

BOARD OF COUNTY COMMISSIONERS

KLAMATH COUNTY, OREGON

IN THE MATTER OF AMENDING  
THE COMPREHENSIVE PLAN )  
ADOPTING THE KLAMATH FALLS )  
URBAN AREA PLAN INCLUDING )  
THE GOAL 10 HOUSING NEEDS )  
ANALYSIS

ORDINANCE 45.97

**2021-002495**

Klamath County, Oregon



00274354202100024951751750

02/19/2021 10:18:11 AM

Fee: NO FEE

**WHEREAS**, the Klamath County Board of Commissioners has the authority and desires to amend the Comprehensive Plan; and

**WHEREAS**, the Klamath County Planning Department provided written notice of the public hearing as required in Klamath County Land Development Code Article 31; and

**WHEREAS**, a public hearing was held on January 26, 2021, and public testimony was considered before the Klamath County Planning Commission and Board of County Commissioners; and

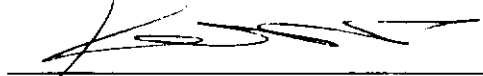
**WHEREAS** the Klamath County Planning Commission forwarded a recommendation of approval; and

**WHEREAS**, on January 26, 2021, based on testimony entered and in consideration of the whole record, the Klamath County Board of Commissioners voted unanimously to approve the request in File No. CLUP 12-20.

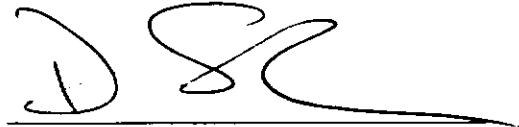
**NOW, THEREFORE,** the Klamath County Board of Commissioners ordains to amend the Comprehensive Plan to include the Klamath Falls Urban Area Plan (Exhibit "A") including the goal 10 Housing Needs Analysis (Exhibit "B"), and incorporated herein by reference are hereby adopted.

DATED this 12 day of February, 2021.

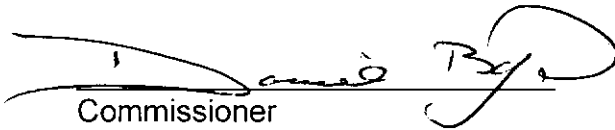
**FOR THE BOARD OF COMMISSIONERS**



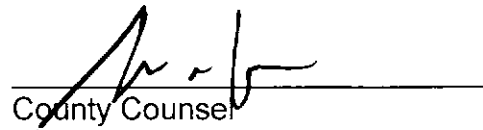
Chairman



Commissioner



Commissioner



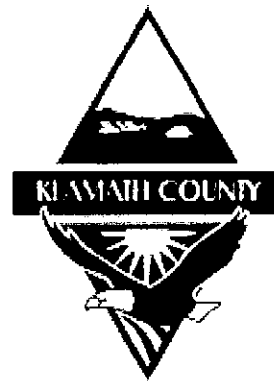
County Counsel

Approved as to form

#### **NOTICE OF APPEAL RIGHTS**

This decision may be appealed to the Oregon Land Use Board of Appeals (LUBA) within 21-days following the date of the mailing of this order. Contact LUBA for information as how to file this appeal (LUBA by phone 1-503-373-1265 or by mail at 550 Capitol Street NE, Suite 235, Salem Oregon 97301-2552). Failure to do so in a timely manner may affect your rights.

# Klamath Falls Urban Area Comprehensive Plan Volume I



Prepared by  
Winterbrook Planning



## Acknowledgments

This project was funded jointly by Klamath County and the City of Klamath Falls. The project team recognizes and appreciates the leadership and foresight shown by the following appointed and elected officials.

Klamath County Board of Commissioners	Klamath Falls City Council
<ul style="list-style-type: none"> <li>• Donnie Boyd, Chair</li> <li>• Kelley Minty Morris, Vice Chair</li> <li>• Derrick DeGroot, Commissioner</li> </ul>	<ul style="list-style-type: none"> <li>• Carol Westfall, Mayor</li> <li>• Phil Studenberg, Ward I</li> <li>• Kendall Bell, Ward II</li> <li>• Matt Dodson, Ward III</li> <li>• Dan Tofell, Ward IV</li> <li>• Todd Andres, Ward V</li> </ul>

Klamath County Planning Commission	Klamath Falls Planning Commission
<ul style="list-style-type: none"> <li>• Randy Shaw, Chair</li> <li>• Ernie Palmer</li> <li>• Steve Bocchi</li> <li>• Chris Kandra</li> <li>• Samantha Totten-Perry</li> <li>• Tamera Bancroft</li> <li>• Lauren Jespersen</li> <li>• Brian Fox</li> <li>• Don McCasland</li> </ul>	<ul style="list-style-type: none"> <li>• Kevin Brown</li> <li>• Sheryl Franklin</li> <li>• Tyler Tucker</li> <li>• Randy Cox</li> <li>• Bryan Faunt</li> <li>• Susie Spratt</li> </ul>

The following local government staff actively participated in the preparation of this Urban Area Plan:

Klamath County	City of Klamath Falls
Jeremy Morris – Public Works Director Erik Nobel – Planning Director Erica Wilde – Klamath County GIS Technician	Scott Souders – Assistant Public Works Director Mark Willrett – Public Works Director Joe Wall – Planning Manager Jon Anderson – Assistant Planner Jeff Hansen – Klamath Falls GIS Technician

## Table of Contents

Acknowledgments.....	ii
Introduction and Purpose.....	1
Urban Area Plan Organization and Purpose .....	1
Volume I: Urban Area Plan.....	1
Urban Area Plan Chapter Format.....	2
Objectives, Policies and Implementation Measures.....	2
Klamath Falls and Klamath County Comprehensive Plans.....	2
City and County Land Use and Zoning Maps .....	3
The Urban Area Economic Opportunities Analysis .....	3
The Urban Area Transportation System Plan .....	3
The Urban Area Public Facilities Plan.....	3
Urban Area Plan Maps .....	3
Population Projections.....	4
Urban Area Plan Glossary and Acronyms .....	4
Volume II: Background Plans and Studies (listing).....	5
Housing Needs Analysis and Buildable Lands Inventory.....	<b>Error! Bookmark not defined.</b>
Volume III: Facilities Master Plans (listing) .....	5
Volume IV: Urban Area Plan Implementation Measures (listing).....	6
Volume V: Urban Area Intergovernmental Agreements (listing) .....	6
Goal 1: Citizen Involvement .....	7
Statewide Planning Goal 1 Requirements .....	7
City and County Background and Policy Context.....	7
Citizen Involvement Objectives and Policies .....	8
Implementation .....	9
Goal 2: Land Use Planning .....	10
Statewide Planning Goal 2 Requirements .....	10
City and County Land Use Planning Background and Policy Context .....	11
Coordinated Population Projection .....	11
Table 2.1 Projected Urban Area and County Population Growth.....	12
Urban Area Land Use Planning Objectives and Policies .....	12
Implementing Urban Area Zones.....	13
Table 2.2 Base City and County Urban Area Zoning Designations.....	13

Urban Area Zone Change Criteria .....	14
Zone Change Approval Options .....	14
Urban Area Zone Change Criteria .....	14
Table 2.3 Base County Urban Area Zoning Designations and Corresponding Purpose .....	16
Table 2.4 Base City Urban Area Zoning Designations and Corresponding Purpose .....	17
Figure 1: Air/Rail Transportation Zone Overlay .....	20
Goal 3: Agricultural Lands and Goal 4: Forest Lands .....	21
Statewide Planning Goal 3 and 4 Requirements .....	21
City and County Agricultural and Forest Lands Background and Policy Context.....	21
Goal 5: Urban Open Space and Cultural Resources .....	22
Statewide Planning Goal 5 Requirements .....	22
City and County Natural and Cultural Resources Background and Policy Context.....	22
The Historic Landmarks Inventory .....	22
The Local Wetland Inventory and Riparian Assessment.....	23
Natural and Cultural Resources Objectives and Policies .....	24
Goal 5 Implementation .....	25
Historic Preservation.....	25
Natural Resources Implementation.....	26
Goal 6: Air, Water and Land Resources Quality.....	27
Statewide Planning Goal 6 Requirements .....	27
City and County Environmental Protection Background and Policy Context .....	27
Environmental Protection Objectives and Policies.....	27
Implementation .....	28
Goal 7: Natural Hazards .....	30
Statewide Planning Goal 7 Requirements .....	30
City and County Natural Hazards Mitigation Background and Policy Context .....	30
Natural Hazard Mitigation Objectives and Policies .....	30
Implementation .....	31
Goal 8: Urban Recreational Needs and Opportunities .....	32
Statewide Planning Goal 8 Requirements .....	32
City and County Parks and Recreation Background and Policy Context.....	32
Park and Recreation Objectives and Policies .....	33
Implementation .....	34

Goal 9: Economic Development.....	35
Statewide Planning Goal 9 Requirements .....	35
City and County Economic Development Background and Policy Context .....	35
Figure 2: Urban Area EOA Figure 30 Employment Land Supply .....	36
Economic Development Objectives and Policies .....	37
Implementation .....	38
Goal 10: Housing.....	40
Statewide Planning Goal 10 Requirements .....	40
City and County Housing Background and Policy Context.....	40
Housing Policies and Objectives .....	41
Implementation .....	<b>Error! Bookmark not defined.</b> 42
Goal 11: Public Facilities and Services.....	46
Statewide Planning Goal 11 Requirements .....	46
City and County Public Facilities Background and Policy Context .....	46
Public Facilities Objectives and Policies.....	47
Implementation .....	49
Goal 12: Transportation .....	51
Statewide Planning Goal 12 Requirements .....	51
City and County Transportation Background and Policy Context.....	51
TSP Process .....	52
Figure 3: Klamath Falls Urban Area TSP Plan Area.....	53
Figure 4: Transportation Facilities by Jurisdiction .....	54
Figure 5: Functional Classification Map .....	55
Figure 6: Truck Freight Routes .....	56
Transportation Objectives and Policies .....	57
Implementation .....	58
Goal 13: Energy Conservation.....	59
Statewide Planning Goal 13 Requirements .....	59
City and County Energy Conservation Background and Policy Context .....	59
Energy Conservation Objectives and Policies .....	59
Implementation .....	60
Goal 14: Growth Management and Urbanization .....	62
Statewide Planning Goal 14 Requirements .....	62

City and County Growth Management Background and Policy Context.....63

Growth Management Objectives and Policies.....64

Growth Management Implementation .....65



## Introduction and Purpose

The Klamath Falls Urban Area (Urban Area) has approximately 45,000 people, with roughly half living within the City Limits and half living within unincorporated urban areas – primarily the South Suburban Area. Klamath Falls provides the full range of urban services to support urban development within the City Limits. Except for water service (which is provided by the city), Klamath County, through special service districts, separately provides urban services within the unincorporated Urban Area. Since the early 1980s, the city and county have had separate comprehensive plans and land use regulations for areas under their respective jurisdiction. Historically, the city and county governments have not always agreed regarding planning for and regulating land development and the extension of public services within the Urban Area.

However, since the mid-1990s, the city and county have cooperated on several planning and public facilities planning projects. The recent adoption of the Klamath Falls Urban Area Transportation System Plan (TSP) is a great example of such a cooperative effort. The city and county have also adopted or amended intergovernmental agreements with each other and with special service districts with the goal of increased coordination and efficiency in providing public facilities to serve planned growth in the Urban Area.

In April of 2018, the Klamath Falls City Council and the Klamath Board of County Commissioners agreed in principal to move forward with the adoption of the Klamath Falls Urban Area Plan (Urban Area Plan) that applies to the entire Urban Area. The Klamath Falls Urban Area Comprehensive Plan includes the goals, objectives, policies and implementation measures found in the previously adopted Klamath County and Klamath Falls Comprehensive Plans. The premise of the joint initial planning effort was to first determine what is in adopted plans before embarking on an entirely new planning effort.

Beginning in July 2018, Winterbrook Planning worked with city and county planning and public works staff to evaluate existing land use and public facilities programs, and to suggest ways to restructure and update existing plans, land use regulations and intergovernmental agreements to achieve a higher level of intergovernmental cooperation, efficiency and consistency.

The 2018-19 Urban Area planning effort is designed to achieve two primary objectives:

- First, to bring forward existing, previously adopted city and county comprehensive plan objectives, policies and implementation measures that are useful in making local public facilities, zoning and land use decisions – including but not limited to zone changes, conditional use permits, variances and land divisions; and
- Second, to bring forward existing, previously adopted city and county comprehensive plan goals, objectives and policies that are necessary to ensure continued compliance with applicable statewide planning goals and administrative rules.

## Klamath Falls Urban Area Comprehensive Plan Organization and Purpose

The Klamath Falls Urban Area Comprehensive Plan includes five volumes, generally described as follows:

### Volume I: Urban Area Plan (UAP)

The Urban Area Plan is intended to provide a guide for land use decision-making that will be used by the city, county and service districts. The Urban Area Plan incorporates relevant and current goals, objectives, policies and implementation measures from existing, previously adopted City and County

Comprehensive Plans as well as the results of several planning studies and facilities master plans. This Urban Area Plan also includes limited updates to achieve internal plan consistency and comply with statewide planning goals and rules and a series of maps that are discussed below.

### Urban Area Plan Chapter Format

The Urban Area Plan follows the Klamath County Comprehensive Plan's organizational scheme which in turn is based on the statewide planning goals and rules that apply within the Urban Area. Except for the Goal 2: Land Use Planning chapter, each chapter of the Comprehensive Plan is organized as follows:

1. Statewide Planning Goal Requirements
2. City and County Background and Policy Context
3. Related Urban Area Objectives, Policies and Implementation Measures

### Objectives, Policies and Implementation Measures

As used in this Urban Area Plan:

- **Objectives** are broad policy statements that provide the basis for specific and related Urban Area Plan policies and implementation measures.
- **Policies** are local government commitments to (a) implement city and county objectives and/or to (b) demonstrate compliance with applicable statewide planning goals.
- **Implementation** measures come in two types. First, they can indicate options for carrying out objectives and policies – but are not in themselves binding policies. Second, implementation measures may include facility master plans found in Volume III, land use regulations found Volume IV, and intergovernmental agreements found in Volume V of the Klamath Falls Urban Area Comprehensive Plan.

### Klamath Falls and Klamath County Comprehensive Plans

Since most of the 1981 City Comprehensive Plan is outdated and not particularly helpful in guiding future development or making land use decisions, the existing plan has been moved to Volume II (Urban Area Background Documents). Although there have been 25 plan amendments since 1981 to the 1981 City Comprehensive Plan, most of these amendments have not had any substantial policy implications.

However, two major amendments have been adopted by both the city and the county and replaced key chapters of the original City Comprehensive Plan:

1. The 2009 Klamath Falls Economic Opportunities Analysis (EOA) – which replaced the Economic Development Chapter; and
2. The 2012 Klamath Falls Urban Area Transportation System Plan (TSP) – which replaced the Transportation Chapter.

Klamath County Comprehensive Plan goals, objectives, policies and implementation measures that are directly relevant to the Klamath Falls Urban Area and that have been used to make land use decisions – have been brought forward into the Urban Area Plan. In cases where the text of the County Comprehensive Plan addresses the same issues but is written more clearly, the county text has been brought forward into the Urban Area Plan rather than the more arcane city text.

- To distinguish from statewide planning goals, city and county goals and objectives are combined and called “objectives” in the Urban Area Plan.
- Policies that apply outside the Urban Area have not been included in the Urban Area Plan.
- Some chapters, goals and policies in the county comprehensive plan address the same issues, but are more recent, more clearly written or specific than found the corresponding chapter the city

comprehensive plan; in such cases, the county plan text has been included in the Urban Area Plan rather than the city plan text.

- City and county policies that are not required to demonstrate statewide planning goal compliance, or that have not been applied within the Urban Area in the past, have been brought forward as optional implementation measures.
- Upon adoption of the Klamath Falls Urban Area Comprehensive Plan, the city and county comprehensive plans will no longer apply within the Klamath Falls UGB.
  - City adoption of the Klamath Falls Urban Area Comprehensive Plan was approved through City Ordinance 19-18 in October 2019.

### City and County Land Use and Zoning Maps

The **Klamath County Comprehensive Plan** and the **Klamath Falls Urban Growth Management Agreement** reference the 1981 City of Klamath Falls plan map (which applies to land within the City Limits) and the 1984 Klamath County plan map (which applies to the unincorporated area within the UGB). However, based on discussions with city and county staff, these maps are not maintained and rarely used because the city and county rely on their respective zoning maps to determine land use within the Urban Area. Since this is the case, it was decided (at least for the time being) that the Urban Area Plan should be implemented by a “one map” system – which means that the city and county zoning maps function as *both* the comprehensive plan map *and* the zoning map within their respective jurisdictions.

### The Urban Area Economic Opportunities Analysis

The objectives, policies and implementation measures from the **Klamath Falls Economic Opportunities Analysis** (EOA) have been incorporated into the Urban Area Plan; however, the full document has been placed in Volume II, Background Plans and Studies. The EOA is now almost 10 years old and is somewhat outdated. For this reason, the EOA has been included as a background document in Volume II of the Urban Area Plan.

### The Urban Area Housing Needs Analysis

The objectives, policies and implementation measures from the **Klamath Falls Housing Needs Analysis** (HNA) have been incorporated into the Urban Area Plan; however, the full HNA report has been placed in Volume II, Background Plans and Studies.

### The Urban Area Transportation System Plan

Street classifications, goals and objectives and street and access standards found in the **Klamath Falls Transportation System Plan** (TSP) have been incorporated into the Urban Area Plan, whereas background tables and analysis have not. (See Goal 12: Transportation discussion below.)

### The Urban Area Public Facilities Plan

The Urban Area Plan includes the **Klamath Falls Urban Area Public Facilities Plan** (PFP), which synthesizes city, county and special district facility plans for sanitary sewer, water, transportation and storm drainage improvements as required by ORS 197.712 *et seq.* The PFP identifies specific projects, their locations, estimated construction timing and costs, and potential funding mechanisms. The PFP is intended to be used to determine the timing and location of infrastructure projects necessary to support planned residential and economic development.

### Urban Area Plan Maps

The following maps are incorporated by reference into the Urban Area Plan:

- Urban Area City and County Zoning Maps
- Urban Area Transportation System Plan Maps

- **Urban Area Public Facility Plan Maps**
- **Urban Area Local Wetland Inventory**
- **Urban Area Floodplain (FEMA) Maps**
- **Urban Area Historic Resources Inventory Map**

## Population Projections

A new, 2018 updated population forecast from the Portland State University (PSU) Population Research Center is included in the Goal 2: Land Use Planning chapter of the Urban Area Plan (Volume I). State law requires that the PSU forecast be incorporated into the Comprehensive Plan and serve as the basis for housing, employment and public facilities planning. PSU's study justifying the population projection is placed in Volume II: Background Plans and Studies.

## Urban Area Plan Glossary and Acronyms

The following terms are used frequently in the Urban Area Plan:

- **BLI** – Buildable Lands Inventory for land within the Urban Area
- **CIP** – Capital Improvement Program for the City, County or District
- **CDO** – City of Klamath Falls Community Development Ordinance
- **City** – City of Klamath Falls
- **County** – Klamath County
- **District** – Depending on background and context the relevant special service district – usually (but not always) serving unincorporated areas within the Klamath Falls UGB
- **DLCD** – Oregon Department of Land Conservation and Development
- **DSL** – Oregon Department of State Lands
- **EOA** – Klamath Falls Economic Opportunities Analysis (2009)
- **HNA** – Housing Needs Analysis that projects housing need by type and density
- **IAMP** – Interchange Area Management Plan
- **IGA** – Intergovernmental Agreement with the City, County and a special service district; may also include ODOT
- **LCDC** – Land Conservation and Development Commission
- **LDC** – Klamath County Land Development Code
- **LWI** – Klamath Falls Urban Area Local Wetland Inventory – an inventory of streams and wetlands within the Urban Area that meets Department of State Lands inventory methods
- **ODOT** – Oregon Department of Transportation
- **PFP** – Klamath Falls Urban Area Public Facilities Plan
- **PSU** – Portland State University Population Research Center
- **TSP** – Klamath Falls Urban Area Transportation System Plan
- **UGB** – Klamath Falls Urban Growth Boundary
- **UGMA** – Urban Growth Management Agreement between the city and county
- **Urban Area** – The area within the Klamath Falls UGB (including land with both the City Limits and unincorporated areas)

- **Urban Area Plan** – Volume I of the Klamath Falls Comprehensive Plan for the Urban Area that has been jointly adopted by the City of Klamath Falls and Klamath County.
- **Zoning Map** – The Urban Area Zoning Map that is maintained by Klamath County for the Klamath Falls Urban Area; the Urban Area Zoning Map supersedes the Klamath County Land Use Map (1984) and the City of Klamath Falls Comprehensive Plan Map (1981) within the Klamath Falls UGB.

## Volume II: Background Plans and Studies

Background documents provide the factual and analytical basis for the goals, policies and implementing measures found in the Comprehensive Plan, but are not necessarily policy documents in themselves.

The following background documents are included in Volume II: Background Plans and Studies:

- Klamath Falls Urban Area Economic Opportunities Analysis* (2009)
- Klamath Falls Housing Needs Analysis and Buildable Lands Inventory* (2019)
- Klamath Falls Urban Area Population Projection Study* (PSU Population Research Center, 2018)
- Klamath Falls Comprehensive Plan* (1981) – as a historical document

## Volume III: Facilities Master Plans

Master plans for sanitary sewer, parks, water, schools, storm drainage, airport, and transportation facilities also support the goals, policies and implementing measures found in the Comprehensive Plan but are not policy documents in themselves. The projects, cost estimates, timing and funding sources found in public facilities plans are not intended to function as plan policies, unless explicitly adopted as part of the Comprehensive Plan. The following master plans (and any other similar plans) are included in Volume III: Facilities Master Plans:

- Klamath Falls Wastewater Collection System Master Plan* (2006)
- Klamath Falls Wastewater Collection System Master Plan Update* (2014)
- South Suburban Sanitary District Facilities Plan* (2010)
- Klamath Falls Water Master Plan* (2010)
- Klamath Falls Water Tank Vulnerability Assessment* (2018)
- Klamath Falls Urban Areas Transportation System Plan* (2012)
- OR 66 Green Springs Highway Interchange Area Management Plan* (2012)
- Klamath Falls Urban Trails Master Plan* (2016)
- Klamath Falls Transportation System Plan Update* (2019)
- Basin Transit Service Plan* (2013)
- Klamath Falls Safe Routes to School Master Plan* (2018)
- Klamath Falls Parks Master Plan* and Appendices A-C (2000)
- Klamath Falls Parks Master Plan Update* (2019)
- Wiard Park District Master Plan* (2013)
- Kingsley Airfield Joint Land Use Study* (2016)
- Klamath Falls Airport Master Plan* and Master Plan Tables (2004)

These public facilities master plans have been prepared over a 20-year period, in many cases are based on different population projections, and do not provide a complete picture of public facilities project

needs, funding sources, timing and jurisdictional boundaries. ORS 197.712<sup>1</sup> requires local governments to prepare “public facilities plans” that identify needed projects, rough cost estimates and timing for urban growth areas. Preparing a Public Facilities Plan (PFP) is especially useful in the Klamath Falls Urban Area because there are multiple service providers with different service areas. The PFP is also helpful as an economic development tool, because it can be used to determine the timing and funding sources for public facilities necessary for the development of employment sites.

## Volume IV: Klamath Falls Urban Area Comprehensive Plan Implementation Measures

The *Klamath Falls Community Development Ordinance* (CDO) and the *Klamath County Land Development Code* (LDC) have a similar organization scheme with chapters for (a) general provisions and review procedures, (b) types of land use applications (c) zoning and overlay Districts and (d) development standards. Both documents were partially revised in 2017 and provide effective implementation for adopted plans in the Urban Area. No changes are proposed at this time. However, these land use regulations should be reviewed in the future to ensure consistency with the Urban Area Plan.

## Volume V: Urban Area Intergovernmental Agreements

Klamath County and the City of Klamath Falls are partners in the successful implementation of the Klamath Falls Urban Area Comprehensive Plan. The *Urban Growth Management Agreement* (UGMA - 2013) between the city and county describes how land use decisions will be made and who will make them within the Klamath Falls Urban Area. It is likely that changes to the UGMA will be necessary to implement the Klamath Falls Urban Area Comprehensive Plan for several reasons:

- The UGMA should recognize the Urban Area Public Facilities Plan (PFP) and summarize city, county and district roles and responsibilities as set forth in the PFP.
- The UGMA should be reviewed for consistency with goals and policies set forth in the Urban Area Plan and amended as necessary.
- The UGMA references the city and county comprehensive plans rather than the Urban Area Plan.

The city and county have entered into intergovernmental agreements with other partners in land use planning, including the following:

- Oregon Department of Transportation (ODOT),
- OR 66 Green Springs Highway IAMP (MOU – 2012)
- Klamath Falls-Fire District 1 (1997)
- South Suburban Sanitary District (SSSD - 1997)
- Klamath County Drainage District (1990)
- Wiard Park District and City of Klamath Falls (1993)

---

<sup>1</sup> ORS 197.712(2)(e): “A city or county shall develop and adopt a public facility plan for areas within an urban growth boundary containing a population greater than 2,500 persons. The public facility plan shall include rough cost estimates for public projects needed to provide sewer, water and transportation for the land uses contemplated in the comprehensive plan and land use regulations. Project timing and financing provisions of public facility plans shall not be considered land use decisions.”

Requirements for PFPs are further elaborated in OAR 660-11-0010 through 0050. Related definitions are found in 660-11-0005.

## Goal 1: Citizen Involvement

*To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process. The governing body charged with preparing and adopting a comprehensive plan shall adopt and publicize a program for citizen involvement that clearly defines the procedures by which the general public will be involved in the on-going land-use planning process. The citizen involvement program shall be appropriate to the scale of the planning effort. The program shall provide for continuity of citizen participation and of information that enables citizens to identify and comprehend the issues. Federal, State and regional agencies, and special- purpose districts shall coordinate their planning efforts with the affected governing bodies and make use of existing local citizen involvement programs established by counties and cities.*

### Statewide Planning Goal 1 Requirements

Public involvement is a required part of land use planning in Oregon and applies amendments to the Urban Area Plan and implementing area and functional plans, land use regulations and intergovernmental agreements. The requirement for public participation is written in the first goal in the statewide land use planning system.

