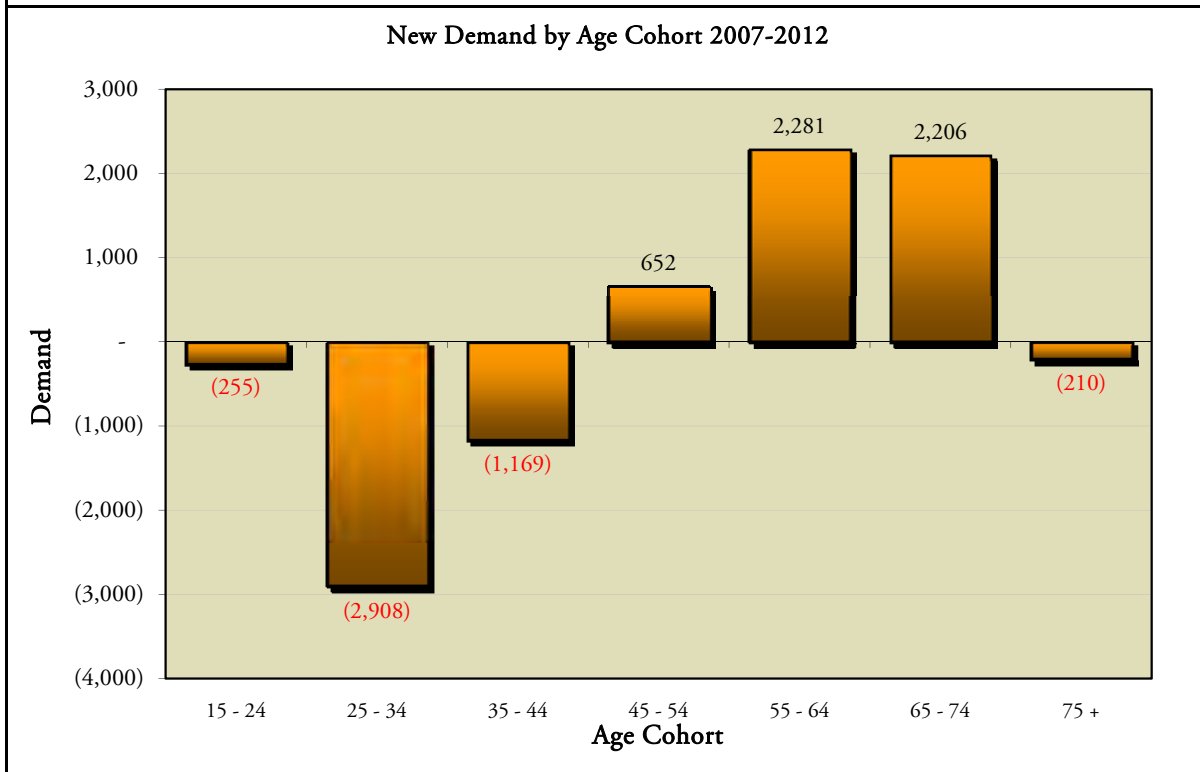
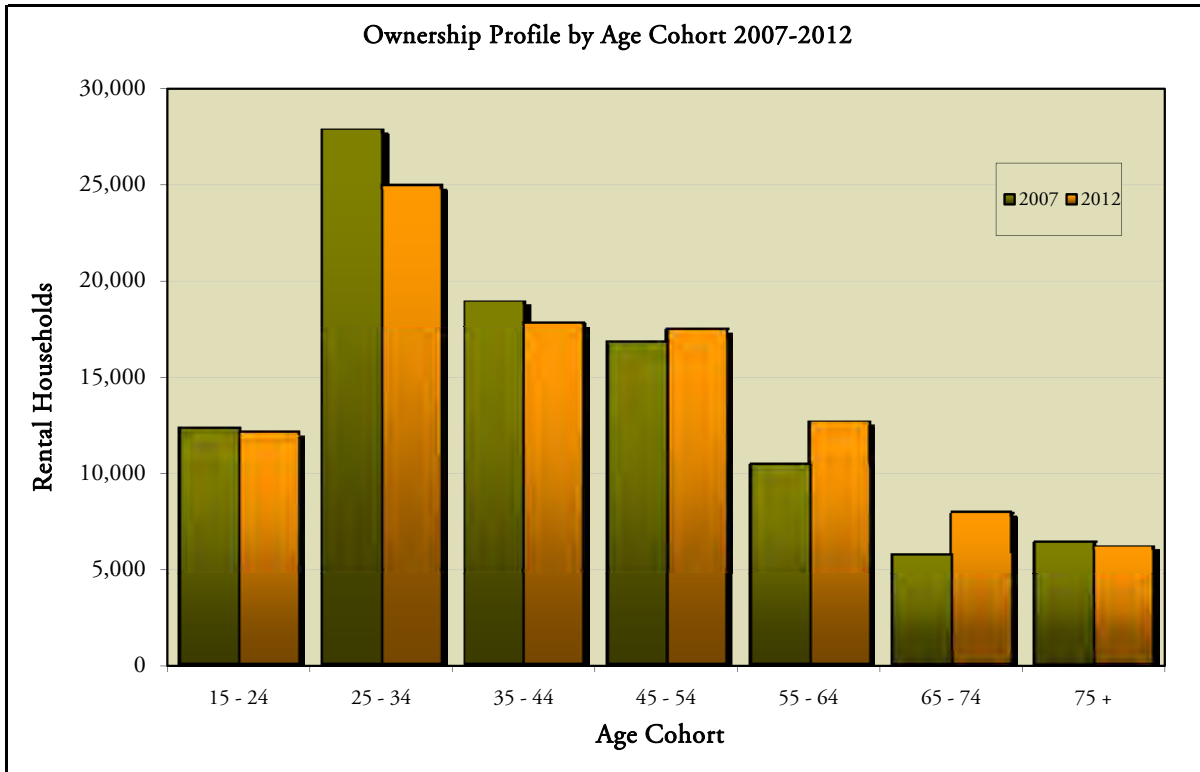
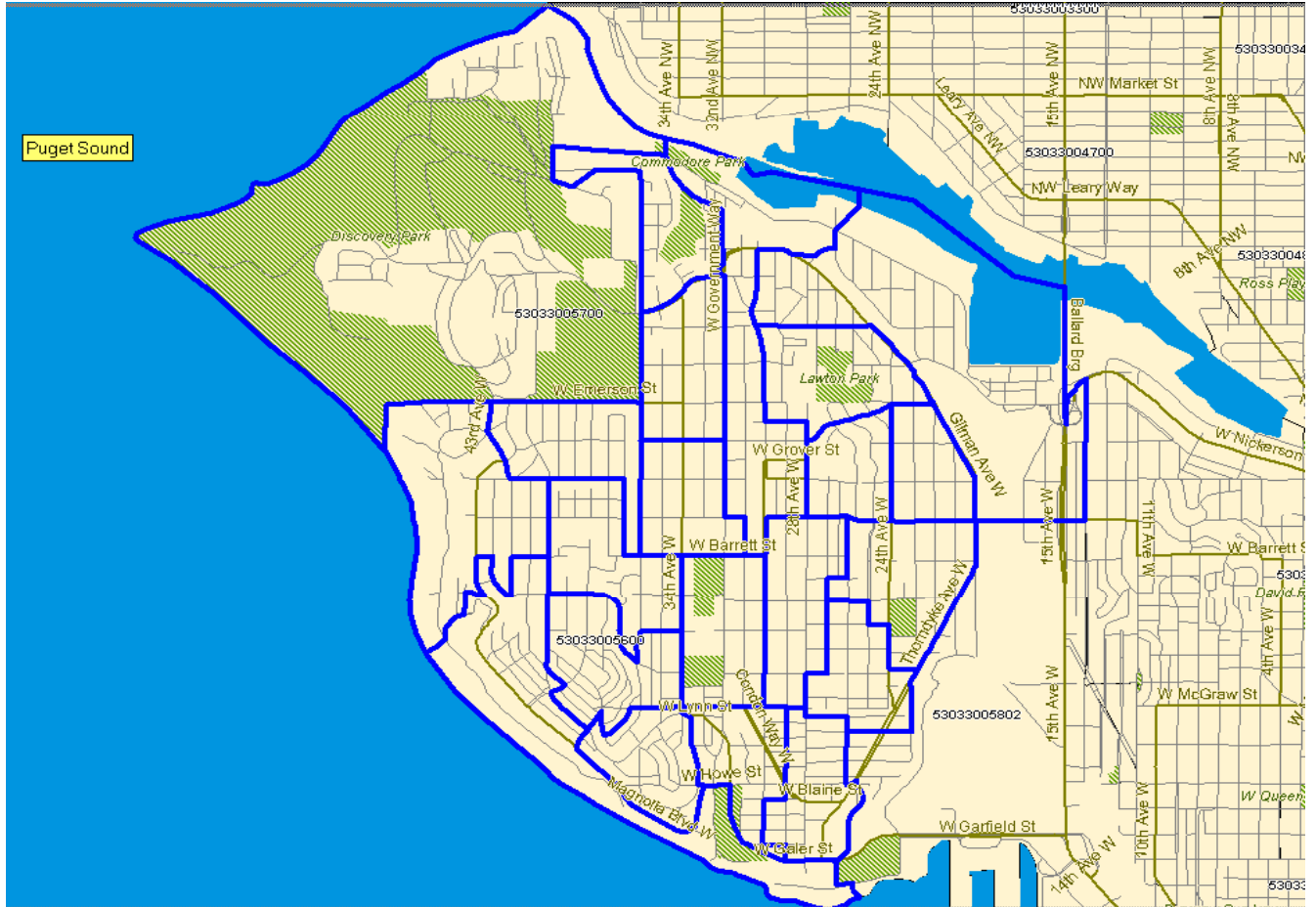


EXHIBIT 2.08

PROJECTED HOUSING DEMAND BY AGE COHORTS  
 DEMAND FOR RENTAL PRODUCT  
 CENTRAL SEATTLE  
 2007-2012



**EXHIBIT 2.09**  
**AREA USED FOR SUBJECT MARKET AREA DEMOGRAPHIC ANALYSIS**  
**Competitive Market Area**

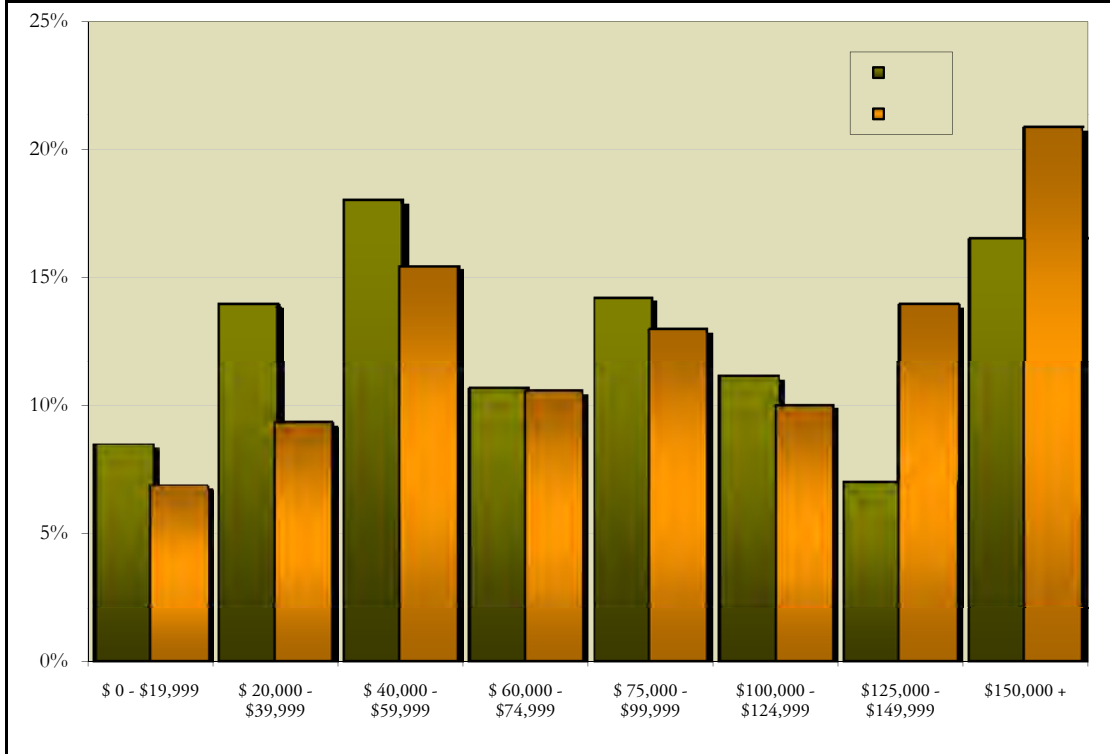


**EXHIBIT 2.10**  
**GENERAL DEMOGRAPHIC PROFILE**  
**MAGNOLIA**

*Population, Households, and Population Makeup*

	2000 (Census)	2007 (Est.)	Annual Growth Rate 00-07	2012 (Proj.)	Annual Growth Rate 07-12
Population	18,881	19,497	0.5%	20,174	0.7%
Households	8,911	9,405	0.8%	9,852	0.9%
Male	9,147	9,476	0.5%	9,845	0.8%
Female	9,734	10,022	0.4%	10,329	0.6%
Household Size	2.12	2.07		2.05	
<b>Income*</b>					
Per Capita (\$)	\$37,285	\$50,557	4.4%	\$57,135	2.5%
Average HH (\$)	\$79,000	\$104,171	4.0%	\$116,352	2.2%
Median HH (\$)	\$60,281	\$78,563	3.9%	\$90,197	2.8%