Statewide Planning Goal 1 calls for "the opportunity for citizens to be involved in all phases of the planning process." It requires each city and county to have a citizen involvement program that addresses:

- Opportunities for widespread public involvement
- Effective two-way communication with the public
- The ability for the public to be involved in all phases of the planning process
- Making technical information easy to understand
- Feedback mechanisms for policy-makers to respond to public input, and
- Adequate financial support for public involvement efforts
- Goal 1 also calls for local governments to have a committee for citizen involvement (CCI) to monitor and encourage public participation in planning.
- The State Citizen Involvement Advisory Committee (CIAC). The CIAC advises the Land Conservation and Development Commission on matters related to Goal 1.

Statewide Planning Goal 1 does not have an implementing administrative rule. However, ORS 197.763 Conduct of local quasi-judicial hearings requires a fair and impartial public decision-making process for local "quasi-judicial" public hearings such as zone changes, conditional use permits, variances and land division approvals.

### City and County Background and Policy Context

The **Klamath County Comprehensive Plan** includes a separate Goal 1: Citizen Involvement chapter that provides objectives, policies and implementation measures to ensure effective citizen involvement on a County-wide level. The Citizen Involvement chapter was last updated in 1992. The **Klamath Falls Comprehensive Plan** describes the city's commitment to citizen and agency involvement in all phases of the planning process in an introductory chapter entitled "The Planning Process." This part of the plan has not been updated since its adoption in 1980 and includes outdated notice and decision-making provisions.

Both city and county land use regulations have incorporated the provisions of ORS 197.763 Conduct of local quasi-judicial hearings into their land use review procedures.

In Klamath County and Klamath Falls, the planning commissions serve as their respective committees for citizen involvement (CCI). Klamath County also may approve “area commissions” to provide advice to the Planning Commission on planning issues in specific areas of the County.

Because the county comprehensive plan citizen involvement goals and policies are more thorough and up-to-date than those found in the existing city comprehensive plan, the following citizen involvement goals, objectives and policies have been excerpted (and adapted as necessary to apply to the Klamath Falls Urban Area) from the *Klamath County Comprehensive Plan* (Goal 1: Citizen Involvement).

## **Citizen Involvement Objectives and Policies**

The following objectives and policies have been adapted from city and county comprehensive plans and shall apply to citizen involvement efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each objective (or group of objectives).

- A. TO ENCOURAGE AN EFFECTIVE CITIZEN PARTICIPATION PROCESS THAT WILL MEANINGFULLY INVOLVE CITIZENS IN ALL PHASES OF THE COMPREHENSIVE PLANNING PROCESS.**
  - 1. The City and County Planning Commissions, acting in their roles as Committees for Citizen Involvement (CCI) shall, within their respective jurisdictions:
    - a. Review the Citizen Involvement Program adopted by the Board of Commissioners or City Council, as appropriate, and recommend any revisions or amendments.
    - b. The CCI shall be the focus of citizen participation in Klamath County and the City of Klamath Falls within the Urban Area.
    - c. Evaluate the success of the program.
    - d. Promote the Citizen Involvement Program.
    - e. There will be a regular evaluation based in part on the report of each official area committee. The evaluation report will be submitted to the Board of Commissioners or City Council, as appropriate.
    - f. Function as a coordination body and liaison between the people of each area and the city and county governments on planning issues within the Urban Area.
- B. PROVIDE OPPORTUNITIES FOR THE GENERAL PUBLIC TO REVIEW, COMMENT, AND MAKE RECOMMENDATIONS ON ALL PLANNING PROPOSALS AND PRELIMINARY PLANS.**
  - 1. Provide for continuing citizen involvement after plan acknowledgment.
- C. KEEP CITIZENS INFORMED ABOUT THE STATUS OF THE COUNTY PLANNING PROGRAM BY MAKING TECHNICAL INFORMATION AND REPORTS AVAILABLE.**
  - 1. Continue involvement of citizens from geographic areas and interest groups in the entire planning process.
  - 2. Provide notice on all comprehensive planning and land use matters as required by the LDC and CDO.
  - 3. Technical information on land use and comprehensive planning related matters shall be available to the public upon request.
  - 4. Citizen input on land use and planning related matters will be adequately considered by planning officials.



5. Adequate human and financial resources shall be allocated to the Citizen Involvement Program to meet city and county notice requirements.
  6. Identify and utilize mechanisms by which the general public will have the opportunity to be involved in goal and policy setting for the data collection and analysis, plan preparation, and adoption, implementation, and amendments.
- D. ENCOURAGE TWO-WAY COMMUNICATION BETWEEN THE GENERAL PUBLIC AND COUNTY OFFICIALS THROUGH THE USE OF COMMUNITY FORUMS, PANEL DISCUSSIONS, AND NEWS MEDIA.**
- E. FEDERAL, STATE, AND REGIONAL AGENCIES AND SPECIAL PURPOSE DISTRICTS SHALL COORDINATE THEIR PLANNING EFFORTS WITH THE AFFECTED GOVERNING BODIES AND MAKE USE OF EXISTING LOCAL CITIZEN INVOLVEMENT PROGRAMS ESTABLISHED BY COUNTIES AND CITIES.**

## Implementation

Goal 1 implementation measures include city and county land use regulations found Volume IV of the Urban Area Plan and the Urban Growth Management Agreement found in Volume IV of the Urban Area Plan. The following non-binding implementation measures have been adapted and brought forward from City and County Comprehensive Plans.

- Cooperate with all media to ensure that planning meetings will be advertised.
- Continue to follow City and County Citizen Involvement Programs.
- Compliance with Klamath County LDC and Klamath Falls CDO public hearing and notification requirements will ensure that Goal 1 is met for “quasi-judicial” land use applications such as zone changes, conditional use permits, variances and land division approvals.
- For legislative amendments to the Urban Area Plan, the city and county planning commissions, in their roles as committees for public involvement, should make recommendations to elected officials to ensure that citizens, interest groups and affected state and federal agencies are involved in all phases of the planning process.

## Goal 2: Land Use Planning

*To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions. City, County, State and Federal agency and special district plans and actions related to land use shall be consistent with the comprehensive plans of cities and counties and regional plans adopted under ORS Chapter 268.*

### Statewide Planning Goal 2 Requirements

Comprehensive plans must comply with the requirements of each applicable statewide planning goal. The Land Conservation and Development Commission (LCDC) reviewed each city and county comprehensive plan for compliance with the goals, and when LCDC found that the plan was consistent with the goals, the commission "acknowledged," or approved, the plan. Once a plan is acknowledged, it replaces the statewide planning goals for the purposes of local land use decision-making.

Goal 2 requires each local government in Oregon to adopt and follow a comprehensive land use plan and implementing regulations. The plan must be based on a coordinated population projection prepared by the Portland State University Population Research Center. Comprehensive plans include functional plans related to public facilities and geographic area plans. Implementing regulations include development codes and intergovernmental agreements.

Cities and counties must build their comprehensive plans on an adequate factual base. Implementing regulations and agreements must be consistent with and adequate to carry out comprehensive plans. Local governments must follow their plan when making decisions on appropriate zoning. City and County plans must be consistent with one another within an urban area. Special district and State agency plans and programs must be coordinated with city and county comprehensive plans.

The comprehensive plan and implementing measures such as land use regulations and intergovernmental agreements, are the guiding documents for local government land use decisions. They help create predictable outcomes for the people that live and operate businesses in the community for development of homes, stores, and industries. Comprehensive plans also guide public facility development – streets, municipal water, sewer, and parks – and conservation of natural resources.

Changes to comprehensive plans must also comply with the statewide planning goals. Amendments to the Urban Area Plan – including zoning map amendments – must meet post-acknowledgment plan amendment requirements set forth in ORS 197.610 *et seq.* See also the DLCD post-acknowledgment plan amendment webpage: <https://www.oregon.gov/lcd/CPU/Pages/Plan-Amendments.aspx>

Through a separate statutory process, comprehensive plans and implementing measures must be periodically reviewed to address changed circumstances, and to ensure ongoing coordination with other units of government and compliance with applicable State statutes, planning goals and administrative rules. (ORS 197.628-636)

Part II of Goal 2 provides a process a local government (usually counties outside of UGBs) can follow when taking an "exception" to one of the land use goals. A local government can take an exception to a goal when it finds that unique circumstances warrant a local override of the statewide goal to create a better outcome. Most goal exceptions apply outside of urban growth boundaries.

Goal 2 is implemented by four administrative rules:

OAR 660-004 – Interpretation of Goal 2 Exception Process  
OAR 660-018 – Post-Acknowledgement Plan Amendments  
OAR 660-030 – Review and Approval of State Agency Coordination Programs  
OAR 660-031 – State Permit Compliance and Compatibility

## City and County Land Use Planning Background and Policy Context

The 2018-19 Urban Area Plan process is intended to provide an updated factual base and policy framework for making coordinated land use decisions within the Klamath Falls Urban Area – which is fully consistent with the primary direction provided by Statewide Planning Goal 2: Land Use Planning.

The Klamath Falls Urban Area (Urban Area) has approximately 45,000 people, with roughly half living within the City Limits and half living within unincorporated urban areas – primarily the South Suburban Area. Klamath Falls provides the full range of urban services to support urban development within the City Limits. Except for water service (which is provided by the City), Klamath County, through special service districts, separately provides urban services within the unincorporated Urban Area. Since the early 1980s, the city and county have separate comprehensive plans and land use regulations for areas under their respective jurisdiction. Historically, city and county governments have not always agreed regarding planning for and regulating land development and the extension of public services within the Urban Area.

However, since the mid-1990s, the city and county have cooperated on several planning and public facilities planning projects. The 2012 adoption of the Klamath Falls Urban Area Transportation System Plan (TSP) is a great example of such a cooperative effort. The city and county have also adopted or amended intergovernmental agreements with each other and with special service districts with the goal of increased coordination and efficiency in providing public facilities to serve planned growth in the Urban Area.

In April of 2018, the Klamath Falls City Council and the Klamath Board of County Commissioners agreed in principal to move forward with the adoption of the Klamath Falls Urban Area Plan (Urban Area Plan) that applies to the entire Urban Area.

The 2018-19 Urban Area planning effort is designed to achieve two primary objectives:

- First, to adapt (using common formatting and sentence structure) and bring forward existing city and county comprehensive plan policies that are useful in making local zoning and land use decisions; and
- Second, to adapt and bring forward existing city and county comprehensive plan policies that are necessary to ensure continued compliance with applicable statewide planning goals and administrative rules.

The Urban Area Plan includes two new elements that have not been derived from existing City and County plans:

1. The Portland State University Population Research Center population projection for the Urban Area; and
2. New policies for use when considering zone map changes within the Urban Area.

## Coordinated Population Projection

Under Oregon law (ORS 195.033), the Portland State University Population Research Center (PSU) is responsible for preparing “coordinated” population projections for each city and county in Oregon.

PSU's Population Forecast Program Cycle 2<sup>2</sup> includes population forecasts through 2068 for Klamath County and for the area within the urban growth boundaries of its cities, including the Klamath Falls Urban Area. The full text of PSU's coordinated population forecast is found in Volume II of the Urban Area Plan.

Notable methodological changes between Cycle 1 (2015-2065) and Cycle 2 (2018-2068) include a simplified analysis of long-term (25-50 year) population. In Klamath County, this change in methodology and re-analysis resulted in a decrease of 2,416 in County population (and a reduction of 586 in Klamath Falls) through 2043 and a 0.0% County growth rate from 2043-2065.

- Klamath County experienced a small population decline from 2015-2018. PSU forecasts relatively low growth for Klamath County, decreasing from an observed 2010-2018 average annual growth rate (AAGR) of 0.3% to 0.1% from 2018-2043, followed by a forecast 0.0% growth rate from 2043-2068.
- Klamath Falls is the only city in the county with over 1,000 population, and the Klamath Falls urban area contains most (64%) of the County's current population. As shown on Table 2.1, most of the County's growth is expected to occur within the Klamath Falls Urban Area.

Table 2.1 Projected Urban Area and County Population Growth

Population	2018	2020	2040	Growth 2020-2040
Klamath Falls Urban Area	43,684	44,040	45,194	1,154
Klamath County	67,957	68,528	69,509	981

Source: Klamath County Coordinated Population Forecast 2018-2068, p.28

## Urban Area Land Use Planning Objectives and Policies

The following objectives and policies shall apply to land use planning efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each objective.

- A. ESTABLISH A LAND USE PLANNING PROCESS AND POLICY FRAMEWORK AS A BASIS FOR ALL DECISIONS AND ACTIONS RELATED TO USE OF LAND AND TO ASSURE AN ADEQUATE FACTUAL BASE FOR SUCH DECISIONS AND ACTIONS.**
  1. Copies of the Urban Area Plan shall be available to the public and to affected governmental units.
  2. Coordinate all plans and programs with regional, State, and Federal plans and policies.
- B. DEVELOP DETAILED PLANS OR SPECIFIC PROGRAMS TO IMPLEMENT THE RECOMMENDATIONS AND PROPOSALS OF THE URBAN AREA PLAN.**
  1. To the extent feasible, the boundaries of zoning districts shall follow property lines.
- C. KEEP THE URBAN AREA PLAN CURRENT THROUGH ANNUAL MINOR REVISIONS AND A MAJOR REVIEW AND UPDATE.**
  1. The written policies, land use maps and urban growth boundary shall be changed only by formal amendment of the Urban Area Plan.

<sup>2</sup> Notable methodology changes between Cycle 1 (2015-2065) and Cycle 2 (2018-2068) include a simplified analysis of long-term (25-50 year) population. Klamath County also experienced a small population decline from 2015-2018. In Klamath County, this change in methodology and re-analysis resulted in a decrease of 2,416 in county population (and a reduction of 586 in Klamath Falls) through 2043 and a 0.0% county growth rate from 2043-2065.

2. All proposed amendments shall be evaluated against the statewide planning goals.
  3. All legally existing land uses shall be allowed to continue as either conforming or nonconforming land uses.
- D. **DEVELOP THE NECESSARY MANAGEMENT MEASURES (URBAN GROWTH BOUNDARIES, ZONING AND SUBDIVISION ORDINANCES, CODES, ETC.) TO ENSURE THE IMPLEMENTATION OF THE ADOPTED URBAN AREA PLAN.**
1. The written policies and urban growth boundary shall be changed only by formal amendment of the Urban Area Plan.
  2. All proposed amendments shall be evaluated against the statewide planning goals.

## Implementing Urban Area Zones

All land inside the Klamath Falls Urban Growth Boundary excluding the land within the City limits of Klamath Falls, is subject to the Klamath County Land Development Code (LDC) and Urban Growth Boundary Management Agreement. All land within the Klamath Falls City limits is subject to the Klamath Falls Community Development Ordinance (CDO).

To the extent feasible, the boundaries of zoning districts shall follow property lines except where the land use plan clearly requires otherwise. For zoning purposes, the land use plan shall be construed liberally, provided that the written policies of the plan are not thereby violated.

As part of the 2019 Urban Area Plan process, the city and county decided to re-organize city and county land use and zoning maps to create a one-map system. Under the one-map scheme, existing city and county zoning maps will function as *both* the comprehensive plan map *and* the zoning map within their respective jurisdictions. The county, with support from city staff, shall be responsible for maintaining the Urban Area Zoning Map.

Urban Area city and county zoning districts are roughly comparable in their organization, permitted uses and conditional uses, and residential density ranges. Table 2.2 shows the base city and county zoning districts within the Klamath Falls Urban Area.

Table 2.2 Base City and County Urban Area Zoning Designations

	City	County
Residential Zones	SF – Single Family Residential	RS – Suburban Residential
		RL – Low Density Residential
	MD – Medium Density Residential	RM – Medium Density Residential
	A – Apartment Residential	RH – High Density Residential
Mixed Use	City	County
	MU – Mixed Use	
Commercial Zones	City	County
	GC – General Commercial	CG – General Commercial
		CR – Recreational Commercial
		CT – Transportation Commercial
	DB – Downtown Business	

	NC – Neighborhood Commercial	CN – Neighborhood Commercial
	City	County
Industrial	LI – Light Industrial	IL – Light Industrial
	I - Industrial	IH- Heavy Industrial
	City	County
Planned Development	PUD – Planned Unit Developments	ART – Air/Rail Transportation
	City	County
Public Facility	PF – Public Facility	PF – Public Facility
	City	County
Special	SR – Special   SR – Special Reserve	OS/C – Open Space and Conservation

The city and county have both adopted the following overlay designations/zones:

- Flood Hazard Overlay
- Airport Safety and Noise Overlay | Airport Safety and Hazard Prevention Overlay
- PUD Overlay

## Urban Area Zone Change Criteria

The Urban Area Zoning Map serves as both the comprehensive plan and zoning map within the Klamath Falls Urban Area. The city and county have roughly corresponding zoning designations for major land use categories. Therefore, it makes sense to have a common set of criteria for reviewing zoning map amendments within the Urban Area that are specific to the type of zone change requested. Note that the following criteria apply only to proposed zoning map amendments – and shall not be interpreted to make the existing zoning for a property non-conforming.

### Zone Change Approval Options

For a zone change to be approved, the governing body must make one of the two findings listed below:

1. The zone change is from a county zone to a corresponding city zone and occurs at the time of annexation to the city, as specified in CDO Chapter 13, Boundary Changes. In such cases, the corresponding city zone shall automatically apply. For example, if the zone change proposal is from county Transportation Commercial to city General Commercial, the zone change will occur automatically upon annexation to the city.  
or
2. The proposed zone change considers both the general and use specific zone change criteria listed below. In this case, the applicant shall be responsible for preparing findings demonstrating consistency with the criteria below.

### Urban Area Zone Change Criteria

The applicant (or the governing body in the case of legislative amendments) shall bear the burden of demonstrating that the following criteria are met for any proposed base zone change:

1. **Procedural Requirements:**

- a. The Department of Land Conservation and Development (DLCD) shall receive notification at least 35 days in advance of the first planning commission hearing for a zone change application in accordance with ORS 197.610 *et seq.* Post-Acknowledgment Procedures.
- b. If a wetland is located on the subject property, the Department of State Lands shall be notified of the zone change proposal pursuant to ORS 227.030 Notice of proposed wetland development and ORS 215.418(5) Approval of development on wetlands, notice.
- c. Local public notice for quasi-judicial map amendments shall be provided as set forth in ORS 197.763 Conduct of local quasi-judicial public hearings; notice requirements – and in relevant sections of the Klamath County LDC or the Klamath Falls CDO, depending on the location of the proposed zone change.

2. **Public Need:** To address Statewide Planning Goals 9 (Economic Development), 10 (Housing) and 11 (Public Facilities and Services), the applicant must demonstrate public need for the zone change by considering applicable relevant Volume II background studies and/or Volume III facility master plans as indicated below.

- a. **For small-scale zone changes in developed areas:** The proposal must result in a more logical and coherent land use pattern, as determined by the review authority.
- b. **For a zone change that would decrease the supply of buildable residential land:** If the proposal would rezone buildable land (as defined in the Residential BLI) from a residential zone to a non-residential zone, or result in decreased residential densities, then the HNA found in Volume II: Background Plans and Studies must be consulted to ensure that the rezone does not result in a shortage of buildable land for a needed housing type. This analysis is necessary to demonstrate compliance with Statewide Planning Goal 10: Housing. For example, if there is a documented shortage in the supply of High Density Residential land in the Urban Area, then the proposed zone change cannot make this shortage worse. To compensate for the loss of land for needed housing, other Urban Area land may be rezoned for comparable residential use, so as to result in “no net loss” of buildable land for the needed housing type.
- c. **For a zone change that would increase the supply of suitable commercial or industrial land:** the proposal must meet a need for a targeted employment opportunity identified in the Economic Opportunities Analysis (EOA) using the medium growth scenario. The EOA is found in Volume II: Background Plans and Studies. Alternatively, the review body may rely on a written commitment to purchase the subject property for a specific employment opportunity to justify the need for an industrial zone change proposal.
- d. **For a Public Facilities rezone proposal:** the property in question must be owned by a public or non-profit corporation and the project should be referenced in the relevant facility master plan found in Volume III: Facility Master Plans.

3. **Purpose:** The proposed zone change shall be consistent with the purpose of and uses allowed by the proposed zone.

- a. Klamath County LDC describes the purpose of each zone and lists permitted and conditional uses in each zone. Table 2.3 lists each applicable base zone and its corresponding purpose.

- b. Descriptions of most city zones have been brought forward from the old comprehensive plan (p.10). The Klamath Falls CDO includes definitions for each zone tables listing permitted and conditional uses in each zone. Table 2.4 describes the purposes of city zones based in these documents.

Table 2.3 Base County Urban Area Zoning Designations and Corresponding Purpose

Residential Zones	Purpose
RS – Suburban Residential	To establish and maintain suburban areas for residential use. This zone serves to implement the Comprehensive Plan calling for use of 1 to 4 dwellings units per acre. Typically, this zone is appropriate for neighborhoods where the majority of the lots are large enough to maintain domesticated animals.
RL – Low Density Residential	To establish and maintain areas suitable for low density residential uses. The Low Density Residential zone is intended to implement the Comprehensive Plan designation calling for an optimum residential density between 1 and 6 dwellings per acre.
RM – Medium Density Residential	To establish and maintain areas for single-family and duplex residences. The Medium Density Residential zone is intended to implement the Comprehensive Plan calling for an optimum residential density up to 8 dwelling units per acre.
RH – High Density Residential	To provide and maintain higher densities of dwelling units in urban areas where the level of public services can adequately accommodate such development. The High Density Residential zone is appropriate in areas near schools, recreation, employment and transportation services. This zone is intended to implement the Comprehensive Plan calling for residential densities of up to 24 dwelling units per acre.
Commercial Zones	Purpose
CG – General Commercial	To establish and maintain places for a full range of retail goods and services available to a large area.
CR – Recreational Commercial	To establish and maintain places for recreational facilities and accessory services available to a large area or region.
CT – Transportation Commercial	To establish and maintain places for sales and services primarily related to transportation and utility industries. The Transportation Commercial zone is appropriate for commercial uses associated with highway, rail or air transportation.
CN – Neighborhood Commercial	To establish and maintain places for limited retail sales and services that are accessible and convenient to nearby residents. The Neighborhood Commercial zone is applied to areas serving only a limited, local market, and is intended to permit only those uses which do not create adverse impacts that are incompatible with nearby residences.
Industrial	Purpose
IL – Light Industrial	To establish and maintain places where manufacturing, storage and wholesale distribution can be undertaken in close proximity to one another without encroaching upon the character of the adjacent land uses. It is not the purpose of the Light Industrial zone to permit the processing of raw materials



IH - Heavy Industrial	To establish and maintain places where large areas of land are needed for the fabrication, processing, and movement of raw materials and where the potential impacts of noise, odor, vibration, glare, and/or heat are least likely to affect adjacent land uses.
<b>Public Facility</b>	<b>Purpose</b>
PF – Public Facility	Public or quasi-public structures generally used by government, non-profit organizations or large numbers of persons.
<b>Air Rail Transportation</b>	<b>Purpose</b>
ART	To enhance the economic viability of Klamath County by encouraging the development of sites to business that would benefit from being located in close proximity to a major transportation facility.

Table 2.4 Base City Urban Area Zoning Designations and Corresponding Purpose

<b>Residential Zones</b>	<b>Purpose</b>
SF – Single Family Residential	Principally single-family dwellings occurring up to a maximum of five units per net acre. A zone that allows single-family residential housing with a maximum density of up to 5 dwelling units per net acre.
MD – Medium Density Residential	Combination of single-family dwellings and limited numbers of multi-family dwellings occurring up to a maximum of 14 units per net acre. A zone that allows for single-family residence through four-plex residential development with a maximum density of up to 14 dwelling units per net acre.
A – Apartment Residential	Combination of dwellings types emphasizing multi-family dwellings occurring up to a maximum of 35 units per net acre. A zone that allows for all types of residential development with a maximum density of up to 35 dwelling units per net acre.
<b>Commercial Zones</b>	<b>Purpose</b>
GC – General Commercial	General commercial enterprises intended to serve residents throughout the community. A zone that allows for profit and nonprofit business uses.
NC – Neighborhood Commercial	General commercial enterprises operating in a limited scale, compatible with surrounding neighborhood conditions, and intended to principally serve neighborhood residents. A zone that allows for a limited number of retail commercial uses which serve the day-to-day needs of the residents from surrounding neighborhoods.
<b>Industrial</b>	<b>Purpose</b>
LI – Light Industrial	Light industrial enterprises, limited in scale, and conducted principally inside buildings. A zone that allows for industrial enterprises where activities and operations do not significantly, adversely impact the surrounding properties, due to odor, particulate matter, smoke, noise, vibration, appearance, or similar impact

I - Industrial	Large industrial enterprises, unlimited in scale, and conducted both inside and outside buildings. A zone that allows the use of land, structure or natural resources involving the manufacturing, warehousing, transporting, processing, assembling or disassembling of semi-finished or finished products from raw materials, or packaging previously prepared materials.
<b>Public Facility</b>	<b>Purpose</b>
PF – Public Facility	Public or quasi-public structures generally used by government, non-profit organizations or large numbers of persons.
<b>Mixed-Use</b>	<b>Purpose</b>
Mixed-Use	A zone that encourages buildings to have a vertical mix of uses on a single lot, with residential dwelling units above the first floor. This can be a combination of the following uses on a single lot: Residential; Commercial Service; Commercial Trade; Public; and where appropriate, uses allowed in the Light Industrial Zone.

4. **Transportation:** The subject property is properly related to transportation facilities to adequately serve the range of uses allowed in conjunction with such zoning and is consistent with the Urban Area Transportation System Plan. The proposed rezone must also meet Transportation Planning Rule (TPR) OAR 660-012-0060 requirements. To demonstrate compliance with the TPR, the applicant may be required to submit a Traffic Impact Study that meets local and Oregon Department of Transportation requirements. The zone change proposal may be conditioned to include demand management strategies that limit peak hour trips to achieve consistency with the TPR.
5. **Adequate Public Facilities:** The subject property has adequate sanitary sewer, storm drainage and domestic water service to serve the range of uses allowed by the proposed zone.
  - a. To make this adequacy finding, the subject property must be served or serviceable within the next 10 years as determined by the city, district and/or county engineer with jurisdiction.
  - b. The engineer's determination must consider the Urban Area Public Facilities Plan, and relevant facility master plans and capital improvement programs.
6. **Residential Zoning Location:** The following locational guidelines shall be considered by the review body for rezoning proposal to the following residential zones:
  - a. High Density Residential should be located within 1000 feet of transit service or should have frontage along a collector or arterial street.
  - b. Medium Density Residential should be located within a half mile of transit service and should have frontage along a collector street or higher classification.
  - c. Zone changes to Low Density Residential and Suburban Residential should not be allowed adjacent to an arterial street.
7. **Commercial Zoning Location:** The following locational guidelines shall be considered in the review of the following commercial rezoning proposals:

- a. General Commercial and Transportation Commercial shall have frontage along an arterial street; exclusive use of local streets that travel through existing single-family neighborhoods in Low Density Residential or Suburban Residential zones shall not be permitted.
- b. Neighborhood Commercial should be located to serve existing or planned residential neighborhoods and shall have frontage along a collector street or arterial street; Neighborhood Commercial zoning may also be used as a transition area between General Commercial and Residential zones.
- c. Downtown Commercial shall be limited to the Downtown Klamath Falls area as defined in the Urban Area Plan.

**8. Topographical Constraints:**

- a. Areas with slopes that are predominantly 25 percent or greater and land within the 100-year floodplain should not be rezoned for High or Medium Density Residential uses.
- b. Areas with substantial topographic constraints, such as predominant slopes of 15% or greater, or substantial floodplain or wetland limitations, are not considered suitable for industrial or commercial development. To demonstrate suitability, the review authority may require engineering and mitigation studies that result in an effective mitigation plan.

**9. Contiguity:**

- a. In situations where up-zoning is proposed, the subject property should have comparable or more intensive zoning on at least one side to minimize incompatible land uses, and to restrict "spot-zoning".
- b. The contiguity requirement shall not apply to Neighborhood Commercial or Mixed Use zones, or to rezoning of 20 acres or more or contiguous land (where adequate buffers can be provided to mitigate potential adverse impacts from the rezoning).

**10. Size and Shape:** The subject property is adequate in size and shape to accommodate the proposed use or uses allowed in the proposed zone.

**11. Historic Sites and Structures:** Rezoning of land will identify potential impacts on designated historic sites and structures and mitigate such impacts to the extent feasible.

**12. Noise Sensitive Uses:** Based on DEQ rules (OAR Chapter 340, Division 35):

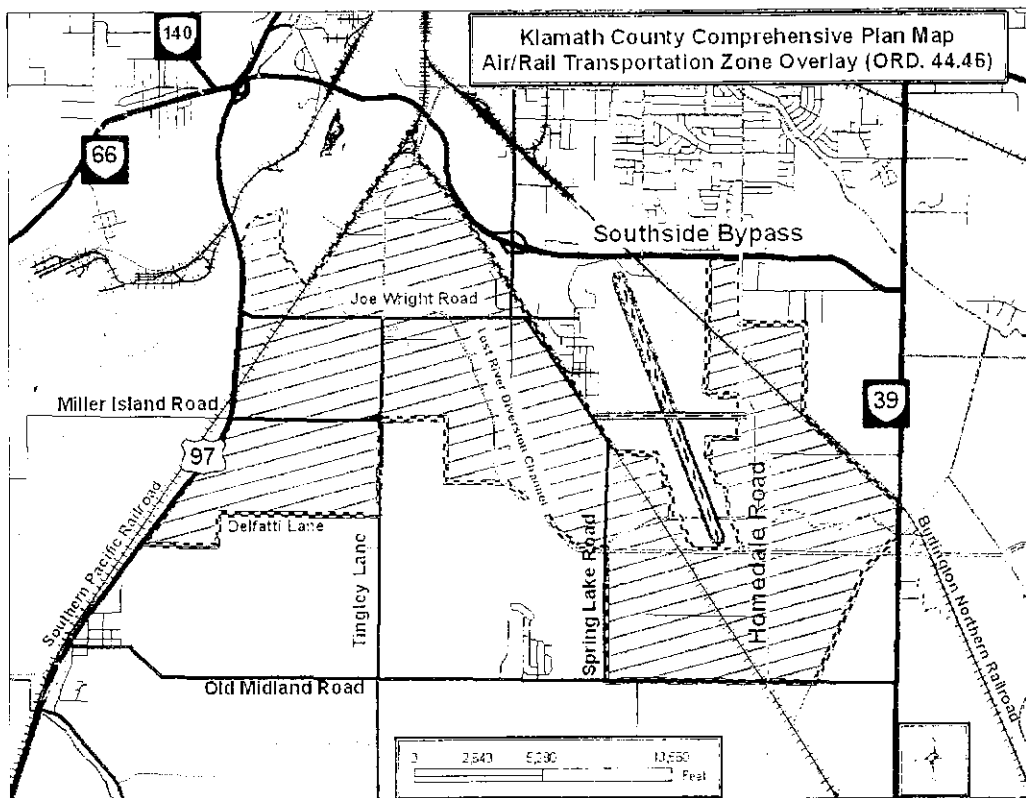
- a. Zone changes that allow uses that generate substantial noise should not be located next to noise-sensitive uses unless noise attenuation measures are assured.
- b. Noise sensitive land uses shall be prohibited or limited within noise-affected areas of the Klamath Falls Municipal Airport. (Ref. Goal 6 Policy)

**13. Neighborhood Impacts:** The review body shall consider impacts on uses allowed by zoning for properties within 500 feet of the proposed zone change.

- a. Where substantial adverse impacts are identified, the review body may condition the zone change to mitigate identified impacts.
- b. Where substantial adverse impacts are identified but cannot be reasonably mitigated, the review body should deny the zone change.

14. **Planned Unit Development:** The PUD zone shall not be applied to allow uses or densities that are inconsistent with uses and densities allowed in the applicable base zone. PUDs shall comply with applicable City and County Engineering Standards unless the relevant Public Works Director approves a modification. However, permitted uses and densities allowed in the base zones may be permitted to cross zoning lines if there is compensating public benefit in terms of preserved natural areas and open space.
15. **Air/Rail Transportation Zone:** Urban Area Lands proposed for rezoning within the Airport/Transportation Development Zone will be restricted to commercial and industrial development.

Figure 1: Air/Rail Transportation Zone Overlay



## Goal 3: Agricultural Lands and Goal 4: Forest Lands

*To preserve and maintain agricultural lands.*

*To conserve forest lands by maintaining the forest land base and to protect the State's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.*

### Statewide Planning Goal 3 and 4 Requirements

Goal 3 requires counties to identify farmland outside of UGBs, designate it as such on the comprehensive plan map, and zone it for exclusive farm use (EFU). An EFU zone places restrictions on developments that are unrelated to agriculture in order to minimize uses that conflict with farming. Property owners who keep EFU land in agricultural production benefit by receiving lowered property taxes.

Goal 4 protects working forest land around the State, preserving it for commercial forestry while recognizing its value for fish and wildlife habitat, recreation, and protection of air and water quality. The goal requires County to identify forest land, designate it as such on the comprehensive plan map, and zone it consistently with State rules. The goal defines forest land in two ways. One way is based on productivity, as measured by the U.S. Forest Service. The other is by making a judgement about whether land is suitable for other, non-commercial forest uses, such as watershed protection, fish and wildlife habitat, and recreation.

### City and County Agricultural and Forest Lands Background and Policy Context

Goals 3 and 4 are not applicable inside within the Urban Area. However, the Urban Area Plan recognizes Klamath County's authority and responsibility to protect farm and forest land outside of the Klamath Falls UGB.

## Goal 5: Urban Open Space and Cultural Resources

*To protect natural resources and conserve scenic and historic areas and open spaces. Local governments shall adopt programs that will protect natural resources and conserve scenic, historic, and open space resources for present and future generations. These resources promote a healthy environment and natural landscape that contributes to Oregon's livability.*

### Statewide Planning Goal 5 Requirements

Goal 5 covers more than a dozen types of natural and cultural resources. Goal 5 is largely a procedural goal, in that local governments may choose which natural and cultural resources to inventory, evaluate and protect. In urban areas, the most commonly inventoried and protected resources are historic sites and buildings, wetlands and riparian areas. In most cases, coordination with State agencies is required. For example, coordination with the State Historic Preservation Office (SHPO) is required when inventorying and protecting historic resources; coordination with the Department of State Lands (DSL) and the Oregon Department of Fish and Wildlife (ODFW) when inventorying and protecting wetlands and riparian areas.

If a city or county decides to protect a specific resource, then it must go through the Goal 5 process: this process does not dictate an outcome but does require that resources be systematically inventoried and that conflicting development uses be identified. Then the economic, social, environmental and energy conservation consequences of three levels of resource protection must be evaluated: full protection (allow no conflicting uses), limited protection (protect the resource while allowing some conflicting development), or no protection (decide to allow conflicting development uses without restriction). Based on this ESEE analysis, local governments must develop a local protection program (plan policies and local regulations) that provides the desired local level of protection for the resource.

When the Klamath Falls and Klamath County comprehensive plans were originally adopted and acknowledged by LCDC in the early 1980s, the plans were subject to OAR Chapter 660, Division 016. In 1995, this rule was replaced by the New Goal 5 rule (OAR Chapter 660 Division 023) which spells out procedural requirements in detail for inventorying, evaluating and protecting each type of resource.

OAR 660-016 – Complying with Statewide Planning Goal 5

OAR 660-023 – Procedures and Requirements for Complying with Goal 5

OAR 660-031 – State Permit Compliance and Compatibility

### City and County Natural and Cultural Resources Background and Policy Context

The city and county have chosen to inventory two types of Goal 5 resources within the Klamath Falls Urban Area: (1) historic resources and (2) water resources (wetlands and riparian areas).

#### The Historic Landmarks Inventory

The Klamath Falls Comprehensive Plan (pp. 91-92) identifies the following sites as significant. For additional information about “Linkville” history, please review to the old Klamath Falls Comprehensive Plan in Volume II: Background Information and Studies.

*Although George Nurse is credited with founding the original town of Linkville, later to become Klamath Falls, no streets nor structures in the City carry his name or honor that fact. In 1932 a marker bearing his name was placed on the southeast corner of*

*the Link River bridge; it stands a short distance from the site of his original store and commemorates his contributions to the City.*

*The National Register of Historic Sites lists only one item from Klamath Falls--the Baldwin Hotel which has recently been made an annex to the County Museum. The State of Oregon has compiled an inventory of historic sites and buildings within the County. Those which are in the urban area are shown on the Historic Areas map and include:*

- 1. AOUW Hall, 25 Main Street, built in 1895 (formerly Baldwin Hardware Company);*
- 2. The Baldwin Hotel, 31 Main Street, constructed in 1904;*
- 3. John Stribling Ford, Inc., Main and Esplanade, built in 1929;*
- 4. Esquire Theater, 218 North Seventh, 1940;*
- 5. First National Bank, 601 Main Street, 1930;*
- 6. Methodist Church, North Tenth and High, 1907;*
- 7. Goeller House, 235 South Riverside, 1905;*
- 8. IOOF Hall, Fifth and Main, 1910;*
- 9. Klamath County Courthouse 1, 415 Walnut Street, 1887-88;*
- 10. City Hall Administration, 500 Klamath, 1926 (previously used as the City Library;*
- 11. Klamath County Courthouse Annex; 305 Main Street, 1915 (originally the Elks Lodge;*
- 12. Klamath County Museum, Main and Spring Streets, 1935 (previously used as an armory);*
- 13. Klamath Falls City Hall, 226 South Fifth, 1915;*
- 14. Klamath Falls U.S. Post Office, Seventh and Oak, 1930;*
- 15. Railway Express Warehouse, Oak Street, 1916;*
- 16. Southern Pacific Depot, 1630 Oak, 1916;*
- 17. S.P. Shops and Railyards, 1916-20;*
- 18. Tower Theater, 2607 South Sixth, 1941;*
- 19. Van Brimmer Cabin, Main and Spring Streets, 1864 (moved from original location to museum site);*
- 20. Willits Building, 430 Main, 1910;*
- 21. Moore House, 120 Riverside Drive, 1907.*

### **The Local Wetland Inventory and Riparian Assessment**

The Goal 5 Rule requires that stream corridors and wetlands be inventoried based on DSL methods. In 2004, DSL approved the "Local Wetland Inventory and Riparian Assessment" (LWI) for the Klamath Falls Urban Area. (Shapiro & Associates, 2004) This inventory has been approved by DSL and is available online: <https://docs.dsl.State.or.us/PublicReview/DocView.aspx?dbid=0&id=866074>

*The study area includes approximately 24,000 acres within the Klamath Falls UGB, which includes portions of two watersheds: the Upper Klamath Lake Watershed (about 3,500 acres) and the Lost River Watershed (about 20,500 acres). Major water bodies include Upper Klamath Lake, Link River and Lake Ewauna. The study area includes 44 wetlands covering 448 acres. Of these, 31 wetlands were deemed "significant" due to the presence of sensitive, threatened or endangered species or because the wetlands are protected mitigation sites. There are also 26 created water*

*features (ponds, stormwater management facilities, gravel mines, golf ponds, etc.) covering an additional 39 acres.*

As noted in the Shapiro study (p. 28):

*The hydrological conditions in the Klamath UGB and surrounding area are very complex, and many attributes are the result of ... the Klamath Project. Canals, laterals, dams, pumping stations, head gates and dikes have significantly altered the spatial and temporal distribution of water resources. Within the UGB, these irrigation features, including some disconnected remnant segments, are common east of the Link River. The principal irrigation canal is the A-Canal that originates from Upper Klamath Lake, about 0.35 miles north of the Link River Dam...Drains accumulate excess irrigation water from the fields and deliver it back into canals and laterals. Groundwater is the primary hydrologic source for the majority of wetlands included in this inventory. In the case of the wetlands adjacent to either of the lakes, the level of the groundwater is influenced by water levels in the lake.*

In part because Urban Area wetlands have been severely impacted, the city and county have chosen not to adopt a local protection program. Rather, both jurisdictions rely on DSL fill and removal regulations and the US Army Corps of Engineers to protect inventoried wetlands and stream corridors.

## **Natural and Cultural Resources Objectives and Policies**

The following objectives and policies shall apply to natural and cultural resource planning efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each objective.

- A. CONSERVE HISTORIC AREAS SITES, STRUCTURES AND OBJECTS; AND CULTURAL AREAS.**
  - 1. Provide incentives to owners of historic structures for restoration purposes.
  - 2. Encourage identification and/or preservation of significant historic landmarks, archeological, and architectural sites which meet established and applicable criteria.
  - 3. Natural historic conditions will be maintained, unless conflicting uses are identified, and economic, social, energy and environmental consequences will be weighed in determining protective measures.
  - 4. Support citizen concern for specific historic areas significant to each neighborhood.
  - 5. Consider cultural areas, historic sites, and archaeological resources when proposing a change in land use.
  - 6. Encourage the preservation and restoration of historic sites and structures whenever possible.
  - 7. Support the inventories of historic sites as approved by the Historic Landmark Commission and shall encourage the identification of historic sites with the cooperation of the landowner.
- B. FOSTER A SENSE OF HISTORICAL AWARENESS AMONG RESIDENTS OF THE COMMUNITY.**

See implementation recommendations below.
- C. CONSERVE OPEN SPACE AND PROTECT NATURAL AND SCENIC RESOURCES.**
  - 1. Encourage the protection and management of significant resources in mutual cooperation with appropriate state and federal agencies.
  - 2. Protect bald eagle nest sites within the UGB; Require that the private property owner take no action that would damage existing bald eagle nest sites.



3. Plan for and encourage public recreation and open space lands in urban expansion areas when UGBs are re-evaluated.
4. Nonstructural flood protection methods may be used whenever practical for conservation of flood plains. Flood control measures shall, whenever practical, utilize natural floodways, maintaining riparian habitats and historic flow volumes. When nonstructural flood protection methods are not practical because of the value of previous urban development, concrete-line channels will be used only if all other structural methods are impractical.

## Goal 5 Implementation

Goal 5 implementation measures include city and county land use regulations found Volume IV of the Urban Area Plan and intergovernmental agreements among state agencies and local governments.

- Both the Klamath Falls CDO (Section 14.260) and the Klamath County LDC (Article 87) include historic preservation regulations.
- CDO Section 12.410 Special Reserve Development Standards has been applied in a few areas and provides limited protection for natural resources.
- LDC Article 56.2 Open Space and Conservation has been applied to publicly-owned open space within the Urban Area.

The following non-binding implementation measures have been adapted and brought forward from city and county comprehensive plans.

### Historic Preservation

- Promote the investigation and use of transferable development rights to protect historical sites.
- Promote public education and involvement relative to the importance of our historical heritage.
- Promote the installation of markers and plaques on historical sites.
- Utilize "Criteria Evaluation for Historic Sites & Buildings", published by the National Trust for Historic Preservation.
- Apply for grants to assist in the preservation or restoration of historic sites.
- Make nominations for State and Federal historic site designations.
- Identify and describe historic sites and areas that are important to the Klamath Falls area.
- Involve museum professionals in developing criteria for historic areas.
- Develop tax incentives for private owners of historic sites or structures to enable restoration and/or maintenance of such sites and structures.
- Contract with a qualified historian to inventory lands with sites, structures and objects that have local, regional, statewide or national historic significance.
- Work with the Oregon State Historic Preservation Office (OSHPO) and with the Klamath County Historical Society to identify properties eligible for nomination to the National Historic Register.
- Support OSHPO efforts to secure matching grants-in-aid for the preservation, acquisition, and development of registered properties and those properties and sites listed in the OSHPO Statewide Inventory of Historic Sites and Buildings.
- Update the historic areas inventory in accordance with the Goal 2 chapter of the Urban Area Plan.
- Review the proposals of the Historic Landmark Commission.
- Support citizen concern for specific historic areas significant to each neighborhood areas.

- Consider cultural areas, historic sites, and archaeological resources when proposing a change in the zoning map.
- Cultural areas, historic sites and archaeological resources discovered in the future or overlooked during the planning process should be inventoried (location, quantity and quality) and significance determined.

#### Natural Resources Implementation

- Where development occurs adjacent to wildlife habitats, every practicable design and construction technique will be used to mitigate adverse effects.
- Protect fish habitats against extraction of stream materials, filling, erosions, siltation, impoundments, removal of shoreline vegetation, and deteriorating water quality.
- Identifiable areas of prime wildlife habitat will be maintained unless conflicting uses are identified, and then economic, social, energy and environmental consequences will be weighed in determining protective measures.
- Support non-game habitat programs by planting desirable food or cover vegetation on city-owned, dedicated open spaces.
- If a proposed land use change falls within a significant fish or wildlife area, the applicant shall be encouraged to contact the Oregon Department of Fish and Wildlife to attempt to resolve possible conflicts.
- The Significant Resource Overlay zone will not be applied within the Urban Growth Boundary.

## Goal 6: Air, Water and Land Resources Quality

### Statewide Planning Goal 6 Requirements

Goal 6 instructs local governments to consider protection of air, water and land resources from pollution and pollutants when developing comprehensive plans. The pollutants addressed in Goal 6 include solid waste, water waste, noise and thermal pollution, air pollution, and industry-related contaminants.

At a Federal level, the elements within Goal 6 correspond broadly to the Clean Air Act and Clean Water Act. At a State level, Goal 6 covers many areas regulated by the Oregon Department of Environmental Quality (DEQ) through its permitting actions. DEQ ensures its permitting decisions comply with the plan and zoning regulations of the affected local government and coordinates with DLCD and other agencies to be sure that city and county plans comply with state and federal laws.

Compliance with Goal 6 depends upon local adoption of policies to coordinate with DEQ and the U.S. Environmental Protection Agency (EPA) to ensure that environmental quality standards are met.

Oregon Department of Environmental Quality (DEQ)

Clean Air Act (EPA)

Clean Water Act (EPA)

### City and County Environmental Protection Background and Policy Context

Air quality has been a major concern in the Klamath Basin for several decades. Smoke pollution from wildfires resulted in hazardous air quality on most days during the summer and early fall of 2018. The city and county have coordinated with the Oregon DEQ to adopt plans and measures to address these issues.

### Environmental Protection Objectives and Policies

The following objectives and policies have been adapted and brought forward from city and county comprehensive plans. These objectives and policies shall apply to environmental quality planning efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each objective.

- A. MAINTAIN AND IMPROVE THE QUALITY OF THE WATER RESOURCES OF THE COMMUNITY.**
  - 1. Potential water pollution problems will be treated with the highest priority.
  - 2. All waste and process discharges from future developments, when combined with such discharges from existing developments, will not violate or threaten to violate applicable water quality regulations.
  - 3. Discharge standards relating to city-owned sewer facilities will be maintained.
  - 4. Comply with State and Federal standards for water quality.
  - 5. Maintain a disaster plan relating to major contaminations or spills of dangerous materials into natural waters.
  - 6. Establish grading standards that limit runoff and erosion from residential, commercial, and industrial construction sites.
- B. COORDINATE ALL PLANNED DEVELOPMENTS ADJACENT TO SURFACE WATER AREAS (LAKES, RIVERS, AND STREAMS) WITH AFFECTED LOCAL, STATE, AND FEDERAL AGENCIES AND DEPARTMENTS.**
  - 1. Discharge standards relating to city-owned sewer facilities will be maintained.

2. The city and county shall establish grading standards that limit runoff and erosion from residential, commercial, and industrial construction sites.
- C. **SUPPORT POLLUTION GUIDELINES AND PREVENTION MEASURES/PROGRAMS OF FEDERAL, STATE, AND LOCAL AGENCIES.**
  1. Comply with State and Federal standards for water quality.
  2. Consideration should be given to locating noise-sensitive activities away from noise generators.
  3. Noise sensitive land uses shall be prohibited or limited within noise-affected areas of the Crater Lake - Klamath Regional Airport in accordance with table II-2. Conditional uses shall be permitted only when a detailed analysis of noise reduction requirements is made and need noise insulation features are included in the building design.
- D. **ASSIST STATE TO IDENTIFY ALL MAJOR SOURCES OF AIR, WATER AND LAND POLLUTION.**
  1. Discharge standards relating to city-owned sewer facilities will be maintained.
  2. Support efforts to maintain and improve the quality of air resources.
  4. Coordinate environmental management programs with State and Federal environmental statutes, programs, and policies (air, water, land and noise).
- E. **RECOMMEND AND PROMOTE THE RESERVATION OF STRATEGIC LOCATIONS TO BE USED FOR TREATMENT OF WASTEWATER, SOLID WASTES, SEPTIC TANK WASTES, SLUDGE AND ALL OTHER HAZARDOUS WASTES.**
- F. **UTILIZE STATE STANDARDS FOR OPTIMUM SEWAGE COLLECTION AND TREATMENT.**

## Implementation

Goal 6 implementation measures include city and county wastewater and stormwater master plans found in Volume III and land use regulations found Volume IV of the Urban Area Plan. City and county engineering standards also help to implement Goal 6 objectives and policies. The following non-binding implementation measures have been adapted and brought forward from city and county comprehensive plans.

- Continue to work with the appropriate Federal agencies efforts to monitor possible point source pollutants and identify non-point sources.
- Cooperate with and support efforts by the Department of Environmental Quality to monitor and regulate water quality standards in the Klamath Basin.
- Support the DEQ air quality regulatory permit process and provide DEQ staff with all required information.
- All solid waste discharge will be disposed of in accordance with the County Solid Waste Management Plan.
- The County shall implement the Solid Waste Management Plan as outlined in Klamath County Solid Waste Management: Comprehensive Study and Preliminary Plan.
- Development standards shall be followed as outlined in the Land Development Code.
- The County shall cooperate with the state to incorporate pertinent information from the state's 2018 Water Quality Management Plan into the Comprehensive Plan and adopt appropriate policies and implementation.
- Produce River Basin (303e) plans for the Crater Lake, Klamath River, Lost River, Sprague River, and Upper Klamath Lake sub basins and the Williamson River Basin.
- Grading regulations are established in the Land Development Code. A study shall be conducted on the feasibility of adopting a grading ordinance to preclude premature and unsound grading.

- Locate noise-sensitive activities away from noise generators. Noise-sensitive land uses shall be regulated through the Land Development Code in accordance with Table II-2 of the Klamath County Comprehensive Plan.
- The city and county shall support the efforts of state and federal agencies to maintain and improve the quality of air resources regarding PM10 Particulate and Carbon Monoxide emissions.
  - On August 31, 1988 Klamath County established the Klamath County Air Quality Program.
  - On July 31, 1991 the County adopted an ordinance establishing a mandatory wood burning curtailment program as well as enforced restrictions on open burning.
  - On September 16, 1991 the City of Klamath Falls adopted Ordinance No. 6630 which implemented the County Air Quality Program.
  - On October 1991, DEQ completed a State Implementation Plan (SIP) for the Klamath Falls Urban Area.
- When DEQ completes an updated Air Quality Maintenance Plan, and if the Air Quality Maintenance Plans indicates an air quality problem, the county shall do the following;
  1. Establish an Air Quality Committee to review the Air Quality Maintenance Plan, and design plans to improve the air quality to a maintainable level.
  2. The County shall review the plans suggested by the Air Quality Committee and do the following; a. If a plan is acceptable to the county, then it shall be adopted; and b. If the County finds none of the plans acceptable, then the County will work with the Air Quality Committee and DEQ to find a practical solution to the air quality problem.