*Distribution of Households by Annual Income 2007, 2012*



Source: Demographics Now, Gardner Johnson



EXHIBIT 2.11

AGE BY INCOME DISTRIBUTION OF HOUSEHOLDS AND  
PROJECTED OWNERSHIP HOUSING DEMAND

MAGNOLIA

2007-2012

Household Income Range <sup>1</sup>	Total	Age of Householder						
		15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 +
<b>2007</b>								
\$ 0 - \$19,999	796	57	128	133	145	109	77	148
\$ 20,000 - \$39,999	1,311	95	216	230	200	223	158	188
\$ 40,000 - \$59,999	1,699	108	301	317	347	268	159	198
\$ 60,000 - \$74,999	1,004	41	179	193	227	172	99	93
\$ 75,000 - \$99,999	1,337	35	231	273	352	230	110	107
\$100,000 - \$124,999	1,049	24	168	235	257	182	88	94
\$125,000 - \$149,999	655	17	58	156	160	166	48	50
\$150,000 +	1,555	14	139	295	421	342	179	166
<b>Overall</b>	<b>9,405</b>	<b>390</b>	<b>1,420</b>	<b>1,831</b>	<b>2,109</b>	<b>1,692</b>	<b>919</b>	<b>1,044</b>
<b>2012</b>								
\$ 0 - \$19,999	674	43	94	95	130	114	76	122
\$ 20,000 - \$39,999	917	65	114	149	126	192	145	125
\$ 40,000 - \$59,999	1,523	100	252	250	289	278	187	167
\$ 60,000 - \$74,999	1,041	55	157	178	211	195	139	106
\$ 75,000 - \$99,999	1,278	45	213	206	337	242	146	90
\$100,000 - \$124,999	985	28	180	200	244	151	94	88
\$125,000 - \$149,999	1,376	33	111	297	318	384	137	96
\$150,000 +	2,057	32	198	346	524	457	299	201
<b>Overall</b>	<b>9,852</b>	<b>402</b>	<b>1,318</b>	<b>1,720</b>	<b>2,179</b>	<b>2,013</b>	<b>1,223</b>	<b>996</b>
<b>NET CHANGE</b>								
\$ 0 - \$19,999	-122	-14	-34	-38	-14	5	0	-26
\$ 20,000 - \$39,999	-394	-30	-102	-81	-74	-31	-13	-62
\$ 40,000 - \$59,999	-175	-8	-49	-67	-58	10	27	-31
\$ 60,000 - \$74,999	38	14	-22	-15	-15	23	41	13
\$ 75,000 - \$99,999	-59	11	-18	-67	-16	12	36	-17
\$100,000 - \$124,999	-64	4	12	-35	-12	-31	6	-6
\$125,000 - \$149,999	720	16	53	141	158	218	88	46
\$150,000 +	502	18	58	51	103	116	120	35
<b>Overall</b>	<b>446</b>	<b>12</b>	<b>-102</b>	<b>-111</b>	<b>71</b>	<b>321</b>	<b>305</b>	<b>-48</b>

Source: Demographics Now, Gardner Johnson

EXHIBIT 2.12

PROJECTED HOUSING DEMAND BY INCOME COHORTS  
DEMAND FOR FOR-SALE PRODUCT

MAGNOLIA

2007-2012

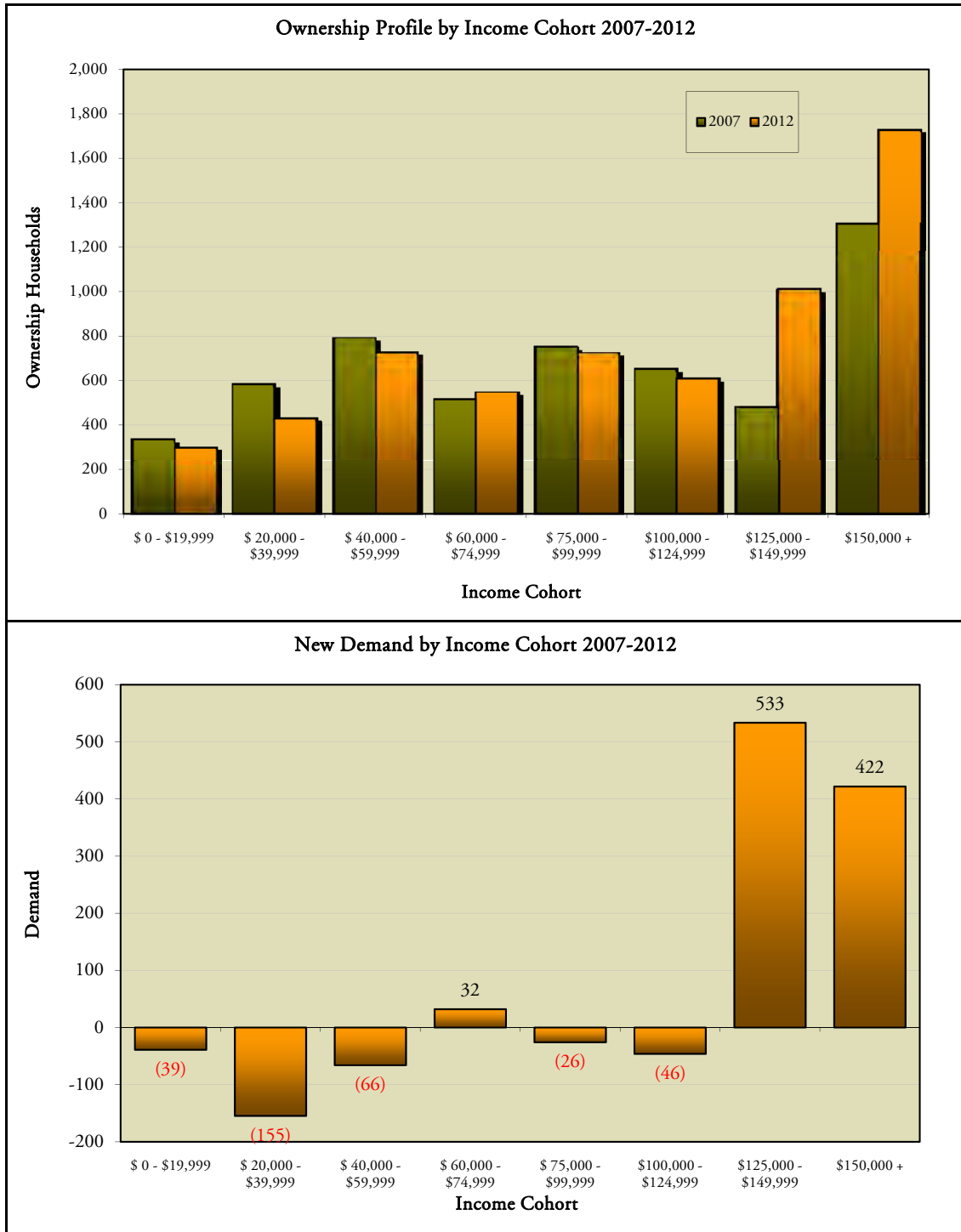


EXHIBIT 2.13

PROJECTED HOUSING DEMAND BY AGE COHORTS  
DEMAND FOR FOR-SALE PRODUCT

MAGNOLIA  
2007-2012

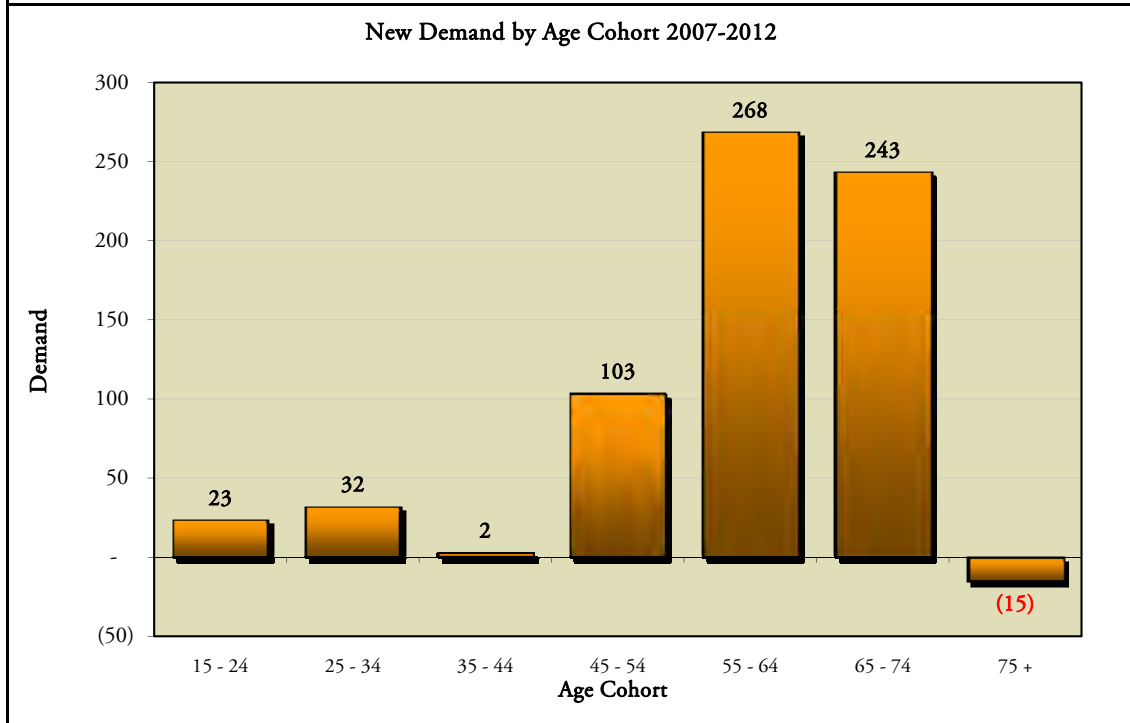
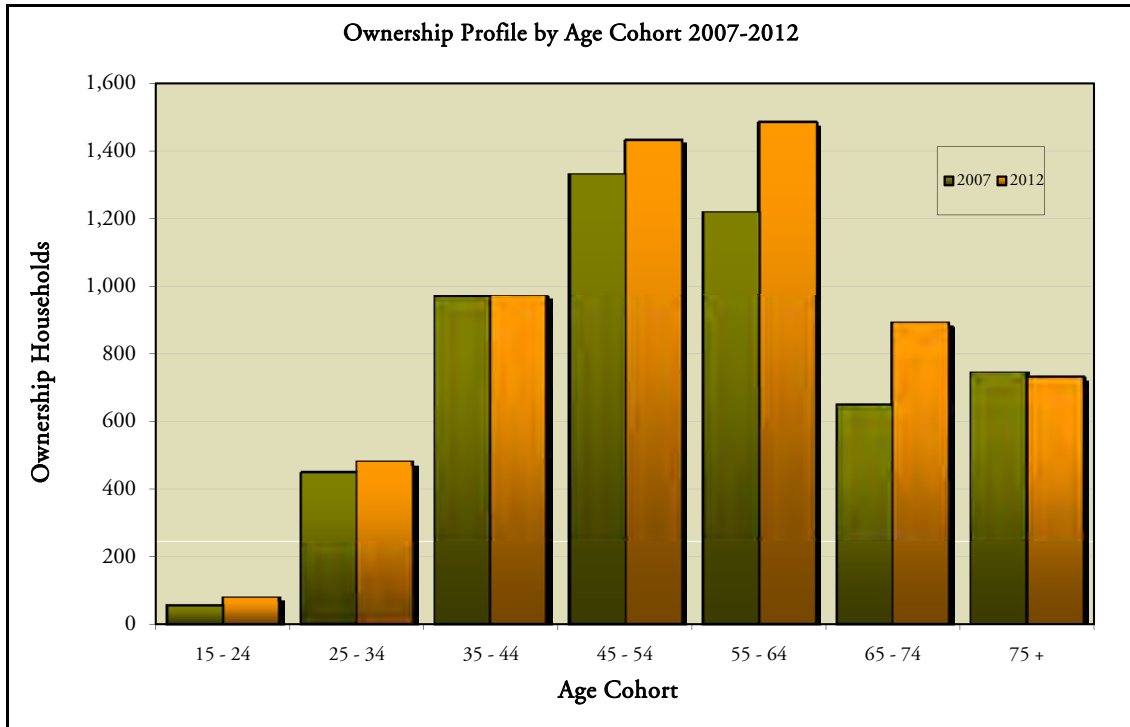