## Goal 7: Natural Hazards

*Local governments shall adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property from natural hazards. Natural hazards for purposes of this goal are: floods (coastal and riverine), landslides, earthquakes and related hazards, tsunamis, coastal erosion, and wildfires. Local governments may identify and plan for other natural hazards.*

*New hazard inventory information provided by Federal and State agencies shall be reviewed by the Department in consultation with affected State and local government representatives. After such consultation, the Department shall notify local governments if the new hazard information requires a local response. Local governments shall respond to new inventory information on natural hazards within 36 months after being notified by the Department of Land Conservation and Development, unless extended by the Department.*

### Statewide Planning Goal 7 Requirements

Goal 7 requires local comprehensive plans to address Oregon's natural hazards. Protecting people and property from natural hazards requires knowledge, planning, coordination, and education. Oregon and local governments have been engaged in natural hazard planning for the last 40 years. Floods, landslides and wildfires are a consistent presence in Oregon. In recent years, more awareness has been developing about the possibility of a major earthquake and tsunami from the Cascadia Subduction Zone (CSZ). Good planning does not put buildings or people in harm's way. Planning, especially for the location of essential services like schools, hospitals, fire and police stations, is done with sensitivity to the potential impact of nearby hazards.

A local government addresses natural hazards in its comprehensive land use plan by adopting a natural hazard inventory and supporting plans and policies. DLCD works with the Oregon Department of Geology and Mineral Industries, the Federal Emergency Management Agency, and others to help communities plan for natural hazards.

### City and County Natural Hazards Mitigation Background and Policy Context

The primary Urban Area natural hazard is flooding. The city and county have coordinated with FEMA to address flood mapping and mitigation. Rural area wildfires have become increasingly severe over the last decade.

### Natural Hazard Mitigation Objectives and Policies

The following objectives and policies have been adapted and brought forward from city and county comprehensive plans. These objectives and policies shall apply to natural hazard planning efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each objective (or group of objectives).

- A. TO PROTECT LIFE AND PROPERTY FROM WATER-RELATED NATURAL DISASTERS AND HAZARDS.**
- B. IDENTIFY AREAS PRONE TO FLOODING AND DELINEATE THEM ON APPROPRIATE TOPOGRAPHIC MAPS.**
- C. PREVENT DEVELOPMENT THAT RESULTS IN ENCROACHMENT OF WATER CHANNELS.**

1. Water-related hazards such as flooding will not necessitate disapproval of development, but higher development costs can be expected in order to minimize hazards.
  2. All lands designated as areas of floodplain will be urbanized only in accordance with an adopted floodplain management program.
  3. Restrict filling or construction in floodways. Uses such as sand extraction, recreational activities, industrial and agricultural pursuits may be exceptions to this policy.
- D. IDENTIFY AREAS SUBJECT TO NATURAL DISASTERS/HAZARDS AND AVOID SITUATING INCOMPATIBLE FUTURE LAND USES IN THESE AREAS.**
1. Consider site constraints in evaluating land use in fire hazard areas. Within designated areas where population or building densities may be inappropriate to the hazards present, measures will be developed to mitigate risk to life and property loss.
- E. CONSIDER ALTERNATIVE USES IN FLOODPLAIN AREAS SUCH AS PARKS AND/OR OTHER LOW-DAMAGE DEVELOPMENTS.**

## Implementation

Goal 7 implementation measures include public facility master plans found in Volume III and city and county land use regulations found Volume IV of the Urban Area Plan. City and county engineering standards also help to implement Goal 7 objectives and policies. The following non-binding implementation measures have been adapted and brought forward from city and county comprehensive plans.

- Continue to participate in the Flood Insurance Program as administered by the Federal Insurance Administration.
- Floodplain management regulations will be developed and included within the Community Development Ordinance and the Land Development Code.
- Evaluate and adopt the wildfire hazards map prepared by Oregon State Forestry Department and shall develop a wildfire hazard rating system. Mitigating measure for wildfire hazards shall be included in development proposals for areas with designations of moderate, high, or extreme on the Wildfire Hazards Rating Map.
- New development shall be kept off slopes greater than 25 percent, unless engineering plans are approved by the relevant Department of Public Works.

## Goal 8: Urban Recreational Needs and Opportunities

*To satisfy the recreational needs of the citizens of the State and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts. RECREATION PLANNING The requirements for meeting such needs, now and in the future, shall be planned for by governmental agencies having responsibility for recreation areas, facilities and opportunities: (1) in coordination with private enterprise; (2) in appropriate proportions; and (3) in such quantity, quality and locations as is consistent with the availability of the resources to meet such requirements. State and Federal agency recreation plans shall be coordinated with local and regional recreational needs and plans.*

### Statewide Planning Goal 8 Requirements

Oregonians and Oregon's many visitors enjoy the diverse recreational opportunities our State offers. From the snows of the Wallowa Mountains to the sands to the Pacific coast, outdoor recreation is available everywhere in Oregon. These outdoor resources could diminish from overuse if we don't plan in advance for when, where, how, and how often we use them. Local, State, and Federal agencies and the private sector must co-ordinate their plans for recreation facilities and activities to protect our recreation resources and to help nearby communities prepare to meet the demand these recreation destinations place on public services and facilities such as roads.

Goal 8 requires local governments to plan for the recreation needs of their residents and visitors. The goal places priority on non-motorized forms of recreation, and recreation areas that serve high-density populations with limited transportation options and limited financial resources. It also places priority on recreation areas that are free or available at a low cost to the public.

Statewide Planning Goal 8 is implemented by: OAR 660-034 -- State and Local Park Planning

### City and County Parks and Recreation Background and Policy Context

The old Klamath Falls Comprehensive Plan includes largely outdated information on parks and recreation. The Klamath County Comprehensive Plan has a county-wide focus but recognizes park and recreational needs within the unincorporated Urban Area.

In 2000, the City Council accepted the **Klamath Falls Parks Master Plan** which provides a useful policy framework and a more up-to-date picture of park and recreational needs. The Wiard Park District accepted the **Wiard Park District Master Plan** in 2013; this plan also provides valuable policy and background information. However, these documents have been formally adopted by city or county elected officials and have not been integrated into the comprehensive plans of either jurisdiction. Incorporating information and policies from these plans would be appropriate in the next iteration of the Urban Area Plan.

The city is currently working on an update to the Parks Master Plan. This update is expected to include level-of-service standards that relate needed park acreage to population. Future goals and recommendations from this plan may be incorporated into the Goal 8 chapter of the Urban Area Plan. This vision articulated in the draft (December 2018) plan states that:

*Parks and trails contribute to the vibrancy of our city by connecting community members and visitors to one another, natural resources, recreational opportunities and our rich heritage.*



The following goals, policies and implementation measures have been adapted from the Klamath Falls and Klamath County Comprehensive Plans for inclusion in the Urban Area Plan.

## **Park and Recreation Objectives and Policies**

The following objectives and policies have been adapted and brought forward from city and county comprehensive plans. These objectives and policies shall apply to park and recreation planning efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each objective (or group of objectives).

- A. TO PROVIDE AS MUCH CHOICE AS POSSIBLE IN RECREATIONAL ALTERNATIVES TO SATISFY THE NEEDS OF THE CITIZENS OF THE URBAN AREA AND ITS VISITORS.**  
Support for tourist facilities and accommodations will continue
- B. TO PROVIDE TIMELY, ORDERLY, AND EFFICIENT ARRANGEMENTS OF RECREATIONAL FACILITIES AND SERVICES.**
  - 1. The Park Board will review the park needs annually to determine what people want and what resources are available.
  - 2. A cooperative cost sharing program will be developed with the County to achieve a more equitable financing system among urban area users.
  - 3. Continue to improve park and recreation facilities with public or private funding.
  - 4. The community will create and maintain a diversified system of recreation lands and facilities that meets the recreation needs of all people, conserves energy, and enhances the environmental quality of the community
  - 5. Parks and recreation sites may be acquired as needed.
  - 6. Assist private investors seeking to establish new commercial recreation enterprises.
- C. CONTINUE TO REEVALUATE URBAN AREA PARK AND RECREATION PLANS TO ENSURE THAT FACILITIES AND SERVICES MEET EXISTING AND CHANGING NEEDS.**
  - 1. The Park Board will review the park needs annually to determine what people want and what resources are available.
- D. ENCOURAGE A VARIETY OF SPECTATOR AND PARTICIPANT ACTIVITIES.**
- E. ENCOURAGE ACCESSIBILITY AND AVAILABILITY OF VARIED RECREATION ACTIVITIES TO PEOPLE OF ALL AGES INCLUDING THE DISABLED.**
  - 1. A wide range of recreational opportunities will be provided for the urban citizens of all ages including the handicapped and elderly.
- F. ENCOURAGE USE OF LEISURE TIME IN CREATIVE, CULTURAL, AND RECREATIVE WAYS.**
- G. PROTECT AND PROMOTE APPROVED TRAILS-FOR NON-MOTORIZED RECREATIONAL USE IN THE URBAN AREA.**
  - 1. Use of motorized vehicles within City limits on other than designated public or private streets will be discouraged.
  - 2. A system of trails for pedestrian and non-motorized use will be established to lead out of the city into surrounding open spaces and scenic areas.
  - 3. Future recreation programs will prefer non-motorized activities over motorized activities so as to conserve energy.
  - 4. Encourage the development of bike paths.
  - 5. Encourage the protection of recreation trails.
- H. DEVELOP A RECREATION PLAN THAT WILL ADDRESS THE NEEDS OF BOTH URBANIZED CENTERS AND RURAL AREAS.**

1. Continue to seek, acquire, and develop park property on the shorelines of Upper Klamath Lake and Lake Ewauna. Waterfront park facilities should be developed to maximize their water orientation.

## Implementation

Goal 7 implementation measures include public facility master plans found in Volume III and city and county land use regulations found Volume IV of the Urban Area Plan. City and county engineering standards may also help to implemented Goal 8 objectives and policies. In particular, the **Wiard Park District Master Plan** (2013) and the **Klamath Falls Parks Plan** (2019) directly implement the objectives and policies of the Goal 8 chapter of the Urban Area Plan. The Klamath Falls Parks Plan includes level-of-service standards for park dedication or fees *in lieu* thereof.

The following non-binding implementation measures have been adapted and brought forward from city and county comprehensive plans.

- Efforts will be made to preserve the recreational and water qualities of Klamath Lake and Lake Ewauna.
- Support public education and involvement.
- Develop a detailed capital improvement program.
- Review all tax foreclosure land for potential park or recreational use.
- Develop recreational or park measures to be included in zoning and land development ordinances.
- Work with schools to allow use of grounds as recreational areas during non-school times.
- Consider bond measures or levies to allow capital improvements in recreation.
- Allow park districts to acquire park sites in accordance with the plan.
- Continue to encourage the maintenance of the "A" Canal bike path.
- Cooperate with local governments in preparing bikeway plans.
- Cooperate with government agencies special districts, and citizens to protect identified recreation trails.
- Study the economic feasibility of establishing rowing race course facilities at Lake Ewauna, to include a boathouse, parking, an access road, and a spectator viewing area.

## Goal 9: Economic Development

*To provide adequate opportunities throughout the State for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens. Comprehensive plans and policies shall contribute to a stable and healthy economy in all regions of the State. Such plans shall be based on inventories of areas suitable for increased economic growth and activity after taking into consideration the health of the current economic base; materials and energy availability and cost; labor market factors; educational and technical training programs; availability of key public facilities; necessary support facilities; current market forces; location relative to markets; availability of renewable and non-renewable resources; availability of land; and pollution control requirements.*

### Statewide Planning Goal 9 Requirements

The purpose of Goal 9 planning is to make sure cities and counties have enough land available to realize economic growth and development opportunities. Commercial and industrial development takes a variety of shapes and leads to economic activities that are vital to the health, welfare and prosperity of Oregon's citizens. To be ready for these opportunities, local governments perform Economic Opportunity Analyses based on a 20-year forecast of population and job growth. Each city and county has a unique local vision for economic development. Ideally, this vision reflects community aspirations and has specific objectives and actions.

Under Goal 9, all local governments should have a working inventory of areas suitable for economic growth that can be provided with public services. These inventories primarily focus on planning for major industrial and commercial developments and having a ready supply of land appropriately zoned and located for those opportunities and local investments. As with all areas of the comprehensive plan, the amount of land planned for economic development should be adequate for a 20-year supply. The economic development plans formed by a city often use one or more market incentives to encourage the type of development a community or county would like to see. These might include tax incentives or disincentives, land use controls, or preferential assessments.

OAR 660-009 – Economic Development

### City and County Economic Development Background and Policy Context

In 2010, the city and county jointly adopted the *Klamath Falls Economic Opportunities Analysis and Long-Term Urban Land Needs Assessment* (Urban Area EOA - Johnson and Gardner, 2009). The full text of the Urban Area EOA is found in Volume II: Background Plans and Studies. As Stated in City Ordinance 10-12, the Urban Area EOA replaced Chapter I (Economy Element) of the Klamath Falls Comprehensive Plan.

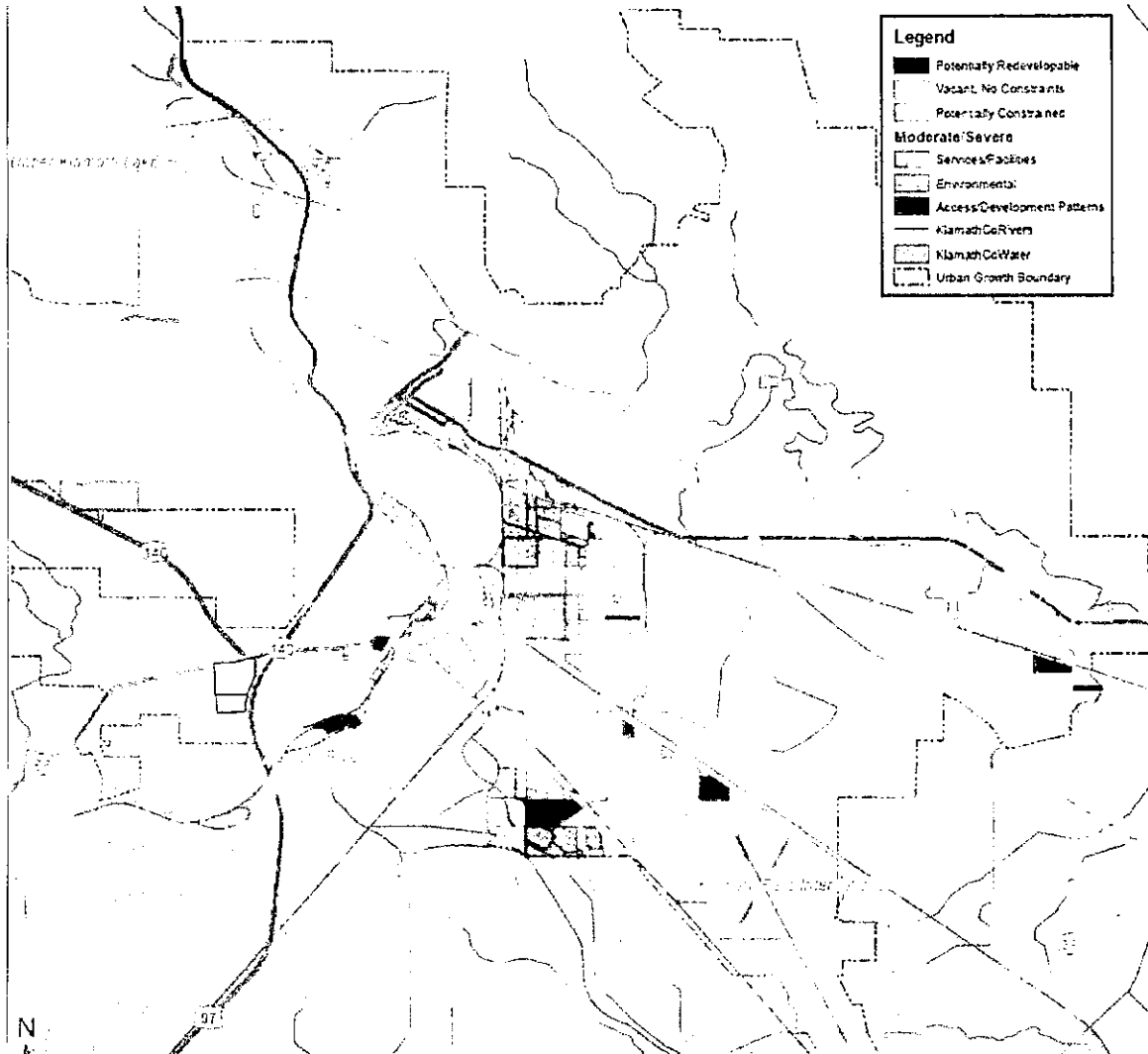
The Urban Area EOA:

- Analyzes national, State, regional and local economic and demographic trends;
- Considers the Urban Area's existing economic clusters and identifies emerging/potential industrial opportunities and target industries;
- Includes a 20-year employment forecast and employment land needs analysis;
- Identifies the site characteristics required by targeted employment opportunities;
- Evaluates the existing employment land supply; and

- Projects employment land demand and supply for a 20-year and 50-year period.

The need and supply analysis and [Figure 30 – Map of Vacant, Constrained and Potentially Constrained Sites](#) should be consulted when evaluating zoning district amendment proposals.

Figure 2: Urban Area EOA Figure 30 Employment Land Supply



Policy 1 of the Goal 9: County Economy chapter of the Klamath County Comprehensive Plan States that:

*The County shall work with local governments to coordinate and compile appropriate industrial and commercial site availability in order to develop a common regional economic development strategy.*

The County effectuated this goal in the Klamath Falls Urban Area by actively participating in the review and co-adoption of the Urban Area EOA in 2010. The Urban Area EOA includes economic development goals, policies and implementation measures for the Urban Area – which are incorporated into the Economic Development Goals, Policies and Implementation provisions below.

## Economic Development Objectives and Policies

The following objectives and policies are quoted directly from the Urban Area EOA. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each objective.

**A. ACTIVELY STIMULATE ECONOMIC DEVELOPMENT AND GROWTH THAT WILL DIVERSIFY AND STRENGTHEN THE MIX OF ECONOMIC ACTIVITY IN THE LOCAL MARKETPLACE AND PROVIDE EMPLOYMENT OPPORTUNITIES FOR LOCAL RESIDENTS.**

A-1: The City of Klamath Falls and Klamath County will continually strive to strengthen the community's industry, business, financial, medical, tourist and retail activities and to capitalize on its comparative advantages in the local and regional marketplace.

**B. RETAIN AND SUPPORT THE EXPANSION OF EXISTING BUSINESSES IN KLAMATH FALLS.**

B-1: The City of Klamath Falls and Klamath County shall seek ways to partner with the business, medical and educational communities to implement the Economic Element and advance common objectives.

B-2: The City of Klamath Falls and Klamath County recognizes that the expansion and/or redevelopment of existing employment sites is often more challenging than the development of vacant sites and shall consider ways to encourage the expansion and/or redevelopment of existing employment sites.

B-3: The City and County will coordinate with Federal and State agencies and other stakeholders to plan its employment land base in ways that best balance the needs of business, other stakeholders and the environment.

**C. ASSURE AN ADEQUATE COMMERCIAL AND INDUSTRIAL LAND BASE TO ACCOMMODATE THE TYPES AND AMOUNT OF ECONOMIC DEVELOPMENT AND GROWTH ANTICIPATED IN THE FUTURE, WHILE ENCOURAGING EFFICIENT USE OF LAND AND PUBLIC FACILITIES WITHIN THE KLAMATH FALLS URBAN AREA.**

C-1: The City of Klamath Falls and Klamath County will rely upon its Medium Employment Growth Scenario in the City's Economic Element 20-year Employment Projections, Land Demand Projections, and Site Demand Projections when planning its employment land base.

C-2: The City and County considers short-term (five-year) employment land demand to be equal to one quarter (25 percent) of the amount of land projected to be demanded over the twenty-year planning horizon.

C-3: The City of Klamath Falls and Klamath County will maintain a Short-Term Supply of employment land consistent with the Economic Opportunities Analysis in the Economic Element.

C-4: The City of Klamath Falls and Klamath County will meet sub-regional land needs by maintaining a Short-Term Supply of employment land consistent with sub-regional demand estimates.

C-5: The City of Klamath Falls and Klamath County recognizes important differences among sites with respect to the site characteristics demanded by respective industry.

C-6: The City of Klamath Falls and Klamath County may assist in the identification of sites for businesses that have unique requirements.

C-7: The City of Klamath Falls and Klamath County shall place limits on commercial uses that are or can be permitted in industrial zones.

**C-8: The City of Klamath Falls and Klamath County shall encourage higher density industrial and/or commercial development forms than has historically been exhibited in the City and better reflect emerging targeted industries and businesses.**

**C-9: The City of Klamath Falls and Klamath County shall designate lands in the vicinity of the Airport for uses that will take advantage of services.**

**D. TO DEVELOP LOCATION CRITERIA AND SITE DEVELOPMENT STANDARDS FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENT WHICH ENCOURAGE EFFICIENT USE OF PUBLIC FACILITIES, PARTICULARLY THE CITY AND COUNTY'S TRANSPORTATION SYSTEMS.**

**D-1: The City of Klamath Falls and Klamath County shall encourage integrated commercial centers, rather than individual linear developments.**

**E. THE LIVABILITY OF A COMMUNITY IS AN IMPORTANT FACTOR IN THE LOCATION CHOICE OF BUSINESSES. THE CITY OF KLAMATH FALLS AND KLAMATH COUNTY SHALL CONTINUE TO STRIVE, MAINTAIN, AND ENHANCE THE LIVABILITY OF THE COMMUNITY.**

**E-1: The City of Klamath Falls and Klamath County recognizes that community amenities and quality of life considerations factor highly into the site location choice of business seeking to start new or relocate.**

## **Implementation**

The city and county commercial and industrial zoning districts directly implement these objectives and policies. The following non-binding implementation measures are quoted directly from the Urban Area EOA:

- **A-1(a)** Identify opportunities and incentives to encourage value-adding, family-wage business to expand or locate in the community.
- **A-1(b)** Support the retention and attraction of firms with high wage rates for all industries, but also encourage the attraction and retention of firms with high wage rates within their respective industry classifications.
- **A-1(c)** Participate in a joint public/private business development program to provide retention services and identify opportunities for the growth of existing businesses and the attraction of new firms to the community, in order to diversify the mix of employment opportunities.
- **A-1(d)** In recruiting new companies to the area, market comparative advantages, such as city-owned utilities, renewable energy, sales tax benefits, enterprise zone and education/research infrastructure.
- **A-1(e)** Work with O.I.T. and Klamath Community College to strategically encourage labor-training programs that match personnel needs of firms now operating in the community and those industries which city aspires to bring in.
- **A-1(f)** Work with O.I.T. and Klamath Community College to encourage retraining programs to transition the current workforce to match skills needed in the firms operating in the community and those industries which city aspires to bring in.
- **A-1(g)** Maintain good relations and frequent contact with to market the Crater Lake-Klamath Regional Airport and Kinsley Air Base, in effort to identify companies seeking to locate in the area.
- **A-1(h)** Foster regional economic development relationships to identify spill-over opportunities from economic growth in targeted industries in Bend and/or Medford which cannot be accommodated.

- **A-1(i)** Target medium-scale general manufacturers as part of a comprehensive recruiting plan.
- **A-1(j)** Foster relationships with the medical community to create opportunities for additional local health care services.
- **A-1(k)** Coordinate the city's economic development program with the citizens of the City of Klamath Falls, and community development based organizations, Klamath County and other local regional, State and Federal agencies.
- **B-1(a)** Identify opportunities and incentives to encourage industry related to the area's competitive advantages.
- **B-1(b)** Increase the retention of retail commerce by providing opportunities and incentives to increase the diversity of the city's retail landscape.
- **B-1(c)** Partner with regional and State agencies as well as National industry groups to identify new potential for an emerging renewable energy industry.
- **B-2(a)** Consider adopting regulations that differentiate between the development of vacant sites and the expansion and/or redevelopment of existing sites.
- **C-2(a)** Update the buildable lands inventory every five years to ensure adequate employment sites are available.
- **C-5(a)** Assure demand projections for medium and large Commercial, Industrial and Office sites are captured in aggregate land demand projections.
- **C-5(b)** The city and county shall protect large commercial and industrial sites by limiting land divisions except where part of larger development.
- **C-5(c)** Consider the transportation infrastructure needs of target industry opportunities when preparing Transportation System Plan updates and corridor plans to implement the city's Goal 9 objectives.
- **D-1(a)** Encourage the creation of master planned employment districts that integrate industrial and/or commercial uses.
- **D-1(b)** Encourage utilizing Special Area Plans, master planned employment districts, Neighborhood Plans and Planned Unit Development to integrate and mix residential development with employment development patterns. This may take the form of mixed use overlay zones.
- **D-1(c)** The city shall work with Basin Transit Service to increase level of service.
- **E-1(a)** Support all School District's pursuit of improvements in excellence and learning.
- **E-1(b)** Continue collaboration with community organizations to enhance the city and county's image and quality of life.
- **E-1(c)** Encourage additional industrial and commercial development in areas that will not have a detrimental effect on living conditions.
- **E-1(d)** The City of Klamath Falls and Klamath County shall continue to promote and preserve open space within the Community and surrounding areas.
- **E-1(e)** The City of Klamath Falls and Klamath County recognizes the importance of child care and shall support efforts to develop child care services for the labor force.

## Goal 10: Housing

*To provide for the housing needs of citizens of the State. Buildable lands for residential use shall be inventoried, and plans shall encourage the availability of adequate numbers of housing units at price ranges and rent levels commensurate with the financial capabilities of households and allow for flexibility of housing location, type, and density.*

### Statewide Planning Goal 10 Requirements

An adequate housing supply is a fundamental building block of a healthy community. Likewise, provision of housing for a community is one of the primary elements in a comprehensive plan for cities in Oregon. Housing takes many forms and should be built to serve people at a variety of incomes levels. A housing supply that meets community needs is one that offers people a range of different places to live, different community densities to choose from, and does not overburden the financial resources of any group living there.

Goal 10 planning, at a local level, asks that cities inventory their "buildable lands," this refers to land inside an Urban Growth Boundary that is suitable and available for residential use. This is determined, in large part, by local zoning codes. At a State level, both the administrative rules linked below, and Oregon Revised Statutes Chapter 215 offer local governments guidance and requirements so that they can fulfill their obligation to provide housing for residents.