EXHIBIT 2.14

AGE BY INCOME DISTRIBUTION OF HOUSEHOLDS AND  
PROJECTED RENTAL HOUSING DEMAND

MAGNOLIA

2007-2012

Household Income Range <sup>1</sup>	Total	Age of Householder						
		15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 +
<b>2007</b>								
\$ 0 - \$19,999	796	57	128	133	145	109	77	148
\$ 20,000 - \$39,999	1,311	95	216	230	200	223	158	188
\$ 40,000 - \$59,999	1,699	108	301	317	347	268	159	198
\$ 60,000 - \$74,999	1,004	41	179	193	227	172	99	93
\$ 75,000 - \$99,999	1,337	35	231	273	352	230	110	107
\$100,000 - \$124,999	1,049	24	168	235	257	182	88	94
\$125,000 - \$149,999	655	17	58	156	160	166	48	50
\$150,000 +	1,555	14	139	295	421	342	179	166
<b>Overall</b>	<b>9,405</b>	<b>390</b>	<b>1,420</b>	<b>1,831</b>	<b>2,109</b>	<b>1,692</b>	<b>919</b>	<b>1,044</b>
<b>2012</b>								
\$ 0 - \$19,999	674	43	94	95	130	114	76	122
\$ 20,000 - \$39,999	917	65	114	149	126	192	145	125
\$ 40,000 - \$59,999	1,523	100	252	250	289	278	187	167
\$ 60,000 - \$74,999	1,041	55	157	178	211	195	139	106
\$ 75,000 - \$99,999	1,278	45	213	206	337	242	146	90
\$100,000 - \$124,999	985	28	180	200	244	151	94	88
\$125,000 - \$149,999	1,376	33	111	297	318	384	137	96
\$150,000 +	2,057	32	198	346	524	457	299	201
<b>Overall</b>	<b>9,852</b>	<b>402</b>	<b>1,318</b>	<b>1,720</b>	<b>2,179</b>	<b>2,013</b>	<b>1,223</b>	<b>996</b>
<b>NET CHANGE</b>								
\$ 0 - \$19,999	-122	-14	-34	-38	-14	5	0	-26
\$ 20,000 - \$39,999	-394	-30	-102	-81	-74	-31	-13	-62
\$ 40,000 - \$59,999	-175	-8	-49	-67	-58	10	27	-31
\$ 60,000 - \$74,999	38	14	-22	-15	-15	23	41	13
\$ 75,000 - \$99,999	-59	11	-18	-67	-16	12	36	-17
\$100,000 - \$124,999	-64	4	12	-35	-12	-31	6	-6
\$125,000 - \$149,999	720	16	53	141	158	218	88	46
\$150,000 +	502	18	58	51	103	116	120	35
<b>Overall</b>	<b>446</b>	<b>12</b>	<b>-102</b>	<b>-111</b>	<b>71</b>	<b>321</b>	<b>305</b>	<b>-48</b>

Source: *Demographics Now*, Gardner Johnson

EXHIBIT 2.15

PROJECTED HOUSING DEMAND BY INCOME COHORTS  
DEMAND FOR RENTAL PRODUCT

MAGNOLIA

2007-2012

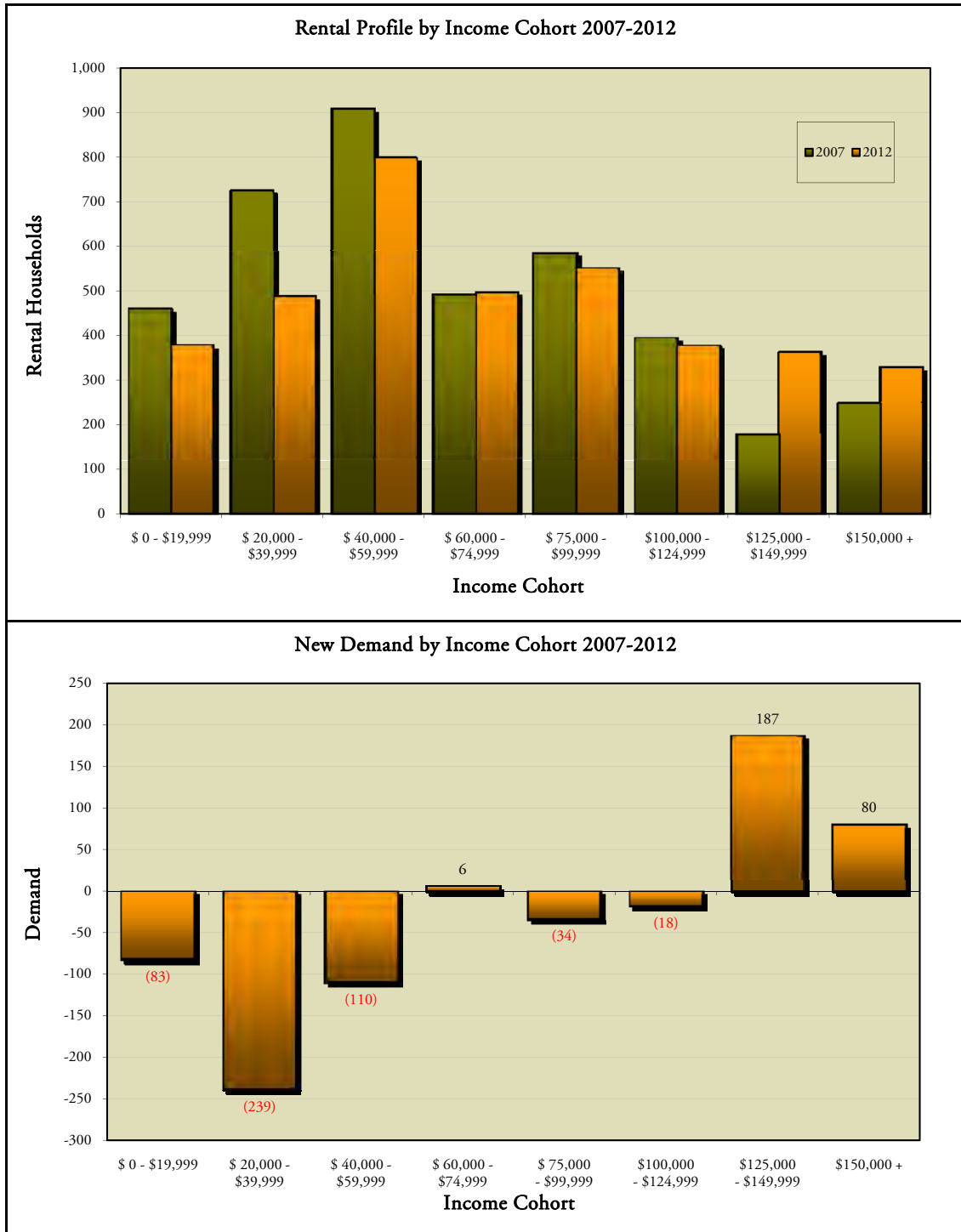


EXHIBIT 2.16

PROJECTED HOUSING DEMAND BY AGE COHORTS  
DEMAND FOR RENTAL PRODUCT

MAGNOLIA

2007-2012

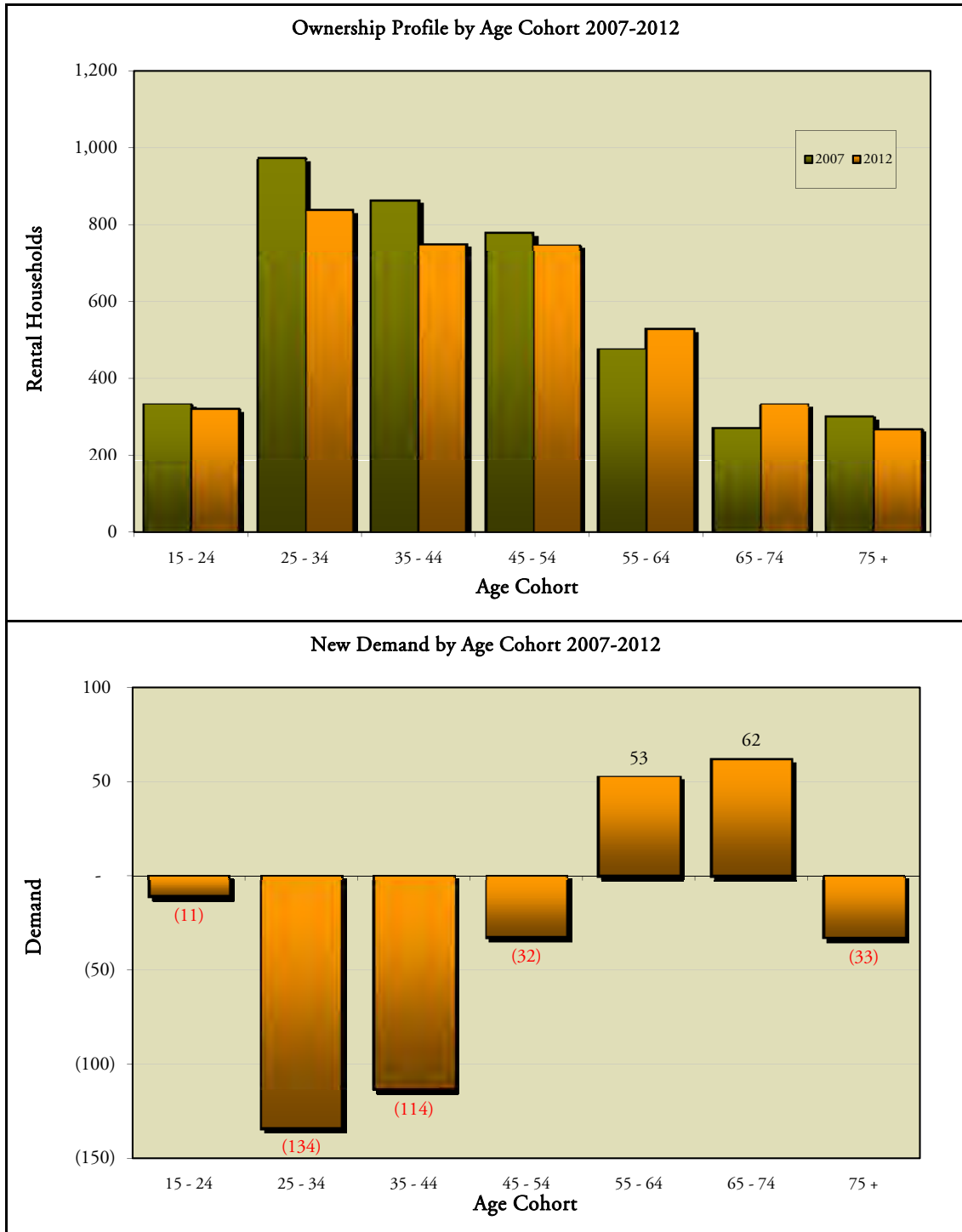
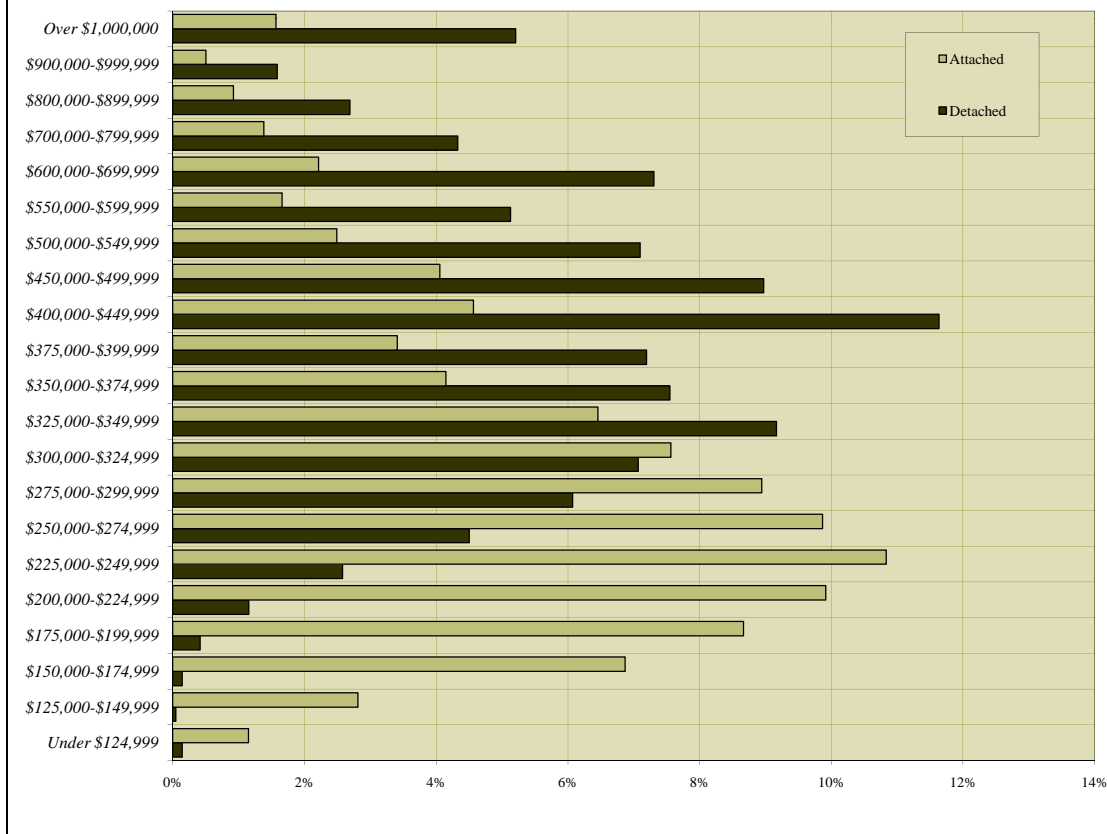


EXHIBIT 3.01

SUMMARY OF RECENT SALES ACTIVITY  
OWNERSHIP RESIDENTIAL MARKET  
SEATTLE/BELLEVUE/EVERETT PMSA  
Third Quarter, 2006 through First Quarter, 2008

Price Range	Total Sales 1/		Distribution	Total Sales Volume 2/			
	Detached	Attached		Detached	Attached	Total	
Under \$124,999	9	25	0.4%	1st Quarter-08	6,240	2,169	8,409
\$125,000 - \$149,999	3	61	0.8%	3rd Quarter-07	8,578	4,033	12,611
\$150,000 - \$174,999	9	149	1.9%	2nd Quarter-07	11,398	4,438	15,836
\$175,000 - \$199,999	26	188	2.5%	1st Quarter-07	7,838	3,498	11,336
\$200,000 - \$224,999	72	215	3.4%	4th Quarter-06	9,865	3,316	13,181
\$225,000 - \$249,999	161	235	4.7%	3rd Quarter-06	13,186	4,942	18,128
\$250,000 - \$274,999	281	214	5.9%				
\$275,000 - \$299,999	379	194	6.8%	<b>Annual Percent Increase (Decrease)</b>	<b>-36.7%</b>	<b>-34.6%</b>	<b>-36.2%</b>
\$300,000 - \$324,999	441	164	7.2%	<b>Average Sales Price -- New Construction</b>			
\$325,000 - \$349,999	572	140	8.5%		<b>1Q08</b>	<b>1Q-07</b>	<b>% Change</b>
\$350,000 - \$374,999	471	90	6.7%	<b>King County 3/</b>			
\$375,000 - \$399,999	449	74	6.2%	Detached	\$618,719	\$577,632	<b>7.1%</b>
\$400,000 - \$449,999	726	99	9.8%	Attached	\$462,659	\$429,875	<b>7.6%</b>
\$450,000 - \$499,999	560	88	7.7%	<b>Snohomish County</b>			
\$500,000 - \$549,999	443	54	5.9%	Detached	\$467,075	454,072	<b>2.9%</b>
\$550,000 - \$599,999	320	36	4.2%	Attached	\$454,669	242,831	<b>87.2%</b>
\$600,000 - \$699,999	456	48	6.0%				
\$700,000 - \$799,999	270	30	3.6%				
\$800,000 - \$899,999	168	20	2.2%				
\$900,000 - \$999,999	99	11	1.3%				
\$1M & Over	325	34	4.3%				
<b>Total</b>	<b>6,240</b>	<b>2,169</b>	<b>100%</b>				

DISTRIBUTION OF SALES BY PRICE RANGE



1/ Total of all sales, New Construction and Resales.

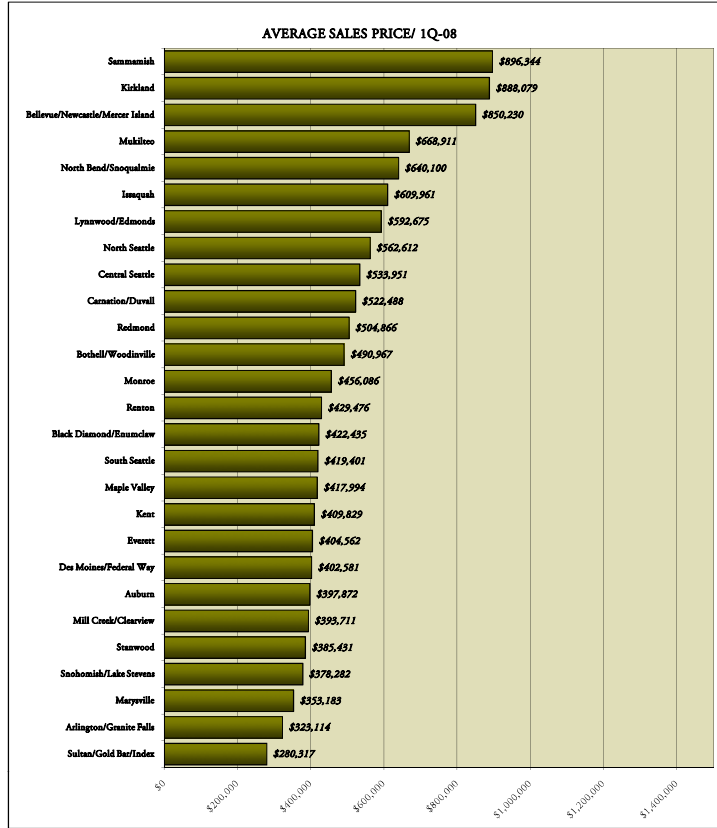
2/ Total of all sales, New Construction and Resales, for King and Snohomish County subregions only.

3/ Mountlake Terrace is included in King County, as part of the North Seattle subregion.

SOURCE: Gardner Johnson LLC.

EXHIBIT 3.02

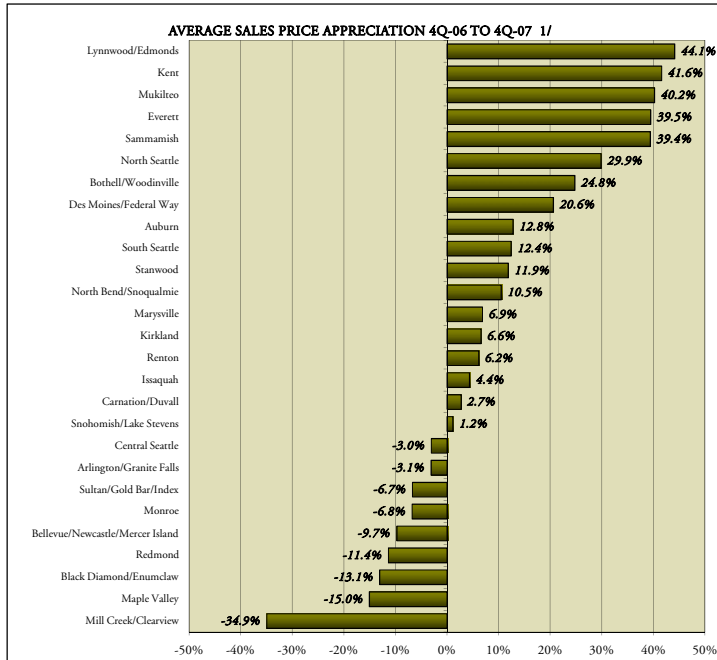
NEW CONSTRUCTION RESIDENTIAL SALES PRICE TRENDS  
BY SUBREGION



SOURCE: NWMLS and Gardner Johnson LLC.

EXHIBIT 3.03 (cont.)