A Housing Needs Analysis (HNA) is one of the components an urban area needs to consider to satisfy the housing needs of its residents. An HNA is both a product and a process that the city and county (within the Urban Growth Boundary) go through to determine areas of need in their current inventory of housing and their buildable land supply. Because the comprehensive planning process in Oregon is based on urban areas having a 20-year supply of land, the HNA is needed to determine if the city and county are satisfying this need. If there is a deficit of housing supply for the next 20-years, the city and county must either expand its Urban Growth Boundary (UGB), increase the amount of allowed housing development on lands already within the UGB, or combine these two alternatives.

#### OAR 660-008 – Interpretation of Goal 10 Housing

Note: This administrative rule defines residential "buildable land" to exclude land (a) with slopes of 25% or greater or (b) within the 100-year floodplain. The rule also requires that cities and counties allow "needed housing types" (single-family residential, duplexes, multi-family residential and manufactured homes) under "clear and objective" review standards in residential zones with enough "buildable land" to satisfy housing needs within the 20-year planning period.

### City and County Housing Background and Policy Context

In 2020, the city and county jointly adopted the Klamath Falls Housing Needs Analysis (Klamath Falls HNA - ECONorthwest, 2019). The full text of the HNA is found in Volume II: Background Plans and Studies.

The Klamath Falls HNA Includes:

- A Residential Buildable Lands Inventory presenting the methodology and results of Klamath Falls' inventory of residential land.
- Historical and recent development trends summarizing state, regional, and local housing market trends affecting Klamath Falls' housing market.



- Demographic and other factors affecting residential development in Klamath Falls focusing on the key determinants of housing need: age, income, and household composition.
- A Forecast of Klamath Falls housing growth needs described by density ranges and income levels.
- An analysis of residential land sufficiency needed to accommodate expected growth over the planning period.

## Housing Policies and Objectives

The following policies and objectives have been brought forward from the Housing Policies and Actions report which was produced concurrent with the Klamath Falls Housing Needs Analysis. These policies and objectives shall apply to housing planning efforts within the Klamath Falls Urban Area. Policies are presented in UPPERCASE and related objectives are listed in numbered lists below each policy.

### **A. LAND AVAILABILITY: PLAN FOR A 20-YEAR SUPPLY OF SUITABLE LAND FOR KLAMATH FALLS TO MEET HOUSING NEEDS WITHIN THE EXISTING URBAN GROWTH BOUNDARY.**

**A.1:** Identify opportunities to address the land needs identified in the Housing Needs Analysis.

**A.2:** In unincorporated areas within the Klamath Falls UGB, the City and County should collaborate to ensure that new development occurs at urban densities consistent with agreed on urban densities.

**A.3:** Encourage development of vacant and partially vacant parcels in areas with existing urban services, with policies that support development of infill housing types.

**A.4:** Monitor residential land development to ensure that there is enough residential land to accommodate the long-term forecast for population growth.

### **B. PROVIDE OPPORTUNITIES FOR HOUSING DEVELOPMENT TO MEET THE KLAMATH FALLS' IDENTIFIED HOUSING NEEDS: PROVIDE OPPORTUNITIES FOR DEVELOPMENT OF A RANGE OF HOUSING TYPES THAT ARE AFFORDABLE TO HOUSEHOLDS AT ALL INCOME LEVELS AS DESCRIBED IN THE KLAMATH FALLS HOUSING NEEDS ANALYSIS. THESE HOUSING TYPES INCLUDE (BUT ARE NOT LIMITED TO): SINGLE-FAMILY DETACHED HOUSING, ACCESSORY DWELINGS COOTAGE HOUSING, MANUFACTURED HOUSING, TOWNHOUSES, DUPLEXES, AND APARTMENTS. THIS WIDER RANGE OF HOUSING TYPES CAN PROVIDE OPPORTUNITIES FOR HOUSING FOR ANY RESIDENT OF KLAMATH FALLS, INCLUDING STUDENTS AT OREGON TECH OR THOSE WORKING AT THE KINGLSEY FIELD AIR NATIONAL GUARD BASE.**

**B.1** Streamline Klamath Falls' development process to make development easier between land use and building permit approvals.

**B.2:** Identify opportunities to increase residential development in Klamath Falls through removing or lowering barriers to residential development.

**B.3:** Allow more opportunities for medium and higher density multifamily development by increasing the densities allowed in the Medium Density Residential and Apartment Residential zone designations.

**B.4:** Allow for a wider range of types of housing development within Klamath Falls' existing zones.

**B.5:** Encourage development of multifamily housing in commercial zones.

**B.6:** Support rehabilitation of poor condition existing housing within Klamath Falls. The City should develop specific criteria for providing rehabilitation assistance, such as the conditions that qualify for the assistance, qualifying household income, the area where the program applies, whether it applies to rental and/or owner-occupied units, and other criteria.

**C. HOUSING AFFORDABILITY: DEVELOP POLICIES TO SUPPORT HOUSING AFFORDABILITY BY LOWERING COSTS OF HOUSING DEVELOPMENT FOR GOVERNMENT-SUBSIDIZED LOW-INCOME AFFORDABLE HOUSING AND/OR MARKET-RATE MIDDLE-INCOME AFFORDABLE HOUSING.**

**C.1:** Support development of government-subsidized low-income housing through partnering with non-profit, for-profit, and governmental developers of low-income affordable housing.

**C.2:** Support development of all types of multifamily affordable housing, market rate or government-subsidized affordable housing, through use of tools to lower development or operational costs.

**C.3:** Develop the “Klamath Falls Housing Program,” which would be a comprehensive housing strategy that supports development of both government-subsidized affordable housing and naturally occurring affordable housing. The Klamath Falls Housing Program will be a program that uses a variety of tools, such as those described in this memorandum, to lower barriers to and encourage affordable housing development.

**D. INFRASTRUCTURE PLANNING: PLAN FOR INFRASTRUCTURE DEVELOPMENT TO SUPPORT RESIDENTIAL DEVELOPMENT.**

**D.1:** Coordinate land use planning with the Capital Improvement Plan and update to the master plans for each type of infrastructure to ensure that infrastructure is available to support residential development, especially in newly urbanizing areas and areas identified as high priority for development in the housing needs analysis.

**E. FUNDING: DEVELOP FUNDING SOURCES TO PAY FOR THE COSTS OF IMPLEMENTING THE AFFORDABLE HOUSING PROGRAMS DESCRIBED IN POLICY C AND THE INFRASTRUCTURE IN POLICY D.**

**E.1:** Identify funding sources to pay for the affordable housing programs and infrastructure development actions in this strategy.

## **Implementation**

City and county zoning and development standards help to implement Goal 10 objectives and policies. The following non-binding implementation measures have been adapted and brought forward from the Housing Policies and Actions document, produced concurrently with the Klamath Falls Housing Needs Analysis.

- **A-1(a)** Identify Single-Family and Medium-Density residential land that could be redesignated to Apartment Residential.
- **A-2(a)** Work with Klamath County to ensure that zoning is consistent for land within the city limits and land within the Klamath Falls UGB but outside city limits.
- **A-3(a)** Identify barriers to infill development, such as zoning barriers, social barriers, and other barriers, and to the extent possible, lower or eliminate these barriers (consistent with the code audit in Action B-2b).

- **A-4(a)** Work with Klamath County staff to develop and implement a system to monitor the supply of residential land. This includes monitoring residential development (through permits) as well as land consumption (e.g. development on vacant, or redevelopable lands).
- **B-1(a)** Identify opportunities to streamline Klamath Falls' development process to make it faster and more efficient, working in coordination with Klamath County for processing of building permits.
- **B-1(b)** Coordinate with Klamath County to ensure that development processes in the unincorporated area within the UGB are as easy as possible and consistent with development processes within the city limits.
- **B-2(a)** The City should work with the County to develop zoning standards that are consistent for areas within the city limits and the urbanizing areas between the city limits and UGB.
- **B-2(b)** Conduct an audit of the City's zoning code for the city limits and County's zoning code for the urbanizing area to identify barriers to residential development and identify alternatives for lowering or eliminating the barriers.
- **B-2(c)** Identify barriers to development of single-family attached housing, such as townhouses, and, to the extent possible, lower or reduce these barriers. One barrier is the minimum lot size in the Medium Density Residential, 5,000 square feet, which is too large for most townhouses. Consider allowing smaller lots for townhouses, such as 3,000 to 4,000 square feet.
- **B-2(d)** Evaluate whether lot size and setback requirements are a barrier to developing a wider range of housing types or increasing densities in the Medium Density Residential and Apartment Residential designations.
- **B-2(e)** Apply for grants to support revisions to the zoning code, such as a Code Assistance grant from Oregon's Transportation and Growth Management Program (TGM).
- **B-3(a)** Evaluate allowing smaller lot sizes for all housing types the Medium Density Residential designation.
- **B-3(b)** Evaluate allowing tri-plexes and quad-plexes outright in the Medium Density Residential designation.
- **B-3(c)** Evaluate opportunities to increase the density of the Apartment Residential zone, which allows housing at a maximum density of 16.7 dwelling units per acre (5,000 square feet for each of the first four dwelling units and 1,000 square feet thereafter). For example, instead of having a minimum lot size, allow standards for building height, parking requirements, and lot coverage to determine maximum density.
- **B-3(d)** Setting a minimum density of 10 or 12 dwelling units per acre in the Apartment Residential zone to limit the development of single-family detached and duplex housing in this zone.
- **B-4(a)** Evaluate development of zoning standards that support cottage housing development, such as cottages clustered on a lot, possibly with the inclusion of park or open space.<sup>3</sup> The zoning code would need to allow sufficient density to support this type of clustered housing, which may be 1.5 or 2 times the density of the zoning district the cluster is located in.
- **B-4(b)** Evaluate development of zoning standards that support tiny houses, such as tiny houses clustered on a lot, possibly with the inclusion of park or open space.<sup>4</sup> Evaluate whether the city will allow tiny houses on wheels or require a foundation for tiny houses. The zoning code would need to allow sufficient density to support tiny housing, which may be 2 or more times the density of the zoning district the tiny housing cluster is located in.

<sup>3</sup> Cottage housing is typically single-family detached units of less than 1,000 square feet.

<sup>4</sup> Tiny houses are typically detached units of less than 500 square feet and may be on wheels or a foundation.

- **B-4(c)** Allow manufactured home parks as a permitted use in the Medium Density Residential Plan Designation.<sup>5</sup>
- **B-4(d)** Develop rules to manage and support development of multifamily dwelling units designed to act as single-room occupancy (SRO) dwellings, with multiple bedrooms and shared common spaces (such as kitchens, bathrooms, and communal spaces).
- **B-5(a)** Identify and lower barriers to mixed-use development that includes residential development in commercial zones.
- **B-5(b)** Support rehabilitation of downtown buildings with vacant second floors, especially in cases where the second-floor space was previously used for housing. The programs in Objective B.6 are ways to support this rehabilitation.
- **B-5(c)** Evaluate disallowing single-family detached and duplex housing types as an allowed use in commercial zones.
- **B-6(a)** Continue to identify and rehabilitate housing that has been abandoned or not occupied.
- **B-6(b)** Develop and facilitate an expedited building permit process, working in coordination with Klamath County, for substantial redevelopment and renovation of existing housing.
- **B-6(c)** Evaluate lowering or waiving permitting fees for rehabilitation projects, working in coordination with Klamath County. This program could address issues such as replacing roofs, fixing plumbing or electrical issues, or repairing foundations. Development of this program should include development of criteria for waiving fees, such as condition of the unit and household income.
- **B-6(d)** Evaluate developing a grant program to support rehabilitation projects, such as roof repairs, connecting to the sewer, electrical system problems, or critical home repairs.
- **B-6(e)** Evaluate developing a low-interest loan program to support significant rehabilitation projects, such as roof repairs, foundation repairs, connecting the sewer, electrical system problems, or other major rehabilitation. Loan payback could be delayed until resale of the house.
- **B-6(f)** Evaluate offering a cash rebate on a portion of property taxes to homeowners who commit to significant rehabilitation projects, such as structure repairs or major remodels of the unit.
- **B-6(g)** Continue to enforce standards for the health and safety standards for rental housing.
- **C-1(a)** Continue to work with developers of government-subsidized low-income housing to identify barriers to development of this type of housing and identify opportunities to lower or remove these barriers.
- **C-1(b)** Continue to identify surplus publicly owned properties that could be used for affordable housing and partner with the developers of low-income government-subsidized housing to develop affordable housing.
- **C-1(c)** Evaluate opportunities for redevelopment of poor condition manufactured home parks with cottage housing, new manufactured homes, tiny homes, or other housing types. The city may have opportunities to partner with affordable housing providers to complete the project. This housing could be targeted at households with income below 50% of MFI or households with income of 80% or less of MFI.
- **C-2(a)** Evaluate opportunities for a tax abatement program, such as the multiple-unit limited tax exemption program or the tax abatement for new and rehabilitated multifamily rental housing, to promote development of affordable multifamily housing.

---

<sup>5</sup> ORS 197.480(1)(b) requires cities to allow the development of manufactured home parks as an allowed use in areas planned and zoned for a residential density of six to 12 units per acre.

- **C-2(b)** Partner with Oregon Housing and Community Services (OHCS), working with other members of the Regional Solutions Team, to identify resources for developing additional housing affordable for both very low-income households and middle-income households. As part of the Statewide Housing Plan, OHCS' goal is to increase their housing development in rural areas by 75%.
- **C-3(a)** Apply for a state grant to develop a comprehensive housing strategy to support development of affordable housing.
- **C-3(b)** Work with willing land-owners to use the tools in support of new affordable multifamily (or other higher density affordable housing). For example, the City might work with a land owner that wants to develop market-rate affordable housing (i.e., housing affordable at below 80% of the Median Family Income) on a high priority site (Action D-1a), providing assistance with rezoning land (such as upzoning from low- to high-density), using tools like a multiple unit tax exemption (Action C-2a), building key off-site infrastructure necessary for the development, and identifying a funding source to pay for these actions (Action E-1b).
- **D-1(a)** Identify areas of high priority for improving infrastructure to support new residential development. The criteria for these areas might include: (1) areas with five or more acres of vacant unconstrained land, (2) zoning for medium or high-density development, (3) redevelopment opportunity sites with two or more acres of redevelopable area, (4) areas that are relatively flat, (5) proximity to transportation corridors, or (6) proximity to existing infrastructure. Coordinate with developers to provide infrastructure development in tandem with private development of housing and infrastructure.
- **D-1(b)** Identify opportunities to improve infrastructure in older neighborhoods, especially when infrastructure improvements will support infill development or housing rehabilitation and improvements.
- **D-1(c)** Ensure that the City's Capital Improvements Plan (CIP) includes funding for improvements and maintenance necessary to support Action E-1(a) and Action D-1(b).
- **D-1(d)** Develop consistent pricing for systems development charges (SDC) for accessory dwelling units (ADUs). The City may consider not charging an SDC for ADUs or charging an SDC based on the size of the ADU (proportionate to a typical single-family detached unit).
- **D-1(e)** Evaluate revisions to reduce SDCs for small-scale infill development, such as division of a lot with existing housing to allow for development of additional housing or development of a vacant lot in an area that is generally otherwise developed.
- **D-1(f)** Identify opportunities to reduce development costs through changes to infrastructure development standards (such as roadway width variations), when appropriate.
- **E-1(a)** Evaluate using Urban Renewal funding to support development of infrastructure necessary to support housing development and housing the housing programs in Policy C, which may require a revision to or update of Klamath Falls' Urban Renewal Plan.
- **E-1(b)** Evaluate other sources of revenues for funding, such as Transient Lodging Taxes, General Obligation Bonds, Bancroft Bonds (for infrastructure projects), marijuana taxes, or other funding sources.

## Goal 11: Public Facilities and Services

*"To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development."*

### Statewide Planning Goal 11 Requirements

As cities grow, the needs of its utility infrastructure grow along with it. Water pipes, sewers, and roads all need to keep up with the urban areas they sustain. Public facilities plans make this easier to manage over time. Oregon law (ORS 197.712(2)(e)) requires all cities and counties with over 2,500 urban population to prepare and maintain a Public Facilities Plan (PFP). The purpose of the PFP is to ensure that urban development within a UGB is guided and supported by types and levels of urban facilities and services that are appropriate for the needs and requirements of the community. These public facilities and services are to be provided in a timely, orderly and efficient manner.

Public facilities and services are a crucial part of our day to day lives. Built and planned into the urban fabric of the world around us, they include water and sewer services, police and fire protection, health services, recreation facilities, energy and communication services, and services provided by the local government like building permitting or public works.

Each city with a population greater than 2,500 is required to create PFP that meets its current and long-range needs. If a county is home to an unincorporated community, the County too must develop and adopt a community public facility plan that regulates facilities and services. PFPs are intended to focus on land within UGBs and cannot authorize extension of public facilities and services to rural areas, except in very specific and limited circumstances. The Urban Area PFP should plan for provision of public services to serve planned urban development within the UGB – especially those areas that don't have public facilities available to them yet.

660-011 – Public Facilities Planning

### City and County Public Facilities Background and Policy Context

Both the Klamath County and the Klamath Falls Comprehensive Plans recognize the critical importance of providing adequate public facilities to serve planned urban development. As documented in Volume III Public Facilities Masters of the Urban Area Plan, the city and special districts that provide services within the Urban Area have prepared a series master plans for sanitary sewer, water, transportation, parks and irrigation/drainage over the last 40 years. These plans include the following:

- A. *Klamath Falls Wastewater Collection System Master Plan* (2006)
- B. *Klamath Falls Wastewater Collection System Master Plan Update* (2014)
- C. *South Suburban Sanitary District Facilities Plan* (2010)
- D. *Klamath Falls Water Master Plan* (2010)
- E. *Klamath Falls Urban Areas Transportation System Plan* (2012)
- F. *OR 66 Green Springs Highway Interchange Area Management Plan* (2012)
- G. *Klamath Falls Parks Master Plan* and Appendices A-C (2000)
- H. *Klamath Falls Parks Master Plan Update* (2019)
- I. *Klamath Falls Safe Routes to Schools Master Plan (2018)*, *Wiard Park District Master Plan* (2013)
- J. *Kingsley Airfield Joint Land Use Study* (2016)

- K. *Klamath Basin Transit Service Plan (2013)*
- L. *Crater Lake-Klamath Regional Airport Master Plan update (Expected in 2020)*
- M. *Klamath Falls Airport Master Plan* and Master Plan Tables (2004)
- N. *Klamath Falls Water Tank Vulnerability Assessment (2018)*
- O. *Klamath Falls Urban Trails Master Plan (2016)*
- P. *Klamath Falls Transportation System Plan Update (2019)*

In 2019, the city and county worked with the South Suburban Sanitary District to prepare and adopt the *Urban Area Public Facilities Plan (PFP)*. As required by ORS 197.712 and the Goal 11 administrative rule, the PFP is part of the Urban Area Plan and identifies sanitary sewer, water, transportation and storm drainage projects needed to support planned urban development through 2040. The PFP also describes each project as well as its location, probable construction timing, estimated costs and potential funding sources. The PFP is a valuable economic development tool because it provides a comprehensive list of key public facilities necessary to support the vacant and redevelopable employment land within the Klamath Falls UGB.

## Public Facilities Objectives and Policies

The following objectives and policies have been adapted and brought forward from city and county comprehensive plans and shall apply to public facility planning efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed below each objective (or group of objectives).

Establish priorities for sewage improvements based on county plans and needs.

### A. TO PROVIDE ADEQUATE SUITABLE SITES AND UTILIZE GOOD DESIGN STANDARDS IN THE PLANNING AND CONSTRUCTION OF PUBLIC FACILITIES.

1. In order to achieve the requirements of State-wide Planning Goal 11, the city and county shall prepare and adopt a public facilities plan describing the water, sewer, transportation, and other urban facilities and services which are to support land uses within the Klamath Falls UGB.
2. Encourage the development of a public facility or service in an urbanizable area only when there is provision for the coordinated development of all other urban facilities and services appropriate to the area.
3. Encourage, whenever feasible, the development of joint (sharing) facilities and service provision programs.
4. Prior to the proposed development's approval, it must be shown that all other existing public facilities (schools, police, roads, etc.) in the area could adequately accommodate the proposed development with little or no impacts on the level of service in the area.
5. Development proposals shall not be approved unless the types and levels of public facilities and services required are available or are to be provided concurrently with defined levels of development within urban areas.

### B. PROVIDE A TIMELY, ORDERLY, AND EFFICIENT ARRANGEMENT OF WATER FACILITIES AND SERVICES.

1. The city will continue to develop well sources, storage capacities and distribution capabilities to ensure the availability of adequate water supply and pressure in the system's service area.

2. Adequate water service, either existing or immediately attainable, will be a precondition to any development project.
  3. All water system extensions will be within the Urban Growth Boundary.
  4. The city will maintain a water rate structure capable of maintaining and improving the water system.
  5. All water users should make equitable contributions to the improvement of the water system and pay all costs associated with the extension of the water system service to them.
  6. Water lines in proposed developments will be adequately sized to meet future needs at the projected usage or density, including fire flow requirements.
  7. The high standard of water service within the community will be maintained.
  8. The city will serve as the preferred provider of water service within the Urban Growth Boundary. In line with this, the city will not extend service to development outside the Urban Growth Boundary.
  9. Water service will be provided outside the city only when an excess supply exists.
- C. TO PROVIDE TIMELY, ORDERLY AND EFFICIENT ARRANGEMENT OF SEWER FACILITIES AND SERVICES.
- D. ESTABLISH PRIORITIES FOR SEWAGE IMPROVEMENTS BASED ON COUNTY PLANS AND NEEDS.
- E. RELATE CONSTRUCTION OF SEWERS TO OTHER UTILITIES IN THE PUBLIC STREETS.
1. The city will endeavor to provide all residents within the city adequate sanitary sewer service.
  2. Adequate sewer service, either existing or immediately attainable, will be a precondition to a development project.
  3. All users will make equitable contribution to improvement or replacement of the sewage treatment system.
  4. All users will be required to meet Federal discharge standards.
  5. In order to meet urban needs separation of sanitary and storm sewer effluents will be completed and maintained.
  6. The expansion of the sewer system will be a major factor in managing urbanization.
  7. The city will, in planning for sewage treatment facilities, take into consideration regional needs and coordinate with special districts and other unincorporated areas requiring treatment of sewerage through the "208" planning process (Clean Water Act of 1977).
  - 8.
- F. TO PROVIDE A TIMELY, ORDERLY, AND EFFICIENT ARRANGEMENT OF STORM DRAINAGE FACILITIES.
- G. PROVIDE REASONABLE MINIMUM DESIGN CRITERIA FOR STORM DRAINAGE TO BE USED IN PLANNING FUTURE DEVELOPMENTS IF AN AREA IS PROVEN TO HAVE A DRAINAGE PROBLEM.
1. Storm water flows within and to natural drainage courses will not, through development, exceed natural capacities within the city.
  2. Steps will be taken during construction to ensure that storm water flows are not exposed to cuts, grading areas, and trenches in such a way as to allow adverse direct flow into natural drainage courses.
  3. Wherever possible road crossings of major natural drainage courses will be minimized.
  4. New developments will limit storm runoff rate outside project boundaries by appropriate measures; where applicable new developments shall intertie new drainage facilities with existing adjacent facilities.



5. Adequate drainage facilities, either existing or immediately attainable, will be a precondition to any development project.
6. The extent of continuous, impervious paved surfaces will be minimized, and large parking or paved areas will be subdivided with functional planting strips with exposed soil or proper drains.
7. The maintenance of drains such as 1-C, 1-C-7, et cetera, to reduce hazards will be supported.
8. Vector control to reduce insect problems in drain areas will be supported.
9. In order to meet urban needs, separation of sanitary and storm sewer collection systems will be completed and maintained.
10. Drainage ways will be dedicated for the purpose of storm water collection when property develops. Where adequate dedications exist, utilization of bankside areas may provide a recreation resource.
11. Use of fill matter in permanent and/or dedicated drainage ways will be regulated.
12. Building in floodplains or major drainage ways will be prohibited except in accordance with adopted regulations.
13. Drainage ways will be kept in an undeveloped state preserving or developing tree lines and vegetation wherever possible.

## Implementation

Goal 11 implementation measures include public facility master plans found in Volume III and city and county land use regulations found Volume IV of the Urban Area Plan. City and county engineering standards also help to implement Goal 11 objectives and policies. The following non-binding implementation measures have been adapted and brought forward from the city comprehensive plan.

### Public Facilities Planning and Adequacy Standards

- A public facilities plan shall be prepared and adopted through coordination and joint action by the County and the City of Klamath Falls.
- The adopted public facilities plan shall be updated, as necessary, at subsequent periodic Plan reviews.
- Review procedures shall be established for development project so that all appropriate public facilities and services will be reviewed and included, if necessary.
- Cooperate with the appropriate agencies to study the cost effectiveness of consolidation of public facilities.
- No new public or private utility districts shall be formed or individual well or septic use for industrial or commercial development approved unless it is found that the service desired cannot be feasibly provided by a recognized preferred provider.
- The City of Klamath Falls, Klamath County, South Suburban Sanitary District, Klamath County Fire District No. 1, Stewart Lenox Fire Protection District, and Klamath County Drainage Service District are recognized as the preferred ultimate providers of urban services within the Urban Growth Boundary of Klamath Falls.
- Development within a water or sewer service district shall be required to meet the requirements of the preferred provider with respect to provisions of service.

### Water

- Develop a detailed capital improvement program.
- Apply for Federal or State funds for upgrading of the water system.

- Development standards should be prepared for new areas with water system requirements.
- Submit all plans for water system improvements and water line extensions to appropriate regulatory agencies for review and approval prior to construction.
- Coordinate with adjoining private water systems to develop proper planning and engineering of areas within the UGB.
- Implement a water rate structure that sets charges according to cost of providing service for different areas.

#### **Sewer**

- Take steps to eliminate storm drainage water from sanitary sewer lines.
- Develop detailed capital improvements programs.
- Apply for Federal or State funds to improve and maintain the sewer system.
- Submit plans for all sewer improvements to appropriate regulatory agencies for review and approval.
- Implement ongoing maintenance programs to provide maximum life to the existing sewer system.