RESIDENTIAL SALES PRICE TRENDS  
BY SUBREGION



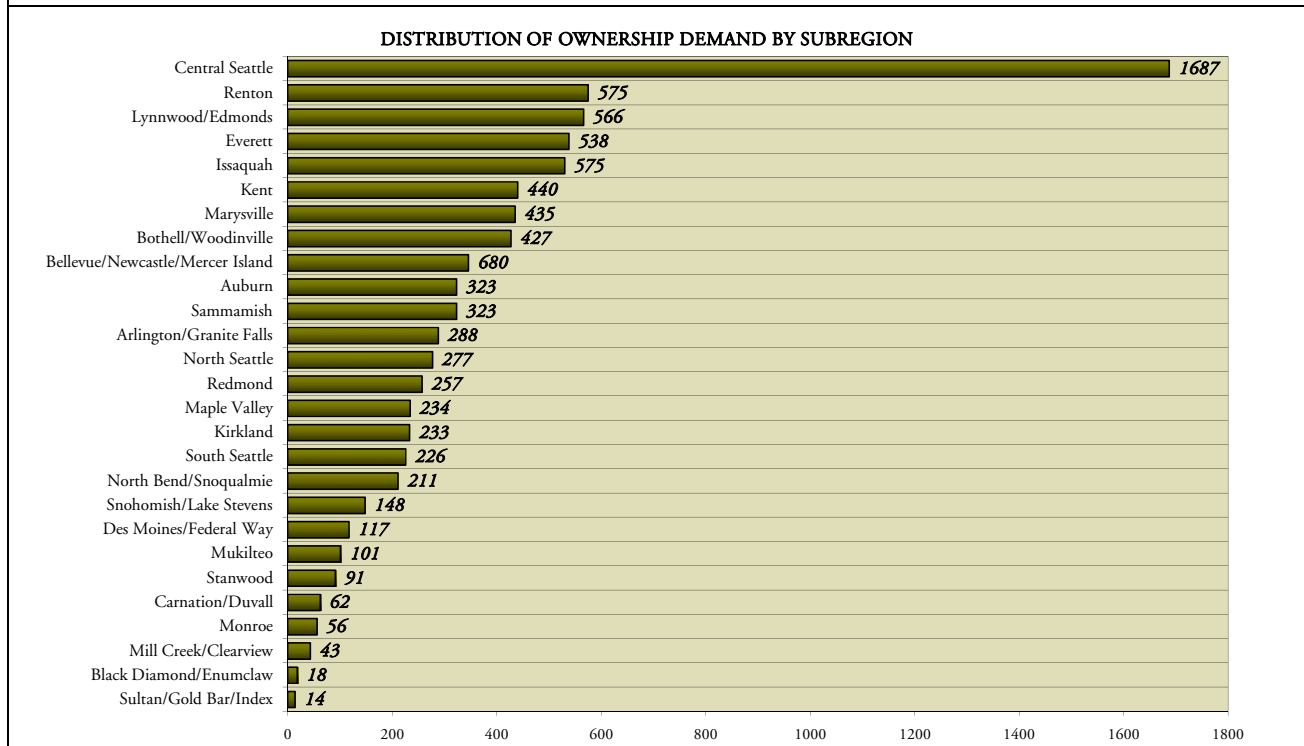
SOURCE: NWMLS and Gardner Johnson LLC.



EXHIBIT 3.04

PROJECTED DISTRIBUTION OF OWNERSHIP DEMAND  
BY AFFORDABLE PRICE RANGE AND SUBREGION  
SEATTLE/BELLEVUE/EVERETT PMSA  
Second Quarter, 2008 through First Quarter, 2009

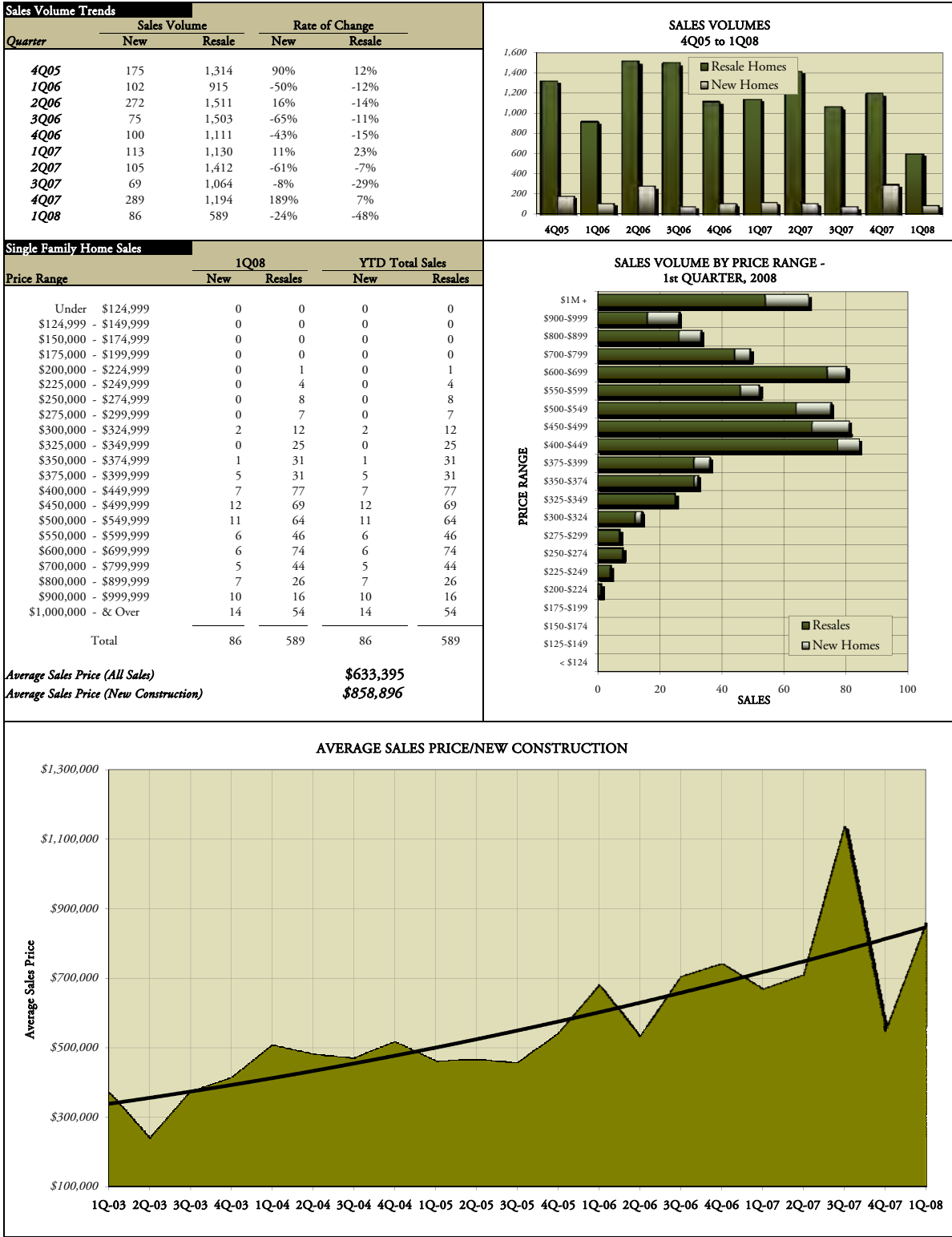
Geographic Subregion	Projected Net New Demand	Percent of Total	Demand by Price Range						
			Under \$150,000	\$150,000 - \$249,999	\$250,000 - \$399,999	\$400,000 - \$599,999	\$600,000 - \$799,999	Over \$800,000	
<b>Seattle</b>									
Central Seattle	1,687	19.7%	68	245	669	464	94	147	
South Seattle	226	2.6%	10	49	91	60	11	5	
<b>Northend</b>									
North Seattle	277	3.2%	11	48	131	43	25	19	
<b>Eastside</b>									
Bellevue/Newcastle/Mercer Island	346	4.0%	8	30	103	53	29	123	
Kirkland	233	2.7%	6	25	74	26	25	77	
Redmond	257	3.0%	7	28	62	30	75	55	
Sammamish	323	3.8%	8	65	45	20	58	127	
Bothell/Woodinville	427	5.0%	13	67	81	187	56	23	
Issaquah	530	6.2%	18	92	120	140	88	72	
Carnation/Duvall	62	0.7%	1	4	6	37	5	9	
North Bend/Snoqualmie	211	2.5%	9	45	24	84	26	23	
<b>Southend</b>									
Auburn	323	3.8%	9	32	110	54	15	6	
Black Diamond/Enumclaw	18	0.2%	0	0	9	5	1	3	
Des Moines/Federal Way	117	1.4%	6	58	17	29	2	5	
Kent	440	5.1%	19	52	198	151	11	9	
Maple Valley	234	2.7%	4	8	78	103	19	22	
Renton	575	6.7%	20	80	105	259	89	22	
<b>Snohomish County</b>									
Arlington/Granite Falls	288	3.4%	16	45	130	81	15	1	
Everett	538	6.3%	35	126	278	87	7	5	
Lynnwood/Edmonds	566	6.6%	19	52	244	174	47	30	
Marysville	435	5.1%	23	49	249	84	21	8	
Mill Creek/Clearview	43	0.5%	1	7	10	16	3	6	
Monroe	56	0.7%	3	16	11	20	6	0	
Mukilteo	101	1.2%	4	26	24	6	30	11	
Snohomish/Lake Stevens	148	1.7%	7	14	46	55	20	6	
Stanwood	91	1.1%	4	8	49	26	3	1	
Sultan/Gold Bar/Index	14	0.2%	1	2	11	0	0	0	
<b>Total-Metropolitan Area</b>	<b>8,566</b>		330	1,273	2,975	2,294	781	815	



SOURCE: Gardner Johnson LLC

EXHIBIT 3.04

SINGLE FAMILY HOME SALES TRENDS  
CENTRAL SEATTLE SUBREGION  
First Quarter, 2008 through Fourth Quarter, 2008

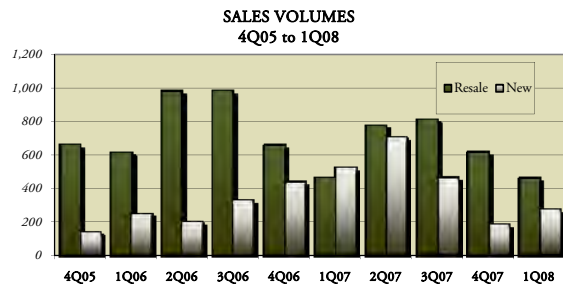


SOURCE: NWMLS and Gardner Johnson LLC

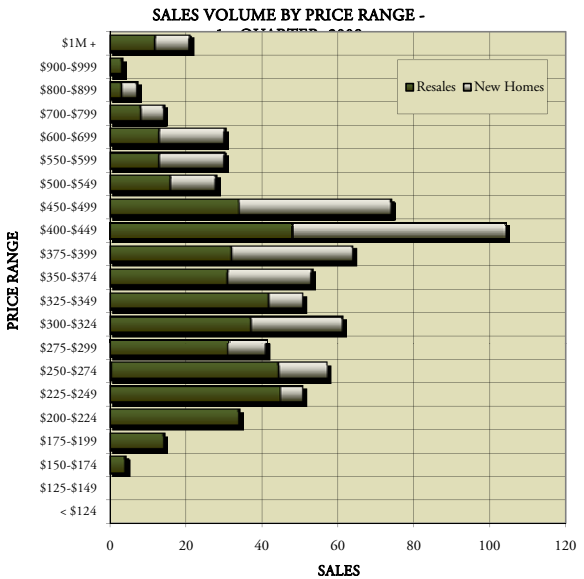
EXHIBIT 3.05

ATTACHED FOR-SALE HOME SALES TRENDS  
CENTRAL SEATTLE SUBREGION  
First Quarter, 2008 through Fourth Quarter, 2008

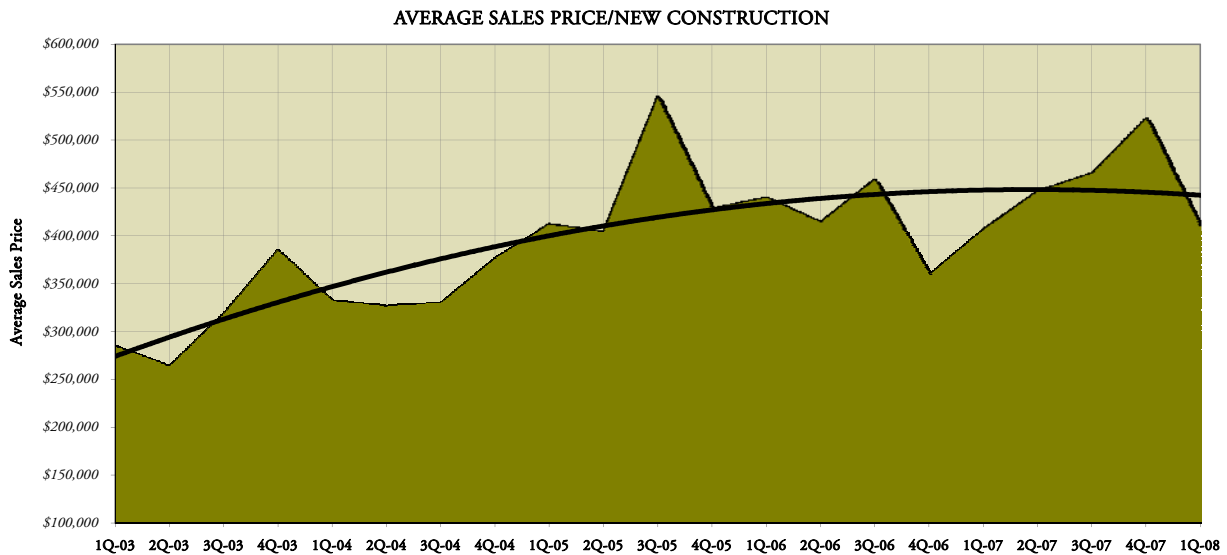
Sales Volume Trends				
Quarter	Sales Volume		Rate of Change	
	New	Resale	New	Resale
4Q05	143	666	-37%	2%
1Q06	250	615	66%	12%
2Q06	202	982	34%	18%
3Q06	330	986	271%	21%
4Q06	444	661	210%	-1%
1Q07	529	468	112%	-24%
2Q07	702	777	248%	-21%
3Q07	463	810	40%	-18%
4Q07	185	618	-58%	-7%
1Q08	277	464	-48%	-1%



Attached Home Sales					
Price Range	1Q08		YTD Total Sales		
	New	Resales	New	Resales	
Under \$124,999	0	0	0	0	
\$125,000 - \$149,999	0	0	0	0	
\$150,000 - \$174,999	0	4	0	4	
\$175,000 - \$199,999	0	14	0	14	
\$200,000 - \$224,999	0	34	0	34	
\$225,000 - \$249,999	6	45	6	45	
\$250,000 - \$274,999	13	44	13	44	
\$275,000 - \$299,999	10	31	10	31	
\$300,000 - \$324,999	24	37	24	37	
\$325,000 - \$349,999	9	42	9	42	
\$350,000 - \$374,999	22	31	22	31	
\$375,000 - \$399,999	32	32	32	32	
\$400,000 - \$449,999	56	48	56	48	
\$450,000 - \$499,999	40	34	40	34	
\$500,000 - \$549,999	12	16	12	16	
\$550,000 - \$599,999	17	13	17	13	
\$600,000 - \$699,999	17	13	17	13	
\$700,000 - \$799,999	6	8	6	8	
\$800,000 - \$899,999	4	3	4	3	
\$900,000 - \$999,999	0	3	0	3	
\$1,000,000 & Over	9	12	9	12	
<b>Total</b>	<b>277</b>	<b>464</b>	<b>277</b>	<b>464</b>	



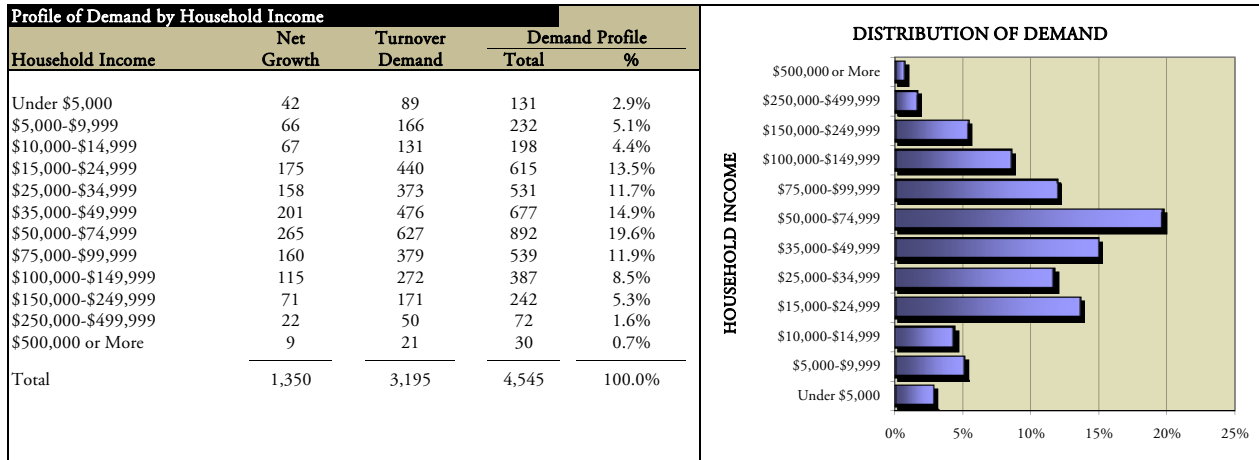
Average Sales Price (All Sales) **\$394,090**  
Average Sales Price (New Construction) **\$408,549**



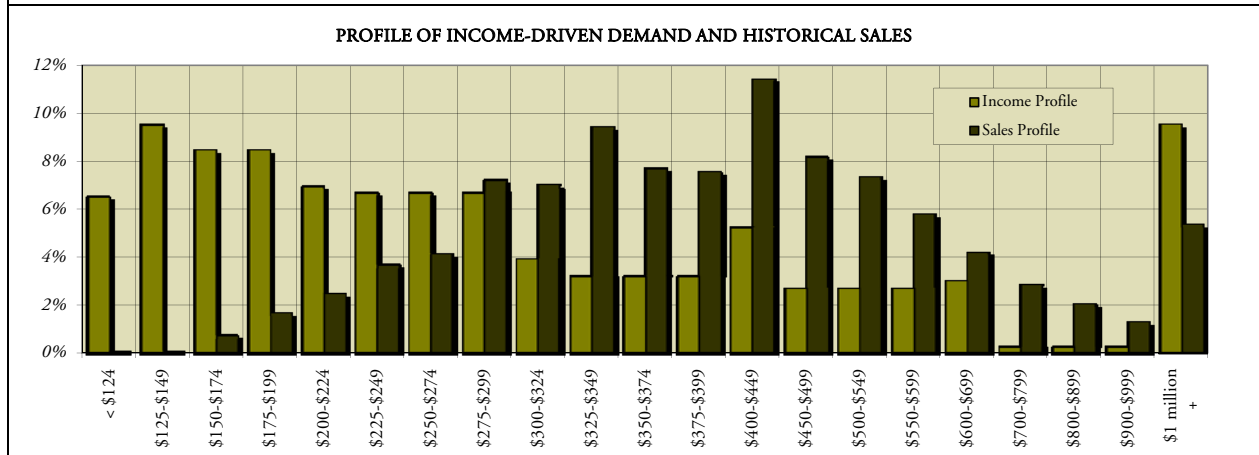
SOURCE: NWMLS and Gardner Johnson LLC

EXHIBIT 3.06

PROJECTED DEMAND FOR OWNERSHIP HOUSING  
CENTRAL SEATTLE SUBREGION  
Second Quarter, 2008 through First Quarter, 2009



Projected Demand for New Housing by Price Range									
Price Range (\$000s)	Previous Volume			Projected Volume			% Change from Previous Year		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
< \$124	0	1	1	8	14	22	---	1,330%	2,100%
\$125-\$149	0	1	1	11	21	32	---	1,980%	3,100%
\$150-\$174	0	18	18	13	23	36	---	30%	100%
\$175-\$199	0	41	41	16	29	45	---	(29%)	10%
\$200-\$224	0	61	61	17	32	49	---	(48%)	(20%)
\$225-\$249	6	84	90	24	36	60	293%	(57%)	(33%)
\$250-\$274	6	95	101	25	39	64	317%	(59%)	(37%)
\$275-\$299	20	157	177	41	55	96	104%	(65%)	(46%)
\$300-\$324	37	135	172	41	43	84	11%	(68%)	(51%)
\$325-\$349	45	186	231	51	55	106	13%	(70%)	(54%)
\$350-\$374	30	159	189	40	49	89	34%	(69%)	(53%)
\$375-\$399	32	153	185	40	47	87	26%	(69%)	(53%)
\$400-\$449	61	219	280	65	68	133	7%	(69%)	(53%)
\$450-\$499	62	138	200	51	41	92	(18%)	(70%)	(54%)
\$500-\$549	75	105	180	52	31	83	(31%)	(70%)	(54%)
\$550-\$599	33	109	142	34	34	68	4%	(69%)	(52%)
\$600-\$699	21	82	103	26	27	53	22%	(67%)	(49%)
\$700-\$799	36	34	70	20	10	30	(44%)	(71%)	(57%)
\$800-\$899	24	26	50	14	7	21	(42%)	(73%)	(58%)
\$900-\$999	19	13	32	10	4	14	(47%)	(70%)	(56%)
\$1 million +	69	62	131	59	27	86	(14%)	(57%)	(34%)
<b>Total</b>	<b>576</b>	<b>1,879</b>	<b>2,455</b>	<b>658</b>	<b>692</b>	<b>1,350</b>	<b>14%</b>	<b>(63%)</b>	<b>(45%)</b>



1/ Based upon sales volume over the previous twelve months and demand projections for the next twelve months.

**EXHIBIT 3.07**

**NEW CONSTRUCTION CONDOMINIUM MARKET AREA EVALUATED**

City of Seattle Zip Code Areas: 98199



SOURCE: Aerials Express/Gardner-Johnson, LLC

EXHIBIT 3.08

CURRENTLY SELLING/UNDER CONSTRUCTION NOT YET SELLING NEW CONSTRUCTION CONDOMINIUM PROJECTS  
City of Seattle Zip Code Area: 98199

Map #	Development	Location	Status	Dwelling Type	Total # of Units	Start of Sales	Monthly Abs. Rates	Total Price Range		Total Sq. Ft. Range		Total \$/Sq. Ft. Range		Est. Sellout
								Min.	Max.	Min.	Max.	Min.	Max.	
1	2715 W Jameson St 2715 W Jameson St Aerial Plat	2914 E. Madison St.	Selling Homes	Townhome	9	4/1/2007	0.38	399000	475000	1150	1450	293	375	3/1/2009
2	3841 34th Ave W 3841 34th Ave W Aerial	1810 11th Ave.	Not Yet Selling	Townhome	5	--	--	--	--	--	--	--	--	--
3	4266 33rd Ave W 4266 33rd Ave W Aerial	1707 Boylston Ave.	Sold Out	Townhome	5	7/14/2006	1.16	449000	499000	1760	1760	255	284	
4	Blue Heron 3150 W Government Way Aerial Plat	1426 E. Madison St.	Selling Homes	Mid Rise	30	5/31/2007	1.21	274990	549990	639	1058	368	603	9/1/2008
5	Candyce (Conversion) 4269 Gilman Ave W Aerial Plat	530 Broadway E.	Selling Homes	Low Rise	10	7/13/2007	0.73	189950	275000	475	768	331	420	1/1/2011
6	Promenade at the Park (Conversion) 3855 34th Ave W Aerial Plat	1530 Eastlake Ave. E.	Selling Homes	Low Rise	19	2/27/2008	0.56	387000	387000	539	962	351	351	12/1/2008
<b>Totals/Averages</b>					<b>78</b>	<b>--</b>	<b>0.8</b>	<b>\$339,988</b>	<b>\$437,198</b>	<b>913</b>	<b>1200</b>	<b>\$320</b>	<b>\$407</b>	

SOURCE: New Home Trends/Northwest Multiple Listing Service



EXHIBIT 3.10

PROPOSED CONDOMINIUM PROJECTS  
City of Seattle Zip Code Area: 98199

Development Name	Location	Units	Dwelling Type	Status	App. Date	Ownership
2200 32nd Ave W	Seattle	10	Townhome	In for Permit	6/5/2007	Condominium
2316 W Crockett St	Seattle	7	Townhome	In for Permit	2/2/2007	Unknown
<b>Totals/Averages</b>		<b>17</b>				

SOURCE: New Home Trends/Applicable City Department of Planning



EXHIBIT 3.11

PROPOSED SINGLE FAMILY PROJECTS

City of Seattle Zip Code Area: 98199

Development Name	Location	Units	Dwelling Type	Status	App. Date	Ownership
2215 32nd Ave W	Seattle	15	Single Family	In for Permit	6/5/2007	Single Family
2215 32nd Ave W	Seattle	39	Single Family	In for Permit	2/2/2007	Single Family
<b>Totals/Averages</b>		<b>54</b>				