#### **Storm Drainage**

- Support public education and involvement in developing proper storm drainage systems.
- Develop detailed capital improvement programs.
- The city will apply for grants to help develop a proper storm drainage system to serve the urban area.
- Establish storm drainage requirements for new land developments.
- Budget funds to correct current drainage problems along streets and roads and within present storm drain systems.
- Develop regulations to set storm drain standards for roads and streets either crossing or affecting natural storm drain areas.
- Develop proper techniques for handling special runoff problems such as thermal pollution from geothermal activity.

#### **Public Works Design and Construction Standards**

The design and construction of public facilities in Klamath Falls must be consistent with the latest edition of the Public Works Engineering Standards. <https://www.klamathfalls.city/i-want-to/find/city-hall/public-works/development-services/eng-standards>

The design and construction of wastewater facilities in South Suburban Sanitary District must be consistent with the latest edition of the South Suburban Sanitary District Design Standards. <https://www.sssd.org/index.php/wastewater-treatment-facility/regulatory/item/18-south-suburban-sanitary-district-design-standards.html>

## Goal 12: Transportation

*To provide and encourage a safe, convenient and economic transportation system. A transportation plan shall (1) consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrian; (2) be based upon an inventory of local, regional and state transportation needs; (3) consider the differences in social consequences that would result from utilizing differing combinations of transportation modes; (4) avoid principal reliance upon any one mode of transportation; (5) minimize adverse social, economic and environmental impacts and costs; (6) conserve energy; (7) meet the needs of the transportation disadvantaged by improving transportation services; (8) facilitate the flow of goods and services so as to strengthen the local and regional economy; and (9) conform with local and regional comprehensive land use plans. Each plan shall include a provision for transportation as a key facility.*

### Statewide Planning Goal 12 Requirements

People and businesses rely on daily access to the transportation services they need. From public transit to freight delivery, transportation impacts our quality of life, cost of living, environmental quality, and the flow of goods and services that support local and regional economies. Planning for transportation requires coordination between cities and counties, and the [Oregon Department of Transportation](#).

Goal 12 requires cities, counties and the state to create a transportation system plan that takes into account all relevant modes of transportation: mass transit, air, water, rail, highway, bicycle and pedestrian. The resulting plan should support a variety of transportation modes so residents are not limited in the ways they can access the jobs, goods, or services available in different parts of their community. A well designed transportation plan conserves energy while also minimizing adverse social and economic impacts for disadvantaged areas.

The [Transportation Planning Rules \(TPR\)](#) implements Goal 12. The TPR specifies what must be included in local planning efforts for transportation, and what must be addressed and included in a transportation system plan.

[OAR 660-012](#) – Transportation Planning

### City and County Transportation Background and Policy Context

The City of Klamath Falls and Klamath County, in conjunction with the Oregon Department of Transportation (ODOT), initiated an update of the urban area's Transportation System Plan (TSP) in 2010. This plan is intended to guide the management and implementation of the transportation facilities, policies, and programs, within the urban area over the next 25 years. This plan blends the vision of the city and county as it relates to the future of the transportation system while remaining consistent with state and other local plans and policies. The plan also provides the necessary elements for adoption by the governing bodies into both the city and county's respective Comprehensive Plans.

State of Oregon planning rules require that the TSP be based on the current comprehensive plan land use map and must provide a transportation system that accommodates the expected 20-year growth in population and employment that will result from implementation of the land use plan. The contents of this TSP update are guided by Oregon Revised Statute (ORS) 197.712 and the Department of Land

Conservation and Development (DLCD) administrative rule known as the Transportation Planning Rule (TPR). These laws and rules require that jurisdictions develop the following:

- A road plan for a network of arterial and collector streets;
- A bicycle and pedestrian plan;
- An air, rail, water, and pipeline plan;
- A transportation financing plan; and
- Policies and ordinances for implementing the TSP.

The TPR requires that the transportation system plan incorporates the needs of all users and abilities. In addition, the TPR requires that local jurisdictions adopt land use and subdivision ordinance amendments to protect transportation facilities and to provide bicycle and pedestrian facilities between residential, commercial, and employment/institutional areas. It is further required that local communities coordinate their respective plans with the applicable county, regional, and state transportation plans.

The Urban Area Plan includes the following figures from the TSP:

- Figure 1-1: Plan Area
- Figure 4-1: Roadway Jurisdiction
- Figure 4-2: Roadway Functional Classification Map
- Figure 4-3: Truck Freight Routes

## TSP Process

The Klamath Falls Urban Area TSP was updated through a process that identified transportation needs, analyzed potential options for addressing those needs over the next 25 years, and provided a financial and implementation plan. The following steps were involved in this process:

- Review of state, regional, and local transportation plans and policies that the Klamath Falls Urban Area TSP must either comply with or be consistent with.
- Gathering community input through public workshops at key points in the project.
- Working with technical and citizen advisory committees to establish goals and objectives, identify and assess alternatives, and prioritize future needs.
- Using a detailed inventory of existing transportation facilities to serve as a foundation to establish needs near- and long-term.
- Identifying and evaluating future transportation needs to support the land use vision and economic vitality of the urban area.
- Prioritizing improvements and strategies that are reflective of the community's vision and fiscal realities.
- Preparing for review and adoption by local agencies, including the Klamath Falls City Council, Klamath County Commissioners, and the City and County Planning Commissions."

Figure 3: Klamath Falls Urban Area TSP Plan Area

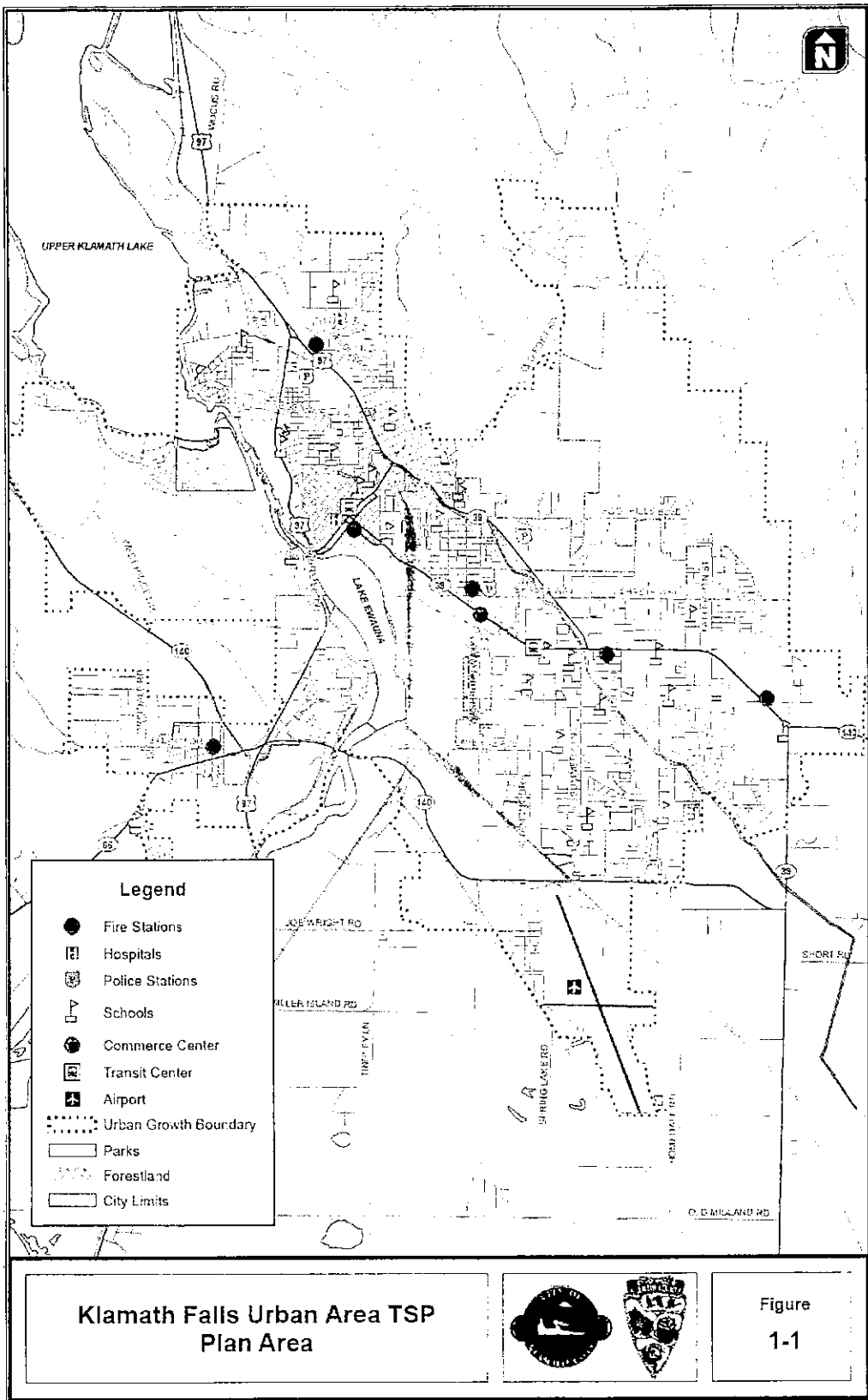


Figure 4: Transportation Facilities by Jurisdiction

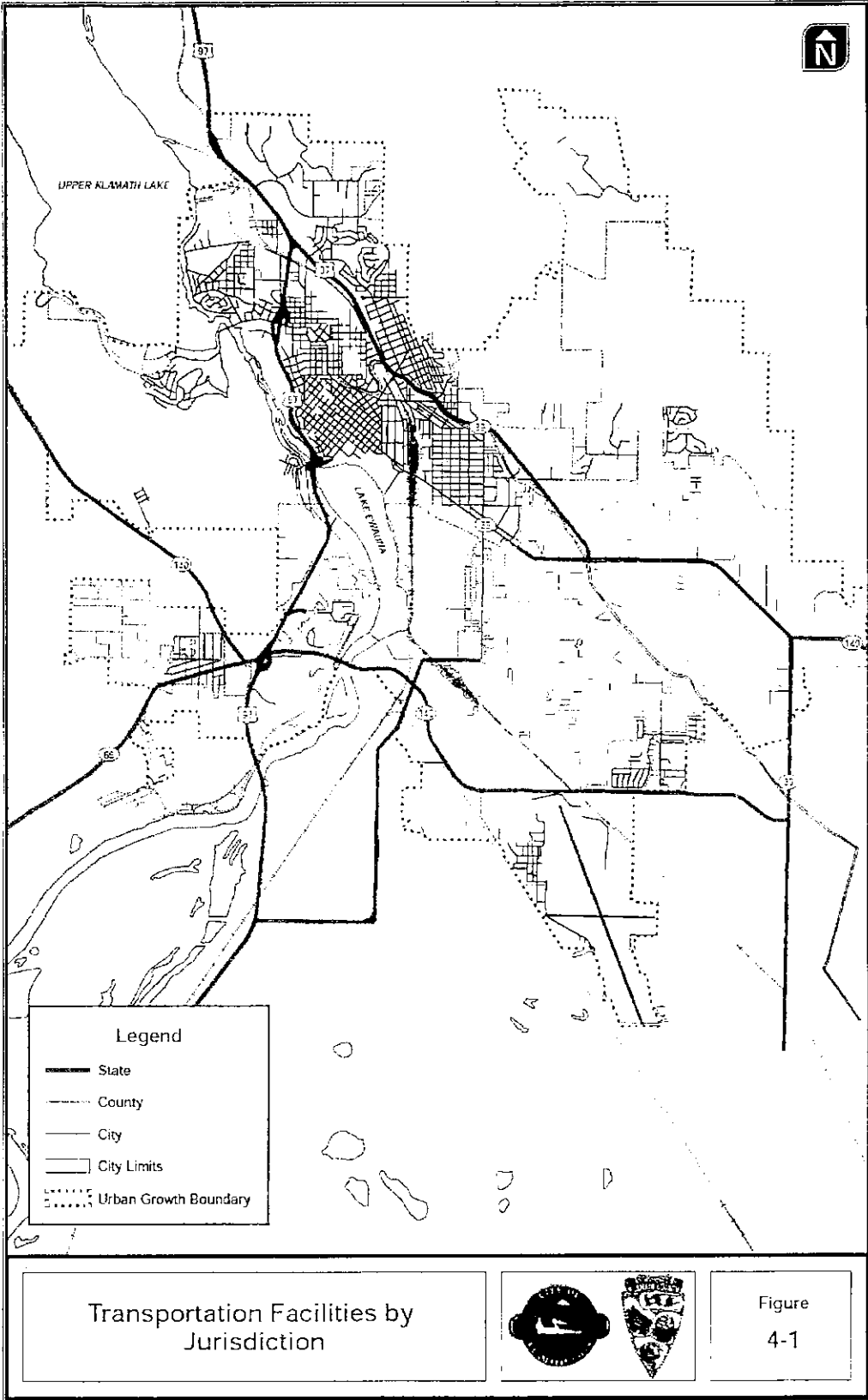


Figure 5: Functional Classification Map

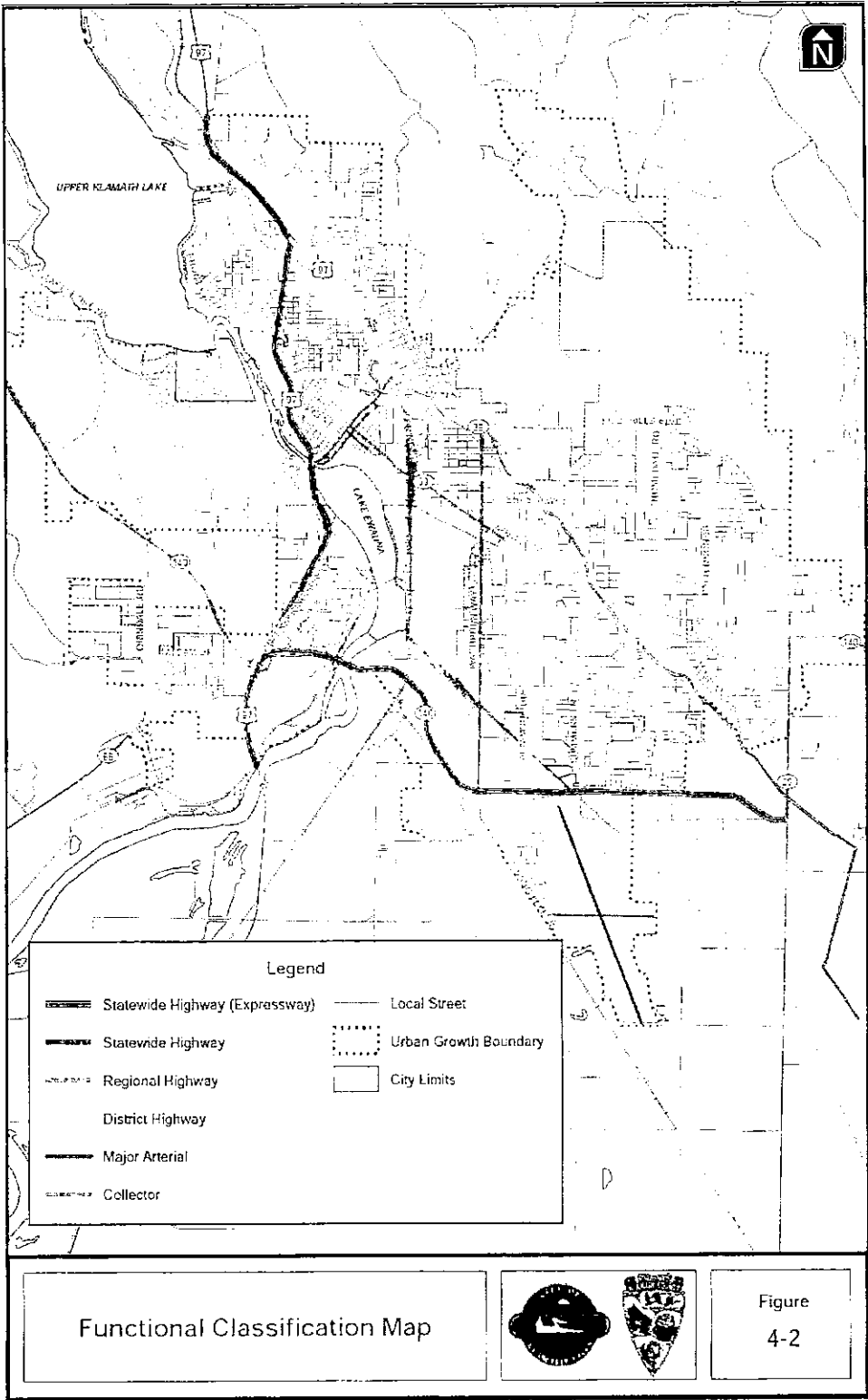
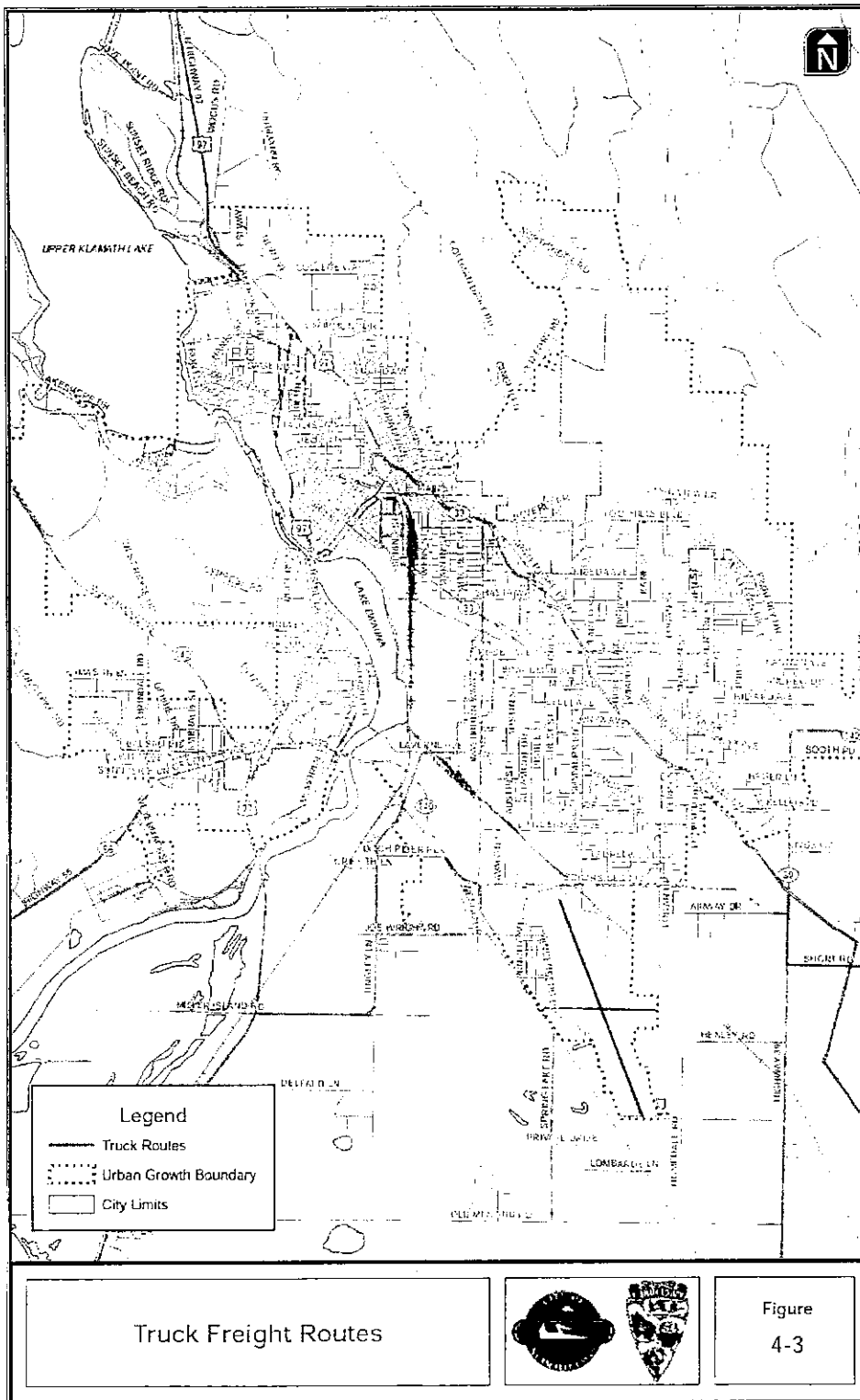


Figure 6: Truck Freight Routes





## Transportation Objectives and Policies

The Klamath Falls TSP identifies transportation goals (referred to as “objectives” in this plan) and related policies for the Urban Area. Objectives are presented in UPPERCASE and related policies are listed in numbered lists below each goal.

- A. ENSURE A SAFE AND EFFICIENT TRANSPORTATION SYSTEM FOR ALL USERS.**
  - 1. Coordinate with existing safe routes to school (SRTS) plans and identify potential engineering components for future SRTS plans for local schools.
  - 2. Strategically plan for safety and operational improvements for bicyclists and pedestrians.
  - 3. Incorporate the Highway Safety Manual (HSM) into development review and capital project evaluation processes.
  - 4. Reduce the number of fatal and serious crashes in the plan area by 50% in the next 20 years.
  - 5. Reduce the frequency of bicycle and pedestrian related crashes in the plan area by 50% in the next 20 years.
  - 6. Meet applicable city, county, or state operational performance measures.
- B. PROVIDE ACCESS TO THE TRANSPORTATION SYSTEM FOR ALL USERS.**
  - 1. Provide transportation mode choices to all users of the transportation system.
- C. INTEGRATE ADEQUATE BICYCLE AND PEDESTRIAN PATHWAYS, SIDEWALKS, AND BICYCLE LANES THROUGH THE COMMUNITY, PARTICULARLY TO CONNECT RESIDENTIAL AREAS WITH SCHOOLS AND ACTIVITY CENTERS.**
  - 1. Provide safe and convenient connections between travel modes.
  - 2. Identify ways to improve street connectivity to provide additional travel routes for bicyclists, pedestrians, and autos.
  - 3. Prioritize projects that improve pedestrian and bicycle system connectivity in areas near schools.
  - 4. Provide signing and pavement markings to identify bicycle and pedestrian networks through the city and to help bicycle and pedestrians reach their destinations via the network.
- D. IMPROVE THE LOCAL CIRCULATION SYSTEM TO REDUCE THE COMMUNITY’S RELIANCE ON STATE HIGHWAY TO TRAVEL TO LOCAL DESTINATIONS.**
  - 1. Provide alternative routes to the state highways.
  - 2. Provide adequate capacity on alternative routes to state highways.
  - 3. Develop local circulation plan identifying valuable new local circulation routes and connections.
  - 4. Sign local routes for local destinations.
- E. BUILD AND MAINTAIN THE TRANSPORTATION SYSTEM TO FACILITATE ECONOMIC DEVELOPMENT IN THE REGION.**
  - 1. Improve the movement of goods and delivery of services throughout the region using a variety of travel modes.
  - 2. Ensure adequate capacity for future travel demand and multiple modes on collector and arterial streets and on the local highways to enable economic development in the community.
  - 3. Identify lower cost alternatives or provide funding mechanisms for transportation improvements necessary for development to occur.
  - 4. Program transportation improvements to facilitate the development of desired land uses.
  - 5. Provide adequate capacity at rail crossings to meet demand.
  - 6. Review transportation and land-use code and regulations and identify changes to attract and facilitate desired development.

- F. IMPROVE SYSTEM PERFORMANCE BY BALANCING MOBILITY AND ACCESS, PARTICULARLY ALONG MAIN TRAVEL ROUTES.**
  - 1. Develop an access management plan that reflects desired character and operations of roadways and is feasible in terms of adoption and enforcement.
  - 2. Incorporate the HSM analysis into corridor planning, operations and design activities to help improve safety.
  - 3. Incorporate multimodal level-of service (MMLOS) analysis from the Highway Capacity Manual (HCM) 2010 to improve mobility for multiple modes.
- G. MINIMIZE THE IMPACTS OF TRANSPORTATION SYSTEM DEVELOPMENT ON THE NATURAL AND BUILT ENVIRONMENT.**
  - 1. Reduce vehicle miles traveled (VMT) to reduce emissions.
  - 2. Increase the non-auto mode split to reduce emissions.
  - 3. Update city design standards to reduce water run-off and street maintenance costs.
  - 4. Use technology to improve efficiency and safety of the transportation system.
  - 5. Assess the ability of the transportation system to handle proposed changes to, or development of, adjacent land uses.
  - 6. Promote transportation demand management strategies (carpooling, flexible work hours, telecommuting, etc.) to reduce VMT on the transportation system.
  - 7. Base planned future improvements on available funding.

## **Implementation**

Goal 12 objectives and policies from are implemented by city and county land use regulations, intergovernmental agreements with ODOT, transportation facility plans, capital improvement programs, and identified transportation projects found in the Urban Area PFP.

## Goal 13: Energy Conservation

*To conserve energy. Land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles.*

### Statewide Planning Goal 13 Requirements

Many land use decisions have a direct effect on the energy we consume. For example, high-density uses along major streets improve the efficiency of public transportation systems, make it easier to walk or bike to a variety of locations, and thereby reduce gasoline consumption. Goal 13 requires local governments to consider the effects of its comprehensive planning decision on energy consumption.

- Goal 13 encourages communities to look within existing urban neighborhoods for areas of potential redevelopment before looking to expand, to "recycle and re-use vacant land." The goal also directs cities and counties to have systems and incentives in place for recycling programs.
- At the time the goal was enacted, Oregonians were particularly concerned by development of new homes that blocked neighbors' sunlight, which can have impacts on passive heating and availability of natural light. These concerns are expressed in the goal language.
- Today, concerns about renewable energy sources are seen through a different lens. Innovation in the areas of solar and wind energy have made them increasingly popular in Oregon. Concern about climate change and air quality have resulted in an increase in public and private interest in and development of alternative energy sources. Goal 13 was not written to govern or direct the production of energy, but its conservation.

### City and County Energy Conservation Background and Policy Context

The Klamath Falls Comprehensive Plan was developed during the energy shortage of the late 1970s and reflects this concern. The Klamath County Comprehensive Plan emphasizes the relationship between land use and energy conservation – by proposing more intensive development along major transportation corridors and reducing transportation-related energy costs by locating housing near employment opportunities.

The Klamath Falls area benefits from abundant geothermal energy which provides a renewable and relatively affordable energy option – especially for space-heating. Solar energy has become a more affordable option in the Klamath Basin.

### Energy Conservation Objectives and Policies

The following objectives and policies have been adapted and brought forward from city and county comprehensive plans and shall apply to energy conservation planning efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed below each objective (or group of objectives).

- A. TO CONSERVE ENERGY AND PROMOTE THE UTILIZATION OF ALTERNATIVE ENERGY SOURCES.**
- B. DEVELOP PUBLIC PROGRAMS THAT WOULD MINIMIZE DEPLETION OF NON-RENEWABLE SOURCES OF ENERGY.**
- C. DEVELOP PUBLIC PROGRAMS THAT WOULD ENCOURAGE UTILIZATION OF RENEWABLE ENERGY SOURCES.**
  - 1. Pedestrian and bicycle use will be promoted as alternative modes of transportation.**

2. Recreation-related energy consumption will be reduced in view of less energy-consuming recreation activities (into the urban area itself).
  3. The prudent use of alternative energy devices (solar, geothermal et cetera) will be encouraged through provision of tax incentives.
  4. The recycling of solid waste materials for both energy and reclamation purposes will be promoted.
  5. Building access to solar rays will be protected to provide for lower heating costs.
  6. Encourage the use of renewable and efficient energy sources in residential, commercial, and industrial development.
  7. The development and use of alternative cost-effective energy shall be encouraged.
  8. Use of timber and agriculture wastes may be encouraged as an alternative source of fuel.
  9. To lessen the energy expenditures for service provision, the utilization of the maximum usable building area on each lot will be encouraged, thereby resulting in an energy-efficient building configuration with minimum street frontage.
- D. SITUATE APPLICABLE FUTURE LAND USE CLOSE TO EXISTING TRANSPORTATION CORRIDORS AND PUBLIC FACILITIES TO ACHIEVE GREATER ENERGY EFFICIENCY.
- E. ENCOURAGE THE LOCATION OF FUTURE RESIDENTIAL LAND USES ADJACENT TO OR IN CLOSE PROXIMITY TO PLACES OF WORK, SHOPPING AREAS, MEDICAL FACILITIES, ETC., IN ORDER TO CONSERVE ENERGY AND TO ACHIEVE GREATER ENERGY EFFICIENCY.
1. Urban sprawl will be curtailed, and in-filling of vacant land promoted to reduce energy costs.
  2. Energy-efficient residential densities will be promoted relative to work sites and transportation planning
  3. Energy efficiency will be a principal criterion in evaluation of all transportation facilities – both public and private.
  4. Energy-consuming vehicular trips will be discouraged, and the development of mass transportation promoted.
  5. New developments and neighborhoods that are large enough to support neighborhood-serving land uses (e.g., neighborhood shopping centers, schools, parks) may be created.
- F. ESTABLISH EFFICIENT ENERGY SUPPLY THAT WOULD PROVIDE ECONOMICAL SERVICE CONDUCIVE TO THE GENERAL HEALTH, WELFARE AND ORDERLY DEVELOPMENT OF THE COUNTY.
- G. PROMOTE EFFICIENT DEVELOPMENT AND USE OF THE COUNTY'S GEOTHERMAL RESOURCES.
1. The discovery and development of geothermal energy is of direct interest to the people of Klamath County.
  2. The carrying capacity of the Known Geothermal Resource Area must be defined and then not exceeded.
  3. Geothermal space heat will be available to the largest number of residences and businesses possible.

## Implementation

Energy conservation objectives and policies are implemented through city and county land use regulations, intergovernmental agreements, transportation facility master plans and capital improvement programs. The following suggested (but non-binding) implementation measures have been adapted and brought forward from city and county comprehensive plans.

- Discourage moving or flashing outdoor advertising signs and other non-essential energy utilizing activities.
- Public construction projects will provide leadership in demonstrating energy conservation.
- Promote public education relative to energy conservation and the attendant savings to the consumer.
- Apply for grants to develop special heating or other energy-saving measures.
- Develop and promote a detailed carrying capacity analysis of the Known Geothermal Resource Area and the uses of the geothermal heating district.
- Continue to commit to the development of geothermal resources.
- Develop a recycling center for the area, including the provision of adequate funding where necessary.
- Encourage the use of solar energy as an adjunct energy source through the protection of solar exposure, flexible setbacks and height requirements, and the promotion of a building code which allows for innovative design.
- Promote projects such as centralized parking areas, downtown shopping malls, and public transportation as a means of reducing short vehicular trips with the urban area.
- Study and prepare a zoning map and energy plan that provides energy conservation standards and criteria for new and existing residential, commercial and industrial development.
- Provide building permit fee waivers for energy conservation practices.
- Consider further economic incentives for energy conservation practices.
- Encourage economic incentives to developers utilizing alternative energy techniques in the design and construction of residential, commercial and industrial structures. These economic incentives may include but are not limited to permit fee waivers and increased density allowances for PUD's and residential development.
- When technical data is available, prepare a long-range Comprehensive Geothermal Energy Plan to guide the development and use of geothermal resources in Klamath County. This plan will provide energy conservation standards and criteria for new and existing industrial, commercial and residential development that will ensure resource preservation and compatibility of surrounding land uses.
- Provide a geothermal designation to encourage the use of known geothermal resource areas for industrial and commercial use.
- Restrict uses other than resource uses which do not utilize the geothermal resource.
- Study the feasibility of providing an economic incentives program for the production of gasahol and methane from agricultural byproducts and wastes.

## Goal 14: Growth Management and Urbanization

*To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities. Urban Growth Boundaries Urban growth boundaries shall be established and maintained by cities, counties and regional governments to provide land for urban development needs and to identify and separate urban and urbanizable land from rural land.*

*Establishment and change of urban growth boundaries shall be a cooperative process among cities, counties and, where applicable, regional governments. An urban growth boundary and amendments to the boundary shall be adopted by all cities within the boundary and by the County or counties within which the boundary is located, consistent with intergovernmental agreements.*

**Land Need** *Establishment and change of urban growth boundaries shall be based on the following: (1) Demonstrated need to accommodate long range urban population, consistent with a 20-year population forecast coordinated with affected local governments; and (2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection (2). In determining need, local government may specify characteristics, such as parcel size, topography or proximity, necessary for land to be suitable for an identified need. Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.*

See [OAR 660-024](#) to learn more about how UGBs are created and expanded. Each city in Oregon has an Urban Growth Boundary, or UGB. A UGB is used to designate where a city expects to grow over the next 20 years. Cities and counties may amend their UGB as needed to accommodate city growth. The use of UGB's, and the review process for UGB expansion, helps to preserve Oregon's agriculture, forest, and open space, and to help ensure compact urban growth.

### Statewide Planning Goal 14 Requirements

Comprehensive land use planning in Oregon is most well-known for its use of the "urban growth boundary" or UGB. The UGB is used to contain urban development, but also as a tool to plan for orderly growth. Every incorporated city in the state has a UGB. The UGB is designated in the city's comprehensive plan. If land is inside a UGB, it is considered urbanizable. When designating an urban growth boundary, a city must plan to include a 20-year supply of land for housing, employment, industry, open space and recreational needs. A UGB should also provide plans for transition from rural to urban land uses, to avoid conflicts. Within a UGB, cities that are over 2,500 population will need to have or create a transportation system plan and public utility plan. And lastly, comprehensive plans should encourage efficient use of the land, to provide for more livable, walkable, and densely built communities.

To write or update a comprehensive plan, there are many different pieces of information a local government considers. One critical element is a city's population forecast for the next twenty years, which can be provided by the Portland State University Population Research Center. This helps a city estimate how many new people are expected to locate in the city. The supply of "buildable lands" must also be recorded in an inventory. Among the buildable lands is land for housing. A city must perform a housing needs analysis (HNA), which demonstrates what types of housing, if any, are lacking in the current supply. An economic opportunities analysis (EOA) helps a city determine whether there is need for additional employment or industrial lands, and what types of business development they could reasonably encourage or plan for. A city must also plan for adequate land for recreation and open space.

To locate an urban growth boundary, a city must complete a location analysis, comparing alternative locations and considering which addition to the UGB will result in the most accommodating and cost effective boundary, while creating the fewest conflicts with neighboring land uses, and causing the fewest negative environmental and economic consequences.

There are circumstances in which residential or industrial development may take place outside an urban growth boundary. Sometimes, this happens in the case of an unincorporated community. In other cases, it takes place in an "exception area", a lot or a parcel that was lawfully created and zoned prior to the beginning of the land use planning program.

Many local governments find the task of updating a comprehensive plan to be time consuming, complicated, and costly. Indeed, the elements of land use planning included in a comprehensive plan update can require expertise to execute well. To give local governments better access to the process of updating a comprehensive plan, in 2016 the Land Conservation and Development Commission adopted a Simplified UGB Process.

OAR 660-024 – Urban growth boundaries

OAR 660-025 – Periodic Review

OAR 660-032 – Population Forecasts

OAR 660-038 – Simplified Urban Growth Boundary Method

## **City and County Growth Management Background and Policy Context**

The urbanization element of Klamath Falls Comprehensive Plan has not changed since it was prepared in 1980. This information is not useful in evaluating 2040 land need and supply but does have some historical value; for this reason, the old comprehensive plan is included as a background document in Volume II of the Urban Area Plan. However, the Urban Area EOA includes revised employment land need and supply information. In late 2019, housing land need and supply estimates will be revised and available for public review.

The Klamath Falls Urban Area (Urban Area) has approximately 45,000 people, with roughly half living within the City Limits and half living within unincorporated urban areas – primarily the South Suburban Area. Klamath Falls provides the full range of urban services to support urban development within the City Limits. Except for water service (which is provided by the city), Klamath County, through special service districts, separately provides urban services within the unincorporated Urban Area. Since the early 1980s, the city and county have separate comprehensive plans and land use regulations for areas under their respective jurisdiction.

As documented in the Goal 2: Land Use Planning chapter of this plan, the Urban Area is expected to have moderate growth during the 20-year planning period. However, if the community can capitalize on

the economic opportunities identified in the Urban Area EOA, population and employment growth could exceed PSU projections.

Since the mid-1990s, the city and county have cooperated on several planning and public facilities planning projects, including the Urban Area Economic Opportunities Analysis (EOA) and the Urban Area Transportation System Plan (TSP). The city and county have also adopted or amended intergovernmental agreements with each other and with special service districts with the goal of increased coordination and efficiency in providing public facilities to serve planned growth in the Urban Area.

In April of 2018, the Klamath Falls City Council and the Klamath Board of County Commissioners agreed in principal to move forward with the adoption of the Klamath Falls Urban Area Plan (Urban Area Plan) and Public Facilities Plan that will apply to the entire Urban Area. These plans will be implemented primarily by the Klamath Falls CDO within the City Limits and the Klamath County LDC within the unincorporated Urban Area.

## **Growth Management Objectives and Policies**

The following objectives and policies have been adapted and brought forward from city and county comprehensive plans and shall apply growth management efforts within the Klamath Falls Urban Area. Objectives are presented in UPPERCASE and related policies are listed below each objective (or group of objectives).

- A. TO PROVIDE AN ORDERLY, TIMELY AND EFFICIENT TRANSITION FROM RURAL TO URBAN LAND USES.**
  - 1. Conversion of urbanizable land to urban uses will be based on consideration of:
    - a. Orderly, economic provisions for public facilities and services;
    - b. Availability of sufficient land for the various uses to enhance choices in the market place;
    - c. Development of urban areas before conversion of urbanizable areas.
    - d. Applicable Urban Area Plan objectives and policies;
    - e. Encouragement of development within urban areas before conversion of urbanizable areas.
- B. TO USE SOUND PLANNING PRINCIPLES AND PRACTICES TO ASSIST URBAN AREA CITIZENS AND/OR PROPERTY OWNERS REGARDING LAND USE ACTIVITIES IN ORDER TO SERVE BEST THE NEEDS OF KLAMATH COUNTY CITIZENS AND BUSINESSES.**
  - 1. The city and county shall jointly develop and adopt specific land use policies related to urbanization of land within the Urban Area.
  - 2. In-filling of developable lands will be encouraged to minimize sprawl and take advantage of existing facilities and services.
  - 3. The expansion of public facilities and services will occur only within the UGB and in accordance with the Urban Area Plan.
  - 4. The city and county shall work with special districts to consider and plan for the type, location and phasing of public facilities and services during the course of urban expansion.
  - 5. During partitioning or subdividing of land, encourage parcels of adequate dimension so as to maximize the utility of land resources and enable the logical and efficient extension of services to such parcels.
- C. SITUATE FUTURE LAND USES TO ACHIEVE COMPATIBILITY WITH ADJACENT USES.**
- D. RECOMMEND FUTURE EXPANSION FOR ADEQUATE SEWERAGE FACILITIES ESPECIALLY IN AREAS CHANGING FROM RURAL TO URBAN DENSITIES.**



**E. DELINEATE THE URBAN GROWTH BOUNDARY IN ORDER TO IDENTIFY AND SEPARATE URBANIZABLE LAND FROM RURAL LAND TO DEFINE EXCEPTIONS PROPERLY.**

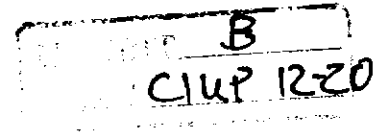
- 1. Future urban development will be contained within the geographic limits of the UGB.**

## **Growth Management Implementation**

This Urban Area Plan represents a major step in providing a common set of land use policies for the Klamath Falls Urban Area. The Urban Growth Boundary Agreement (UGMA) found in Volume V is the primary means of implementing the Urban Area Plan objectives and policies.

The following non-binding implementation measures have been adapted and brought forward from city and county comprehensive plans.

- Promote coordination of comprehensive planning with state and local officials.
- Encourage the use of innovative methods of multiple use development which allow a higher density population around core commercial and service areas.
- The city and county will work with each other and special districts to study the impacts of facility expansion in developing urban areas.
- Designate residential densities that follow a hierarchy of high to low densities from central to outer areas.



---

# City of Klamath Falls

## Housing Needs Analysis

---

July 2019

Prepared for:

City of Klamath Falls

**FINAL REPORT**

**ECONorthwest**  
ECONOMICS • FINANCE • PLANNING

KOIN Center  
222 SW Columbia Street  
Suite 1600  
Portland, OR 97201  
503.222.6060

This page intentionally blank

# Acknowledgements

---

ECONorthwest prepared this report for the City of Klamath Falls. ECONorthwest and the City of Klamath Falls thank those who helped develop the Klamath Falls Housing Needs Analysis. This project is funded by Oregon general fund dollars through the Department of Land Conservation and Development. The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

## Project Advisory Committee

Nathan Cherpeski  
Scott Souders  
Mark Gallagher  
Erik Nobel  
Randy Cox  
Julie Mathews  
Stephanie Hirche

Derrick DeGroot  
Randy Shaw  
Allison York  
Debra Gisreal  
Diana Otero  
Heather Crowder

## State of Oregon

Scott Edelman, Regional Representative – Oregon Department of Land Conservation and Development

## City of Klamath Falls

Joe Wall, Planning Manager

## Consulting Team (ECONorthwest)

Beth Goodman, Project Director  
Robert Parker, Senior Project Adviser  
Margaret Raimann, Technical Manager  
Sadie DiNatale, Associate

### City of Klamath Falls Contact:

Joe Wall, Planning Manager  
City of Klamath Falls  
500 Klamath Avenue,  
Klamath Falls, OR 97601  
541-883-5272  
JWall@klamathfalls.city

### ECONorthwest Contact:

Beth Goodman, Project Director  
ECONorthwest  
222 SW Columbia, Suite 1600  
Portland, OR 97201  
503-222-6060  
goodman@econw.com

This page intentionally blank

# Table of Contents

<b>ACKNOWLEDGEMENTS</b>	<b>III</b>
<b>EXECUTIVE SUMMARY</b>	<b>VII</b>
<b>1. INTRODUCTION</b>	<b>1</b>
FRAMEWORK FOR A HOUSING NEEDS ANALYSIS	1
PUBLIC PROCESS	3
ORGANIZATION OF THIS REPORT	4
<b>2. RESIDENTIAL BUILDABLE LANDS INVENTORY</b>	<b>5</b>
RESIDENTIAL BUILDABLE LAND INVENTORY RESULTS	6
REDEVELOPMENT POTENTIAL	11
<b>3. HISTORICAL AND RECENT DEVELOPMENT TRENDS</b>	<b>13</b>
DATA USED IN THIS ANALYSIS	14
TRENDS IN HOUSING MIX	15
TRENDS IN HOUSING DENSITY	20
TRENDS IN TENURE	21
VACANCY RATES	23
GOVERNMENT-ASSISTED HOUSING	23
MANUFACTURED HOMES	24
<b>4. DEMOGRAPHIC AND OTHER FACTORS AFFECTING RESIDENTIAL DEVELOPMENT IN KLAMATH FALLS</b>	<b>26</b>
DEMOGRAPHIC AND SOCIOECONOMIC FACTORS AFFECTING HOUSING CHOICE	27
REGIONAL AND LOCAL TRENDS AFFECTING AFFORDABILITY IN KLAMATH FALLS	49
SUMMARY OF THE FACTORS AFFECTING KLAMATH FALLS' HOUSING NEEDS	61
<b>5. HOUSING NEED IN KLAMATH FALLS</b>	<b>65</b>
PROJECT NEW HOUSING UNITS NEEDED IN THE NEXT 20 YEARS	65
NEED FOR GOVERNMENT ASSISTED, FARMWORKER, AND MANUFACTURED HOUSING	73
<b>6. RESIDENTIAL LAND SUFFICIENCY WITHIN KLAMATH FALLS</b>	<b>76</b>
CAPACITY ANALYSIS	76
RESIDENTIAL LAND SUFFICIENCY	78
CONCLUSIONS	81
<b>APPENDIX A – RESIDENTIAL BUILDABLE LANDS INVENTORY</b>	<b>84</b>
OVERVIEW OF THE METHODOLOGY	84
INVENTORY STEPS	84

This page intentionally blank

# Executive Summary

---

This report presents a housing needs analysis consistent with requirements of Statewide Planning Goal 10 and OAR 660-008. The methods used for this study generally follow the *Planning for Residential Growth* guidebook, published by the Oregon Transportation and Growth Management Program (1996).

The primary goals of the housing needs analysis were to (1) project the amount of land needed to accommodate the future housing needs of all types within the Klamath Falls Urban Growth Boundary (UGB), (2) evaluate the existing residential land supply within the Klamath Falls UGB to determine if it is adequate to meet that need, (3) to fulfill state planning requirements for a twenty-year supply of residential land, and (4) identify policy and programmatic options for the City to meet identified housing needs.

## What are the key housing needs in Klamath Falls?

Following are several key issues identified in the housing needs analysis:

- **Klamath Falls' housing market is strongly impacted by the housing market in Klamath County.** Klamath Falls' City population is relatively large, accounting for 32% of Klamath County's population. The Klamath Falls UGB accounts for approximately 64% of Klamath County's population. On average, household incomes in Klamath Falls are generally lower than household incomes across Klamath County and the state of Oregon.

Home sales prices in the Klamath Falls Metro Area are lower than the State. As of September 2018, homes in the Metro Area sold for about half of the price of homes statewide. Median gross rents in Klamath Falls are comparable to Klamath County, but both the City's and County's rents are lower than the State's by about \$220 per month. Klamath Falls has a sizable share of housing that is multifamily housing (one-quarter of the City's housing stock).

Given these factors, Klamath Falls will continue to have demand for single-family attached housing, affordable housing for families and seniors, and multifamily housing.

- **Demographic and economic trends will drive demand for relatively affordable single-family detached homes, townhomes, and multifamily housing in Klamath Falls.** The key demographic trends that will affect Klamath Falls' future housing needs are: (1) the aging of the Baby Boomers, (2) the aging of the Millennials, and (3) the continued growth in Latino population.
  - *Baby Boomers.* By 2040, people 60 years and older will account for 36% of the population in Klamath County (up from 27% in 2016). As the Baby Boomers age, growth of retirees will drive demand for housing types specific to seniors, such as small and easy-to-maintain dwellings, assisted living facilities, or age-restricted developments.



- *Millennials.* Growth in this population will result in increased demand for both ownership and rental opportunities. Between 2019 and 2039, Millennials will be a key driver in demand for housing that is comparatively affordable and housing for families with children.
- *Latino population.* Growth in the number of Latino households will result in increased demand for housing of all types, both for ownership and rentals, with an emphasis on housing that is comparatively affordable. Latino households are more likely to be larger than average, with more children and possibly with multigenerational households.
- **Klamath Falls has an existing lack of affordable housing.** Klamath Falls' key challenge over the next 20 years is providing opportunities for development of relatively affordable housing of all types of housing, from lower-cost single-family housing to market-rate multifamily housing.
  - About 38% of Klamath Falls' renter households cannot afford a two-bedroom apartment at HUD's fair market rent level of \$765 per month for Klamath County.
  - In 2016, a household needed to earn \$14.71 an hour to afford a two-bedroom rental unit in Klamath County.
  - Klamath Falls currently has a deficit of housing affordable to households earning between \$10,000 and \$35,000. Klamath Falls also has a need for higher-amenity housing for households earning more than \$75,000.
  - About 40% of Klamath Falls' households are cost burdened, with 54% of renters and 23% of homeowners paying more than 30% of their income on housing.

## How much growth is Klamath Falls planning for?

A 20-year population forecast (in this instance, 2019 to 2039) is the foundation for estimating the number of new dwelling units needed. Exhibit 1 shows a population forecast for the Klamath Falls UGB for the 2019 to 2039 period. It shows that the Klamath Falls UGB population will grow by about 1,255 people over the 20-year period.

### Exhibit 1. Population Forecast, Klamath Falls, 2019-2039

Source: ECONorthwest based on Klamath Falls' official 2018-2040 population forecast from the Oregon Population Forecast Program.

<b>43,921</b>	<b>45,176</b>	<b>1,255</b>	3% increase
Residents in 2019	Residents in 2039	New residents 2019 to 2039	0.14% AAGR

The Housing Needs Analysis assumes that the Klamath Falls UGB population will grow by 1,255 people over the 2019 to 2039 period.

## How much buildable residential land does Klamath Falls currently have?

Exhibit 2 shows buildable residential acres by plan designation, after excluding constrained and unbuildable land. The results show that there are about 3,234 net buildable acres in residential plan designations in Klamath Falls' City Limits. Of this, about 91% are in tax lots classified as vacant, and 9% are in tax lots classified as partially vacant. For the area between Klamath Falls' City Limits and its UGB boundary (Klamath County land use), about 3,166 net buildable acres in residential plan designations are available. Of these net buildable acres, about 52% are in tax lots classified as vacant, and 48% are in tax lots classified as partially vacant.

### Exhibit 2. Development Status with Constraints, by Plan Designation, Klamath Falls UGB, 2018

Source: Klamath County, ECONorthwest analysis.

Plan Designation	Total Buildable acres	Buildable acres on vacant lots	Buildable acres on partially vacant lots
<b>City of Klamath Falls</b>			
Single-family Residential	635	548	87
Medium Density Residential	194	186	8
Apartment Residential	72	72	0
General Commercial	188	188	0
Neighborhood Commercial	6	6	0
Mixed Use	35	33	1
Planned Unit Development	2,104	1,897	208
<b>Klamath County</b>			
Low Density Residential	982	613	369
Rural Residential	2	2	0
Suburban Residential	1,534	537	998
Medium Density Residential	525	401	124
High Density Residential	122	88	34
<b>Total</b>	<b>6,400</b>	<b>4,022</b>	<b>1,742</b>

## How much housing will Klamath Falls need?

Klamath Falls will need to provide about 609 new dwelling units to accommodate forecast population growth between 2019 and 2039.

About 365 dwelling units (60%) will be single-family detached housing, which includes manufactured dwellings. About 92 units (10%) will be single-family attached housing, and 152 units (25%) will be multifamily housing, which includes duplexes, structures with three to four dwellings, and structures with five or more dwellings.

This mix represents a shift from the existing mix of housing, whereas in the 2013-2017 period, 68% of housing was single-family detached housing, 7% was single-family attached housing, and 25% was multifamily housing. The shift in mix is in response to the need for a wider range of housing types, including housing types such as duplexes, townhouses, and apartments. In

addition, Klamath Falls has need for relatively affordable housing for residents with extremely-low, very-low, and low-incomes.

## How much land will be required for housing?

Exhibit 3 shows that 2,864 acres of vacant land in Klamath Falls' City Limits has the capacity to accommodate 9,376 new dwelling units. For the area between Klamath Falls' City Limits and its UGB, Exhibit 3 shows that 3,161 acres of vacant land have the capacity to accommodate 4,997 new dwelling units. The demand for the 14,373 new dwelling units coupled with the capacity of land by plan designation is used in order to determine whether there is sufficient residential land within the Klamath Falls UGB to accommodate growth over the 2019 to 2039 period.

Exhibit 3 shows that the Klamath Falls City Limits and the area between the City Limits and Urban Growth Boundary have a surplus of capacity in all residential plan designations. The following summarizes:

### Klamath Falls City Limits:

- **Single-Family Residential:** Klamath Falls has a surplus of capacity for about 1,821 dwelling units, or 552 gross acres of land to accommodate growth over the 2019-2039 period.
- **Medium Density Residential:** Klamath Falls has a surplus of capacity for about 1,092 dwelling units, or 173 gross acres of land to accommodate growth.
- **Apartment Residential:** Klamath Falls has a surplus of capacity for about 430 dwelling units, or 59 gross acres of land to accommodate growth.
- **Planned Unit Development:** Klamath Falls has a surplus of capacity for about 6,033 dwelling units, or 2,080 gross acres of land to accommodate growth.

### Klamath County – Area Between City Limits and Urban Growth Boundary

- **Rural Residential:** The Klamath Falls area between its City Limits and UGB has a surplus of capacity for about 2 dwelling units, or 2 gross acres of land to accommodate growth.
- **Suburban Residential:** The Klamath Falls area between its City Limits and UGB has a surplus of capacity for about 1,687 dwelling units, or 1,534 gross acres of land to accommodate growth.
- **Low Density Residential:** The Klamath Falls area between its City Limits and UGB has a surplus of capacity for about 2,061 dwelling units, or 981 gross acres of land to accommodate growth.
- **Medium Density Residential:** The Klamath Falls area between its City Limits and UGB has a surplus of capacity for about 784 dwelling units, or 523 gross acres of land to accommodate growth.