SOURCE: New Home Trends/Applicable City Department of Planning

### Exhibit 3.12

#### Neighborhood Comparison of Single Family and Condominium Prices Magnolia and Capitol Hill (January, 2007 - Present)

Neighborhood	Multi Family			Single Family		
	Average Size (Square Feet)	Average Price	Price/Square Foot	Average Size (Square Feet)	Average Price	Price/Square Foot
<b>Magnolia</b>	921	\$ 300,310.00	\$ 326.07	2610	\$ 819,000.00	\$ 313.79
<b>Capitol Hill</b>	801	\$ 342,309.00	\$ 427.35	2410	\$ 757,000.00	\$ 314.11

*Source: King County Assessor, Northwest Multiple Listing Service*

EXHIBIT 3.13

**SUMMARY OF RECOMMENDATIONS**  
**Fort Lawton Redevelopment**

**SUMMARY OF EXISTING STOCK**

Price/Sqft Comparable Currently Selling Attached	\$	363.00
Price/Sqft <2000Sqft	\$	326.00
Price/Sqft>2000Sqft	\$	285.00
Average Single Family All Sizes	\$	313.00
Average lot Square Foot Townhouse		1400
Average lot Square Foot units <2000 Sqft		5400
Average lot Square Foot Units >2000 Sqft		6700

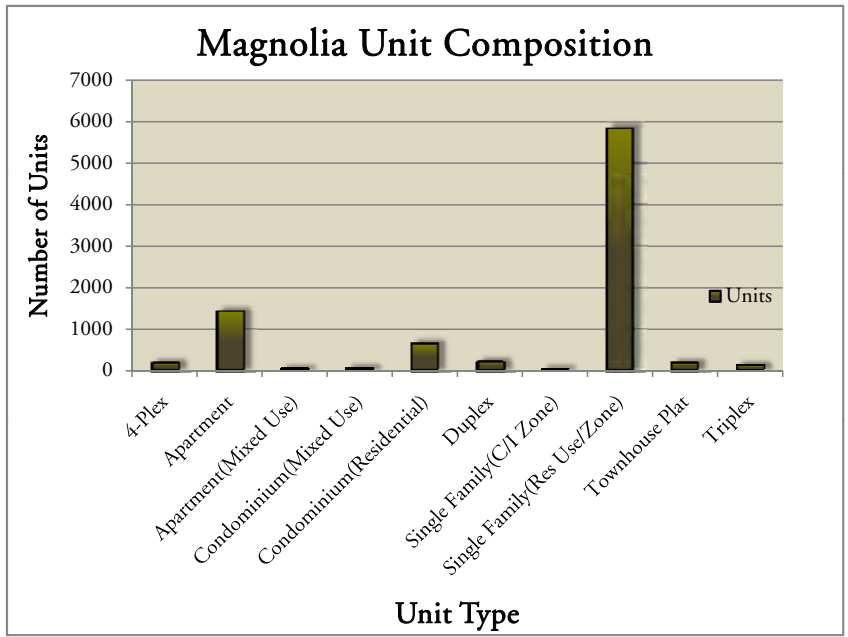
**Recommendations**

Approximate Unit Size Range	Price	\$/Sqft	% of total project	Lot Size Per Unit	Product Type
600 - 1200	\$ 405,000	\$ 450.00	0%	N/A	Stacked Flat
900 - 1700	\$ 471,900	\$ 363.00	10%	1000 - 1500	Townhome
1500 - 2200	\$ 603,100	\$ 326.00	2%	1000 - 1500	Luxury Townhome
1500 - 1900	\$ 554,200	\$ 326.00	20%	2200 - 3500	Small Lot Single Family
2000 - 2500	\$ 733,500	\$ 326.00	45%	5000 - 5500	Single Family 2 Story
2500 - 2800	\$ 829,450	\$ 313.00	23%	5500 - 6000	Larger Lot Single Family 2 or 3 Story

Source: King County Assessor, New Home Trends, Northwest Multiple Listing Service

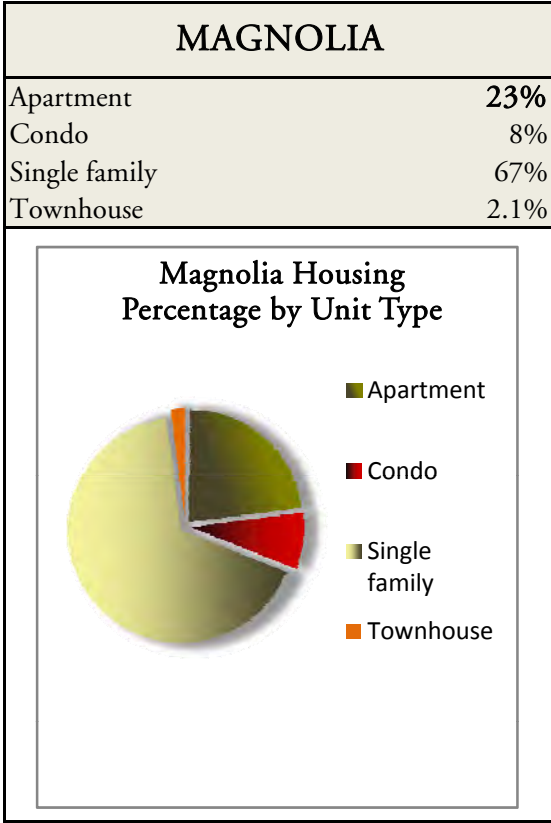
**Exhibit 4.01  
TOTAL NUMBER OF UNITS BY TYPE  
MAGNOLIA**

<b>Unit type</b>	<b>Number of Units</b>
4-Plex	188
Apartment	1429
Apartment(Mixed Use)	48
Condominium(Mixed Use)	62
Condominium(Residential)	654
Duplex	216
Single Family(C/I Zone)	44
Single Family(Res Use/Zone)	5840
Townhouse Plat	187
Triplex	135
<b>Grand Total</b>	<b>8803</b>



Source: King County Assessor

Exhibit 4.02  
LAND USE PERCENTAGES

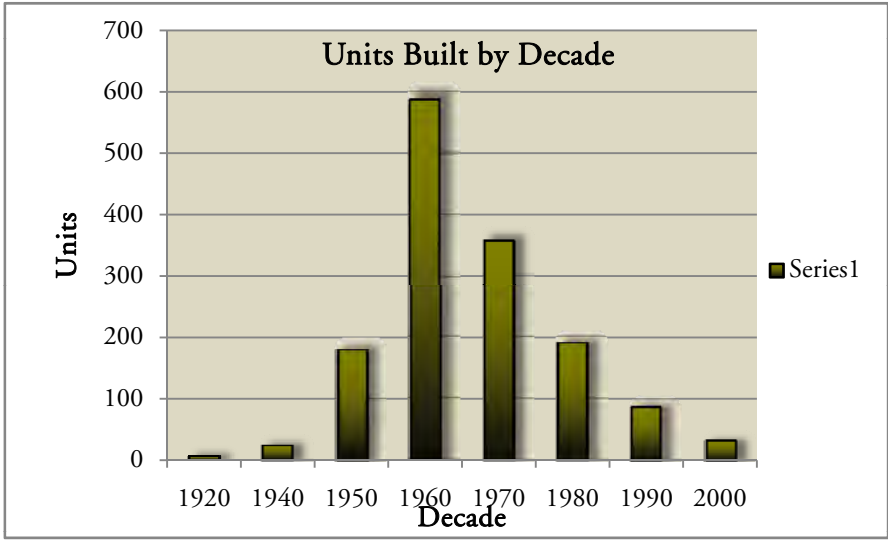


Source: King County Assessor

### Exhibit 4.03

## RENTAL UNITS BY DECADE

1920	1940	1950	1960	1970	1980	1990	2000	Grand Total
7	24	180	588	356	190	87	32	1464

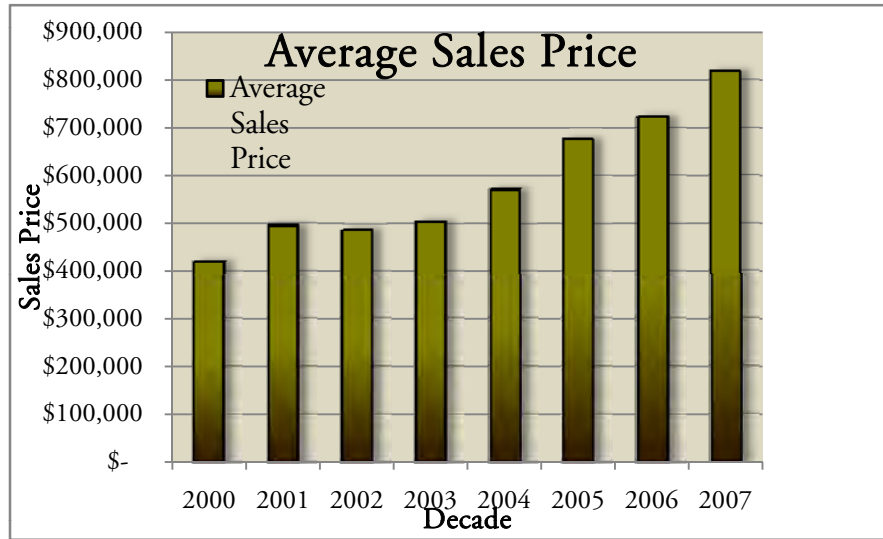


Source: King County Assessor

### Exhibit 4.04

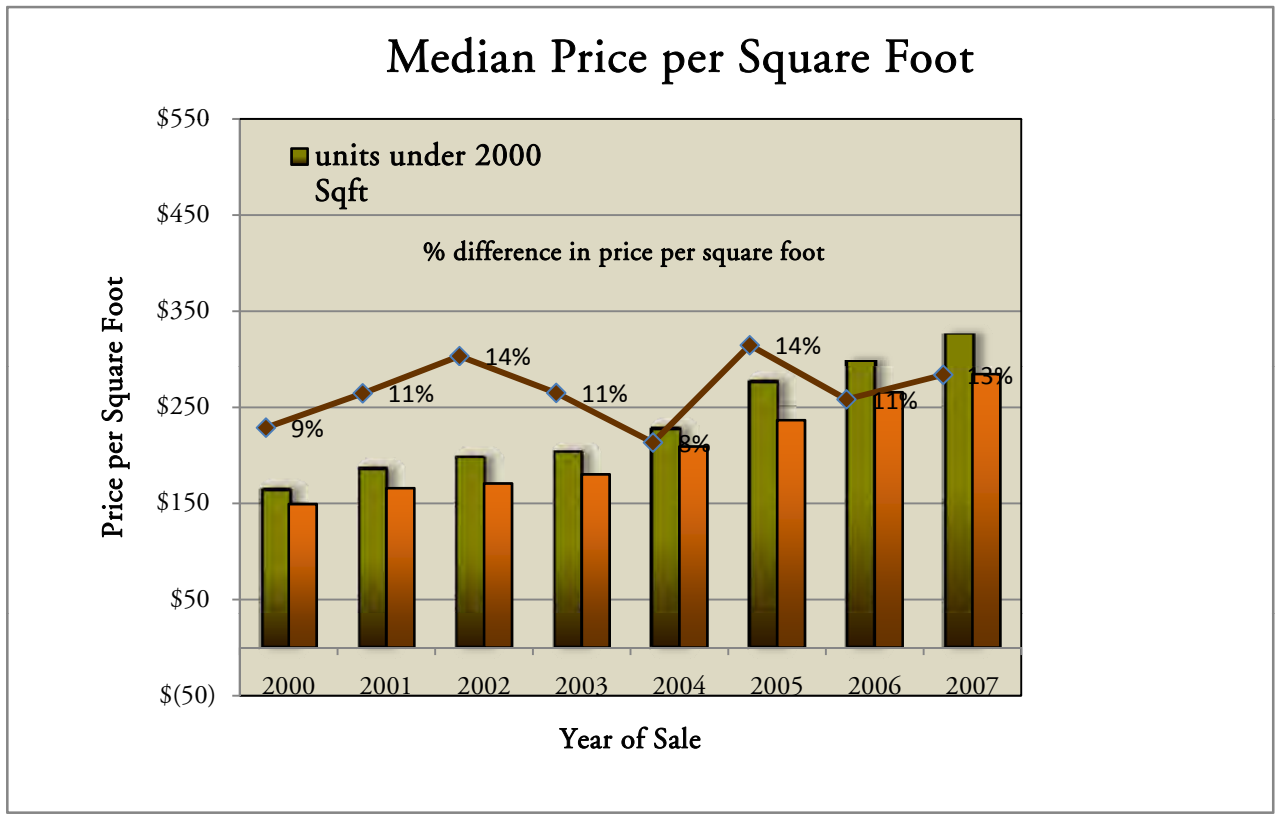
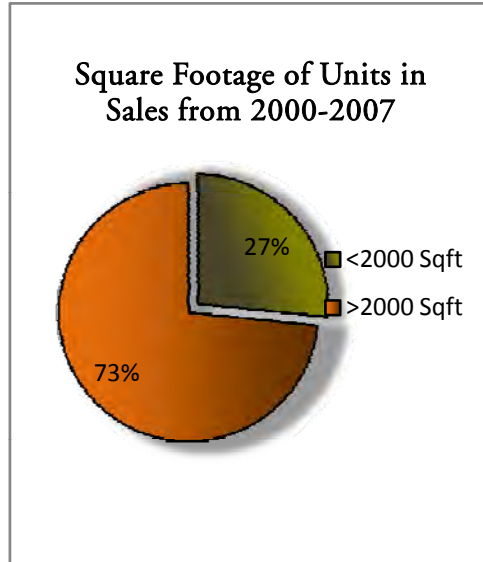
## Average Single Family Sales Price, Magnolia: 2000 - 2007

2000	2001	2002	2003	2004	2005	2006	2007
\$420,318	\$493,348	\$487,101	\$504,047	\$572,427	\$676,267	\$721,474	\$819,130



Source: King County Assessor

**Exhibit 4.05**  
**Single Family Square Footage Price Comparison**  
**Magnolia**



Source: King County Assessor



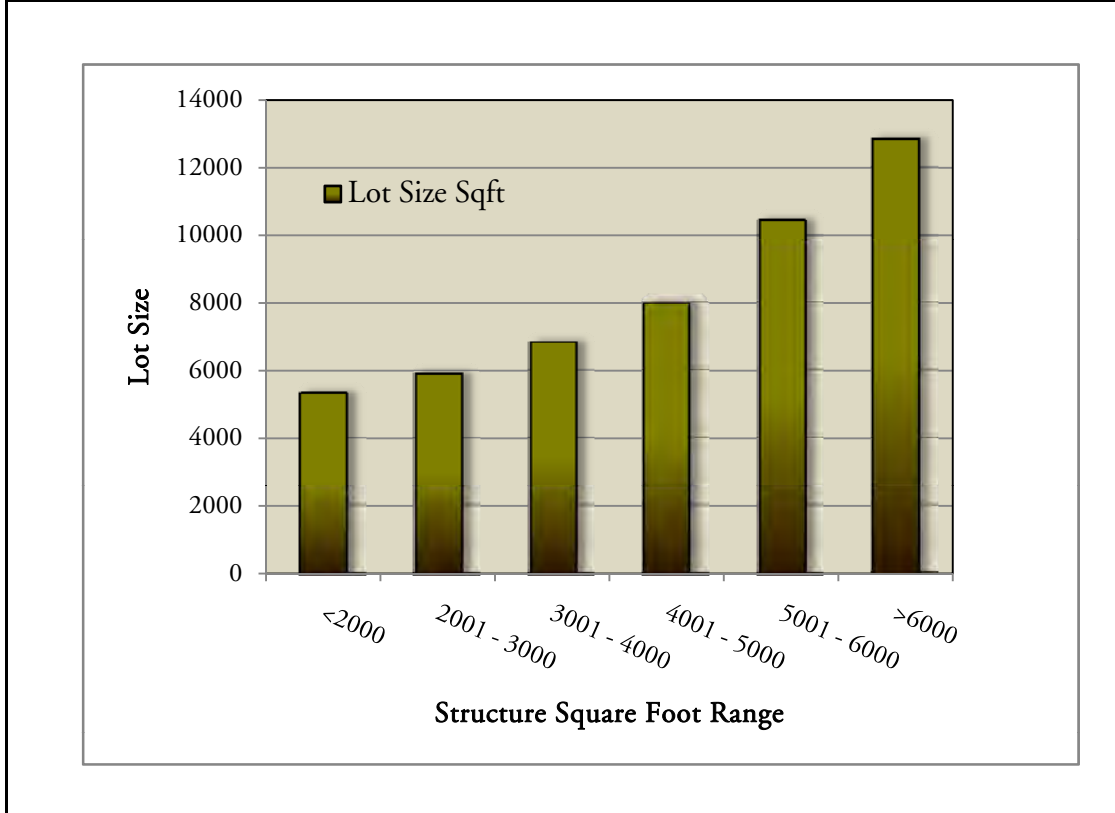
## Exhibit 4.06

### LOT SIZES ASSOCIATED WITH STURCTURE SIZES

Single Family Sales from 2000 - 2007

#### Magnolia Neighborhood, Seattle WA

Structure Size Square FT	<2000	2001 - 3000	3001 - 4000	4001 - 5000	5001 - 6000	>6000
Lot Size Sqft	5337	5915	6849	7990	10445	12847
Average Sales/Yr	74	120	62	21	5	2



Source: King County Assessor



# Appendix H

## Financial Model



## Appendix H: Financial Model

Key Assumptions	Number of Units		Avg Unit Size (a)	Avg Unit Sale Price (a)	Percent To Lot Dev (a)
	Single Family Focus	Townhouse Focus			
Single Family Large Lot	14	6	2,650	\$ 829,450	32.0%
Single Family Medium Lot	15	10	2,250	\$ 733,500	32.0%
Single Family Small Lot	50	50	1,800	\$ 575,000	32.0%
Townhouse - Large	17	42	1,800	\$ 525,000	25.0%
Townhouse - Standard	12	17	1,300	\$ 471,900	25.0%
<b>Total Market Rate</b>	<b>108</b>	<b>125</b>			
Affordable Townhouses	36	36	NA	NA	
Affordable - Stacked Flats	55	55	NA	NA	
<b>Total Affordable</b>	<b>91</b>	<b>91</b>			
<b>Total All Units</b>	<b>199</b>	<b>216</b>			

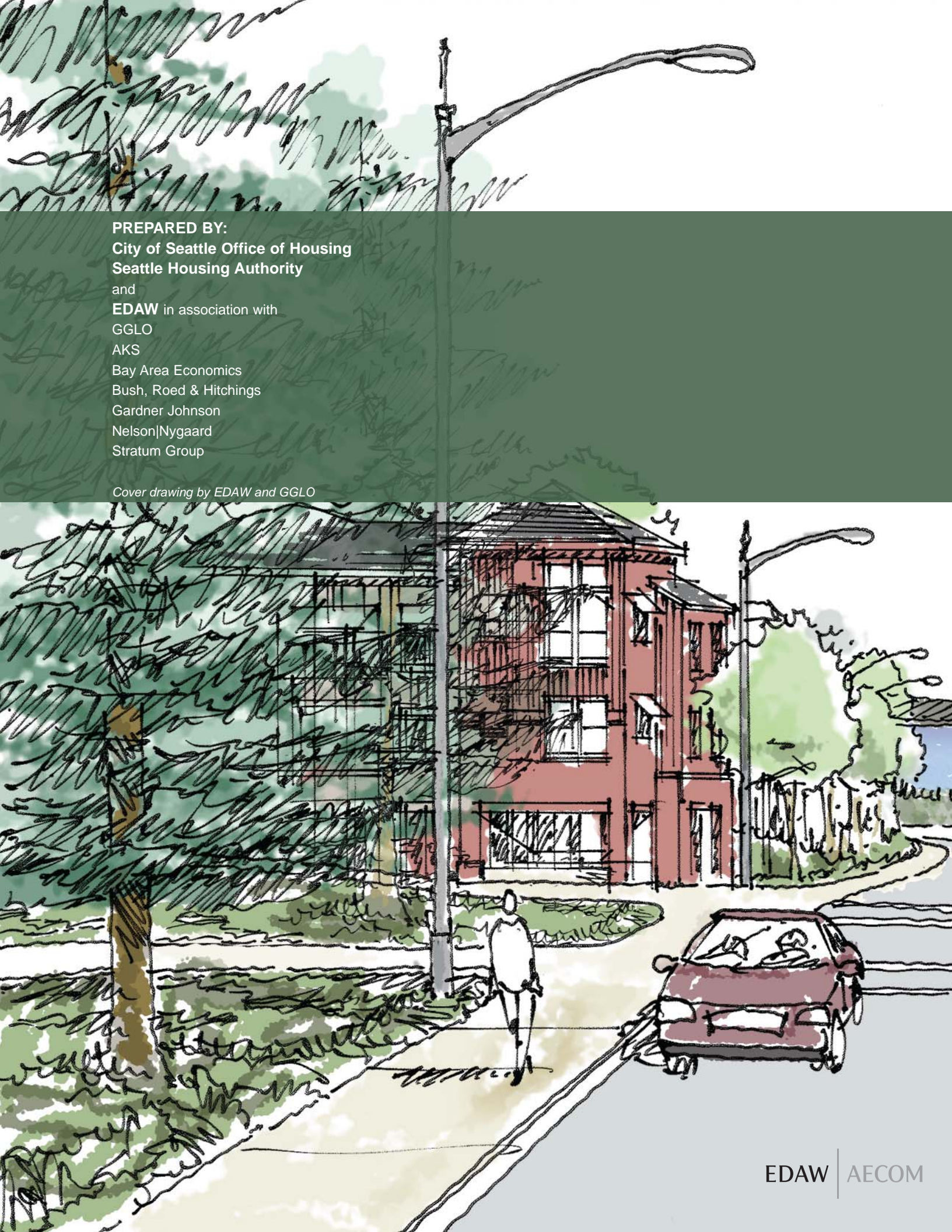
a) Source: SHA

Return @ \$2 M Land Cost	Single Family Focus	Townhouse Focus
<b>Low Lot Pricing</b>		
ROI	Not Feasible	Not Feasible
IRR	Not Feasible	Not Feasible
<b>Med Lot Pricing</b>		
ROI	17%	42%
IRR	5%	12%
<b>High Lot Pricing</b>		
ROI	81%	109%
IRR	20%	27%

Return @ \$2.5 M Land Cost	Single Family Focus	Townhouse Focus
<b>Low Lot Pricing</b>		
ROI	Not Feasible	Not Feasible
IRR	Not Feasible	Not Feasible
<b>Med Lot Pricing</b>		
ROI	Not Feasible	23%
IRR	Not Feasible	7%
<b>High Lot Pricing</b>		
ROI	57%	85%
IRR	15%	22%





A hand-drawn architectural sketch of a street scene. In the foreground, a person is walking on a sidewalk towards the left. A red car is driving on the road to the right. In the background, there is a multi-story red brick building with several windows. To the left of the building is a large, leafy tree. A street lamp stands on the sidewalk. The drawing uses black ink outlines with some color washes in red, green, and brown.

**PREPARED BY:**  
City of Seattle Office of Housing  
Seattle Housing Authority  
and  
**EDAW** in association with  
GGLO  
AKS  
Bay Area Economics  
Bush, Roed & Hitchings  
Gardner Johnson  
Nelson|Nygaard  
Stratum Group

*Cover drawing by EDAW and GGLO*