- **High Density Residential:** The Klamath Falls area between its City Limits and UGB has a surplus of capacity for about 463 dwelling units, or 122 gross acres of land to accommodate growth.

Accordingly, Klamath Falls has enough land to accommodate residential growth over the 20-year period.

**Exhibit 3. Comparison of capacity of existing residential land with demand for new dwelling units and land deficit, Klamath Falls UGB, 2019-2039**

Source: Calculations by ECONorthwest. Note: DU is dwelling unit.

Zoning Districts	Capacity (Dwelling Units)	Demand (Dwelling Units)	Remaining Capacity (Dwelling Units)	Land Surplus or (Deficit) Gross Acres
Klamath Falls City Limits				
Single-family Residential	2,095	274	1,821	552
Medium Density Residential	1,223	131	1,092	173
Apartment Residential	526	96	430	59
Planned Unit Development	6,101	68	6,033	2,080
<b>Subtotal</b>	<b>9,945</b>	<b>569</b>	<b>9,376</b>	<b>2,864</b>
Klamath County - Area between City Limits and Urban Growth Boundary				
Rural Residential	2		2	2
Suburban Residential	1,687		1,687	1,534
Low Density Residential	2,061		2,061	981
Medium Density Residential	784		784	523
High Density Residential	463		463	122
<b>Subtotal</b>	<b>4,997</b>	<b>-</b>	<b>4,997</b>	<b>3,161</b>
<b>Total</b>	<b>14,942</b>	<b>569</b>	<b>14,373</b>	<b>6,026</b>

# What are the Key Findings of the Housing Needs Analysis?

The key findings of Klamath Falls' Housing Needs Analysis are:

- Klamath Falls' population is forecast to grow slower than the past. Klamath Falls UGB is forecast to grow from 43,862 people in 2019 to 45,176 people in 2039, an increase of 1,314 people.
- The Klamath Falls UGB is planning for 609 new dwelling units, over the 20-year planning period, averaging 30 new dwelling units annually.
- Klamath Falls will plan for more single-family attached units in the future to meet the City's housing needs.
- The Klamath Falls UGB has a large surplus of capacity for all types of housing. The Klamath Falls UGB has a surplus of capacity for about 14,376 dwelling units (of which 9,376 are located inside Klamath Falls' City Limits).
- Klamath Falls has relatively little land for higher-density multifamily development. Klamath Falls only has 72 acres of land in apartment residential zones within the City Limits. While this amount of land is sufficient to accommodate growth over the next 20-years, the City may want to evaluate whether apartment residential land is in places where there is market demand for multifamily development.
- Klamath Falls has issues with housing conditions. Nearly 36% of Klamath Falls' housing was built before 1950. Only 20% of Klamath Falls housing was built after 1990. While the age of housing does not necessarily indicate housing condition problems, the age of Klamath Falls' housing stock plays a role in the poor condition of housing. Discussions with stakeholders in Klamath Falls confirmed that poor housing conditions are a substantial problem in Klamath Falls. The poor conditions are found in all types of housing, but especially in mobile homes, manufactured housing, and stick-built single-family detached housing. Actions that address housing conditions will be key to addressing Klamath Falls' housing needs.
- Klamath Falls has a deficit of housing affordable to extremely low-, very low-, and low-income households as well as a deficit of higher-amenity housing types affordable to middle- to higher-income households.

# 1. Introduction

---

This report presents Klamath Falls' Housing Needs Analysis for the 2019 to 2039 period. It is intended to comply with statewide planning policies that govern planning for housing and residential development, including Goal 10 (Housing) and OAR 660 Division 8. The methods used for this study generally follow *Planning for Residential Growth: A Workbook for Oregon's Urban Areas*, a guidebook published by the Oregon Transportation and Growth Management Program (1996).

The City of Klamath Falls has previously not updated its residential Comprehensive Plan policies since 1980. The City has changed considerably since then. Klamath Falls grew from 16,661 people in 1980 to 21,770 people in 2017. This is an addition of 5,109 people (or 31% growth). Since 2000, Klamath Falls' population has grown a little older on average and has become slightly more ethnically diverse, consistent with statewide trends. At the same time, housing costs have risen faster than incomes, making housing less affordable.

This report provides Klamath Falls and Klamath County with a factual basis to update the Housing Element of the City and County's Urban Area Comprehensive Plan and zoning codes, and to support future planning efforts related to housing and options for addressing unmet housing needs in Klamath Falls. This report provides information that informs future planning efforts, including development and redevelopment. This report provides the City with information about the housing market in Klamath Falls and describes the factors that will affect future housing demand in Klamath Falls, such as changing demographics. This analysis will help decision makers understand whether Klamath Falls has enough land to accommodate growth over the next 20 years.

## Framework for a Housing Needs Analysis

Economists view housing as a bundle of services for which people are willing to pay, including shelter, proximity to other attractions (job, shopping, recreation), amenities (type and quality of fixtures and appliances, landscaping, views), prestige, and access to public services (quality of schools). Because it is impossible to maximize all these services and simultaneously minimize costs, households must, and do, make tradeoffs. What they can get for their money is influenced both by economic forces and government policy. Moreover, different households will value what they can get differently. They will have different preferences, which in turn, are a function of many factors like income, age of household head, number of people and children in the household, number of workers and job locations, number of automobiles, and so on.

Thus, housing choices of individual households are influenced in complex ways by dozens of factors and the housing market in Klamath County and Klamath Falls are the result of the individual decisions of thousands of households. These points help to underscore the complexity of projecting what types of housing will be built in Klamath Falls between 2019 and 2039.

The complex nature of the housing market, demonstrated by the unprecedented boom-and-bust during the past decade, does not eliminate the need for some type of forecast of future housing demand and need. This includes resulting implications for land demand and consumption. Such forecasts are inherently uncertain. Their usefulness for public policy often derives more from the explanation of their underlying assumptions about the dynamics of markets and policies than from the specific estimates of future demand and need. Thus, we start our housing analysis with a framework for thinking about housing and residential markets, and how public policy affects those markets.

## **Statewide Planning Goal 10**

The passage of the Oregon Land Use Planning Act of 1974 (ORS Chapter 197) established the Land Conservation and Development Commission (LCDC) and the Department of Land Conservation and Development (DLCD). The Act required the Commission to develop and adopt a set of statewide planning goals. Goal 10 addresses housing in Oregon and provides guidelines for local governments to follow in developing their local comprehensive land-use plans and implementing policies.

At a minimum, local housing policies must meet the requirements of Goal 10 and the statutes and administrative rules that implement it (ORS 197.295 to 197.314, ORS 197.475 to 197.490, and OAR 600-008).<sup>1</sup> Goal 10 requires incorporated cities to complete an inventory of buildable residential lands. Goal 10 also requires cities to encourage the numbers of housing units in price and rent ranges commensurate with the financial capabilities of its households.

Goal 10 defines needed housing types as “all housing on land zoned for residential use or mixed residential and commercial use that is determined to meet the need shown for housing within an urban growth boundary at price ranges and rent levels that are affordable to households within the county with a variety of incomes, including but not limited to households with low incomes, very low incomes and extremely low incomes.” ORS 197.303 defines needed housing types:

- (a) Housing that includes, but is not limited to, attached and detached single-family housing and multiple family housing for both owner and renter occupancy.
- (b) Government assisted housing.<sup>2</sup>
- (c) Mobile home or manufactured dwelling parks as provided in ORS 197.475 to 197.490.
- (d) Manufactured homes on individual lots planned and zoned for single-family residential use that are in addition to lots within designated manufactured dwelling subdivisions.
- (e) Housing for farmworkers.

---

<sup>1</sup> ORS 197.296 only applies to cities with populations over 25,000.

<sup>2</sup> Government assisted housing can be any housing type listed in ORS 197.303 (a), (c), or (d).

DLCD provides guidance on conducting a housing needs analysis in *Planning for Residential Growth*, referred to as the Workbook.

Klamath Falls must identify needs for all of the housing types listed above as well as adopt policies that increase the likelihood that needed housing types will be developed. This housing needs analysis was developed to meet the requirements of Goal 10 and its implementing administrative rules and statutes.

## Public Process

At the broadest level, the purpose of the project was to understand how much Klamath Falls will grow over the next 20 years. The project can be broken into two components: (1) technical analysis, and (2) housing strategies. Both benefit from public input. The technical analysis required a broad range of assumptions that influence the outcomes; the housing strategy is a series of high-level policy choices that will affect Klamath Falls residents.

The intent of the public process was to establish broad public engagement throughout the project as work occurs. Public engagement was accomplished through various avenues. We discuss the two primary avenues below.

### Project Advisory Committee Engagement

The City of Klamath Falls and ECONorthwest solicited public input from an ad-hoc Project Advisory Committee. The Project Advisory Committee met five times<sup>3</sup> to discuss project assumptions, results, and implications. The project relied on the Project Advisory Committee to review draft products and provide input at key points (e.g., before recommendations and decisions were made, and before draft work products were finalized).

The project required many assumptions and policy choices that the committee needed to vet and agree upon, as these choices affect current and future residents. In short, local review and community input were essential to developing a locally appropriate and politically viable housing needs analysis and housing strategy.

### Public Engagement

The City of Klamath Falls and ECONorthwest solicited input from the general public at two public meetings. The first meeting, held on March 19, 2019, solicited comments on the preliminary results of the Housing Needs Analysis. The second public meeting, held on May 14, 2019, solicited comments on the final results of the Housing Needs Analysis and housing strategy.

---

<sup>3</sup> Project Advisory Committee meeting dates: January 15, 2019; February 12, 2019; March 19, 2019; April 9, 2019; and June 4, 2019.



# Organization of this Report

The rest of this document is organized as follows:

- **Chapter 2. Residential Buildable Lands Inventory** presents the methodology and results of Klamath Falls' inventory of residential land.
- **Chapter 3. Historical and Recent Development Trends** summarizes the state, regional, and local housing market trends affecting Klamath Falls' housing market.
- **Chapter 4. Demographic and Other Factors Affecting Residential Development in Klamath Falls** presents factors that affect housing need in Klamath Falls, focusing on the key determinants of housing need: age, income, and household composition. This chapter also describes housing affordability in Klamath Falls relative to the larger region.
- **Chapter 5. Housing Need in Klamath Falls** presents the forecast for housing growth in Klamath Falls, describing housing need by density ranges and income levels.
- **Chapter 6. Residential Land Sufficiency within Klamath Falls** estimates Klamath Falls' residential land sufficiency needed to accommodate expected growth over the planning period.

## 2. Residential Buildable Lands Inventory

---

The general structure of the standard method BLI analysis is based on the DLCD HB 2709 workbook *“Planning for Residential Growth: A Workbook for Oregon’s Urban Areas,”* which specifically addresses residential lands. The steps and sub-steps in the supply inventory are:

1. Calculate the gross vacant acres by plan designation, including fully vacant and partially vacant parcels.
2. Calculate gross buildable vacant acres by plan designation by subtracting unbuildable acres from total acres.
3. Calculate net buildable acres by plan designation, subtracting land for future public facilities from gross buildable vacant acres.
4. Calculate total net buildable acres by plan designation by adding redevelopable acres to net buildable acres.

The methods used for this study are consistent with many others completed by ECONorthwest that have been acknowledged by DLCD and LCDC. A detailed discussion of the methodology used in this study is provided in Appendix A. The BLI for Klamath Falls includes all residential land designated in the comprehensive plan within the Klamath Falls UGB. From a practical perspective, this means that all lands within tax lots identified by the Klamath County Assessor’s Office that fall within the UGB were inventoried. ECONorthwest used the most recent tax lot shapefile from the Klamath County for the analysis. The inventory then builds from the tax lot database to estimate buildable land by plan designation.

# Residential Buildable Land Inventory Results

## Land Base

As defined above, the land base for the Klamath Falls residential BLI includes all tax lots in the Urban Growth Boundary (UGB) in residential plan designations. Exhibit 4 shows the land base by generalized plan designation in the UGB. There are 18,141 tax lots in the land base, accounting for 13,672 acres. There are 28 tax lots that are split between two or more plan designations, like Medium-Density Residential and Neighborhood Commercial.

**Exhibit 4. Land Base by Plan Designation, Klamath Falls UGB, 2018**

Plan Designation	Number of taxlots	Percent	Total taxlot acreage	Percent
<b>City of Klamath Falls</b>				
Apartment Residential	909	5%	272	2%
Medium Density Residential	3,477	19%	759	6%
Single-family Residential	3,228	18%	1,483	11%
General Commercial	870	5%	736	5%
Neighborhood Commercial	315	2%	54	0%
Mixed Use	15	0%	39	0%
Planned Unit Development	1,157	6%	3,909	29%
<b>Klamath County</b>				
Low Density Residential	1,505	8%	1,688	12%
Rural Residential	4	0%	2	0%
Suburban Residential	4,674	26%	3,280	24%
Medium Density Residential	1,773	10%	1,066	8%
High Density Residential	243	1%	381	3%
<b>Total</b>	<b>18,141</b>	<b>100%</b>	<b>13,672</b>	<b>100%</b>

Source: Klamath County, ECO Northwest analysis.

\*The sum tax lots do not equal the total number of tax lots due to split plan designations.

## Development Status

Exhibit 5 shows total acres in tax lots classified by development status. We used a rule-based classification (defined in the methods and definitions above) to define an initial development status. Then we used a rapid visual assessment method to confirm this development status using aerial imagery.

**Exhibit 5. Development Status Before Constraints Are Applied,  
by Plan Designation, Klamath Falls UGB, 2018**

Plan Designation	Total acres on vacant taxlots	Total acres on partially vacant taxlots	Total committed acres		
			Developed	Undevelopable	Public or exempt
City of Klamath Falls					
Apartment Residential	88	0	161	4	20
Medium Density Residential	213	15	467	12	53
Single-family Residential	694	122	573	4	91
General Commercial	205	0	453	4	73
Neighborhood Commercial	6	0	42	2	3
Mixed Use	35	1	0	0	2
Planned Unit Development	2,911	328	285	0	385
Klamath County					
Low Density Residential	824	523	266	3	73
Rural Residential	2	0	0	0	0
Suburban Residential	624	1,293	1,029	5	329
Medium Density Residential	448	154	425	2	38
High Density Residential	95	51	52	0	183
Total	6,146	2,487	3,754	36	1,249

Source: Klamath County, ECONorthwest analysis.

The Buildable Lands Inventory identifies the following as constraints that prohibit development: floodways and floodplains, wetlands, and steep slopes above 25%. Vacant or partially vacant land with these constraints are considered unavailable for development and were removed from the inventory of buildable land.

Exhibit 6 shows development status with constraints applied, resulting in buildable acres. Of the 13,672 total acres in the land base, 5,002 are committed acres, 2,270 are constrained acres, and 6,400 are buildable acres.

**Exhibit 6. Development Status with Constraints, by Plan Designation, Klamath Falls UGB, 2018**

Plan Designation	Total acres	Committed acres	Constrained acres	Buildable acres
<b>City of Klamath Falls</b>				
Apartment Residential	272	181	19	72
Medium Density Residential	759	517	48	194
Single-family Residential	1,483	639	209	635
General Commercial	736	510	39	188
Neighborhood Commercial	54	47	1	6
Mixed Use	39	2	2	35
Planned Unit Development	3,909	501	1,305	2,104
<b>Klamath County</b>				
Low Density Residential	1,688	363	344	982
Rural Residential	2	0	0	2
Suburban Residential	3,280	1,570	176	1,534
Medium Density Residential	1,066	490	51	525
High Density Residential	381	182	77	122
<b>Total</b>	<b>13,672</b>	<b>5,002</b>	<b>2,270</b>	<b>6,400</b>

Source: Klamath County, ECONorthwest analysis.

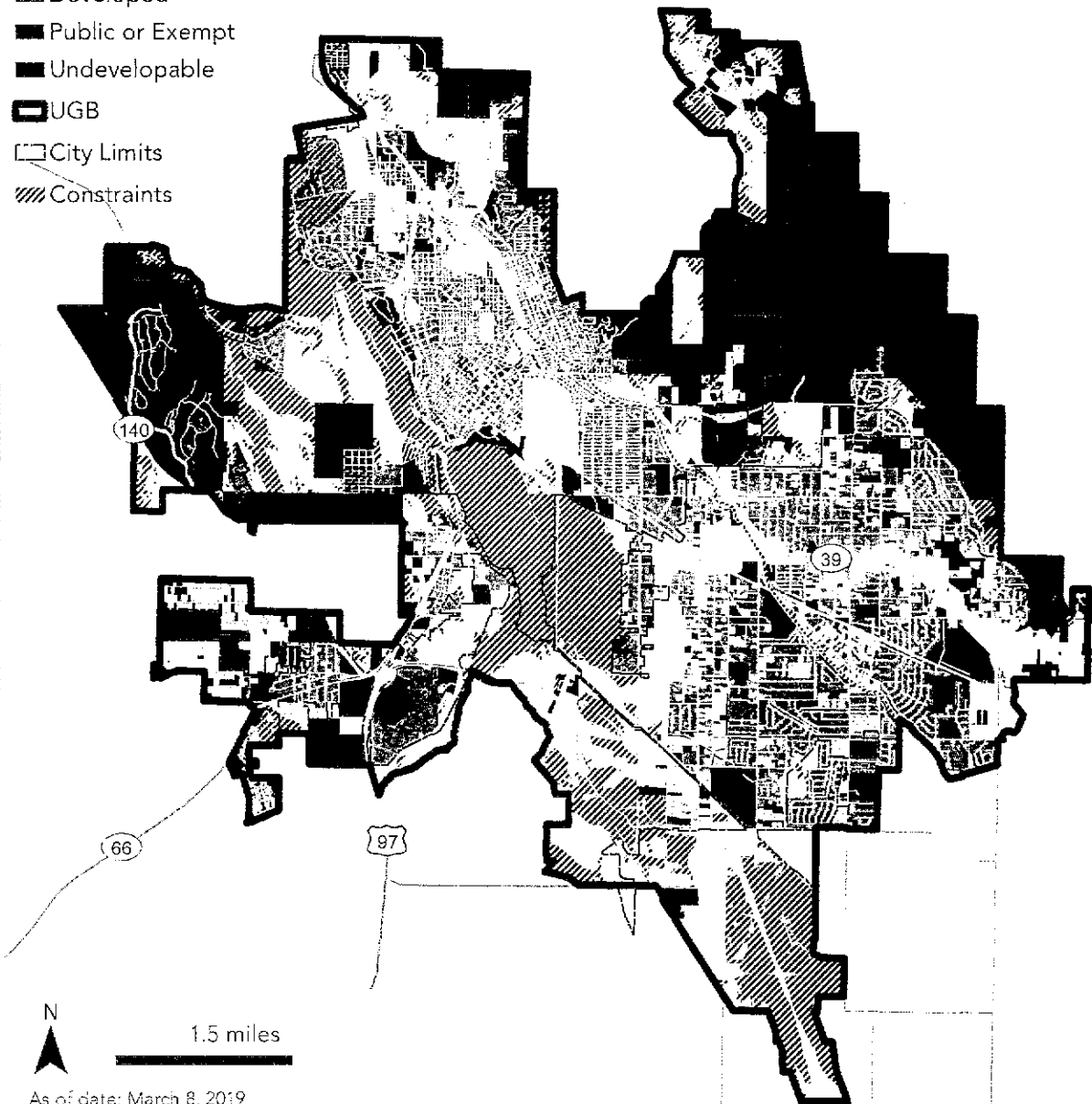
Exhibit 7 shows residential land by development status with constraints overlaid.

# Klamath Falls Buildable Lands Inventory

## Residential Development Status

### Development Status

- Vacant
- Partially Vacant
- ▨ Developed
- Public or Exempt
- Undevelopable
- ▭ UGB
- City Limits
- ▨ Constraints



As of date: March 8, 2019

Source: ECONorthwest; Klamath County

## Vacant Buildable Land

Exhibit 8 shows buildable acres (i.e., acres in tax lots after constraints are deducted) for vacant and partially vacant land by plan designation. Of Klamath Falls UGB's 6,400 unconstrained buildable residential acres, about 71% are in tax lots classified as vacant and 29% are in tax lots classified as partially vacant.

**Exhibit 8. Buildable Acres in Vacant and Partially Vacant Tax Lots by Plan Designation, Klamath Falls UGB, 2018**

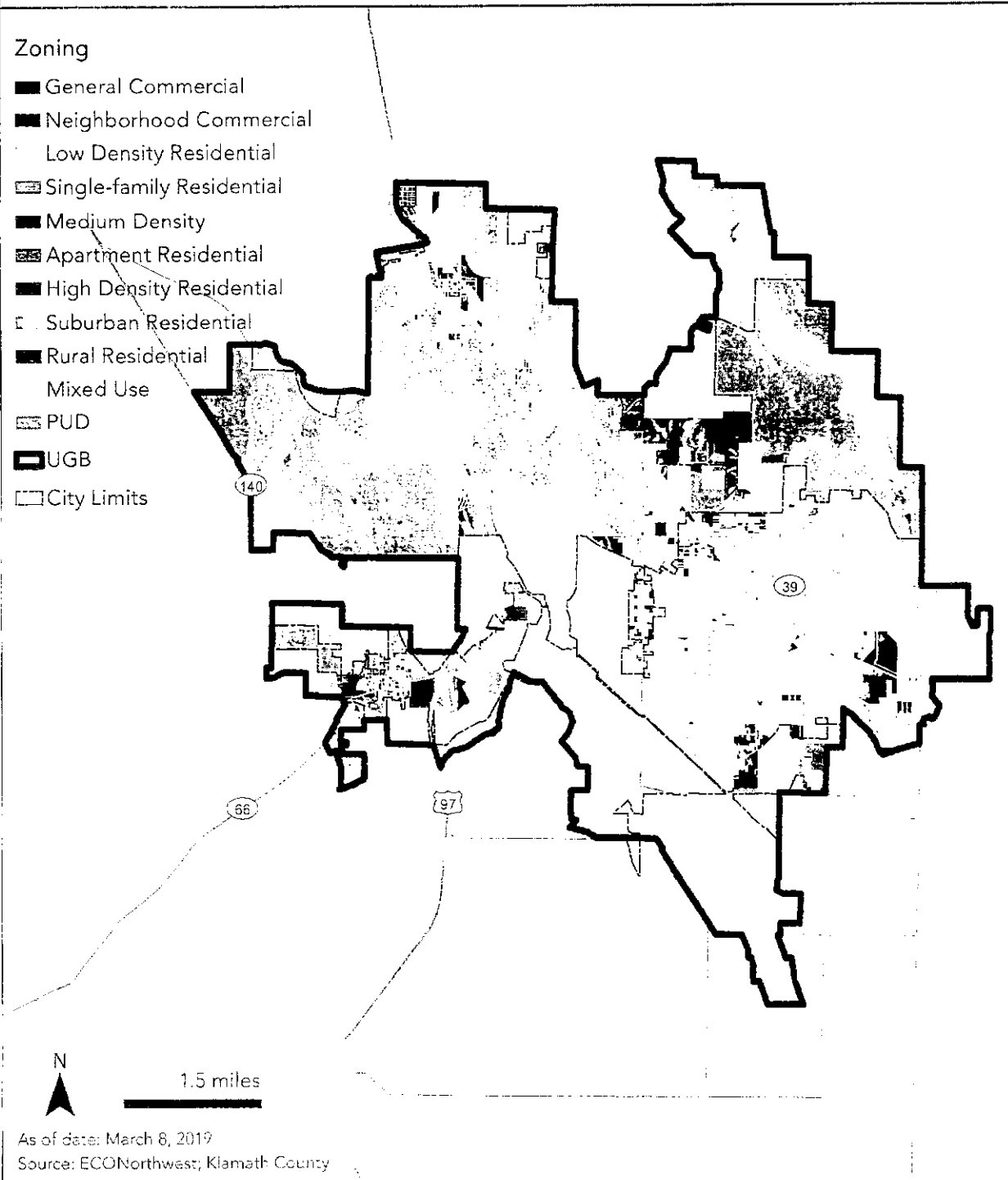
Plan Designation	Total Buildable acres	Buildable acres on vacant lots	Buildable acres on partially vacant lots
<b>City of Klamath Falls</b>			
Single-family Residential	635	548	87
Medium Density Residential	194	186	8
Apartment Residential	72	72	0
General Commercial	188	188	0
Neighborhood Commercial	6	6	0
Mixed Use	35	33	1
Planned Unit Development	2,104	1,897	208
<b>Klamath County</b>			
Low Density Residential	982	613	369
Rural Residential	2	2	0
Suburban Residential	1,534	537	998
Medium Density Residential	525	401	124
High Density Residential	122	88	34
<b>Total</b>	<b>6,400</b>	<b>4,022</b>	<b>1,742</b>

Source: Klamath County, ECONorthwest analysis.

Exhibit 9 shows Klamath Falls' buildable vacant and partially vacant residential land.

# Klamath Falls Buildable Lands Inventory

## Unconstrained Vacant & Partially Vacant Residential Land



## Redevelopment Potential

Redevelopment potential deals primarily with developed land designated for two-family or multifamily residential use (i.e., apartment residential, mixed-use, and high-density residential plan designations) that have single family residences (property class code 101 or 401) and where the ratio of improvement-to-land value is less than 1:1<sup>4</sup>. Not all parcels that meet these criteria for redevelopment potential will be assumed to redevelop during the planning period.

As a starting point, we plotted the distribution of improvement-to-land-value ratios for all residential parcels classified as developed.<sup>5</sup> Exhibit 10 shows the distribution of improvement-to-land values for developed residential land in Klamath Falls in the apartment residential and high-density residential plan designations. It provides a summary of potentially redevelopable parcels by improvement-to-land value ratio in 2018. A ratio of less than 1:1 is a typical, but arbitrary, standard for estimating lands with redevelopment potential.

The results show that few residential parcels in the apartment residential and high-density residential designations have improvement-to-land value ratios of less than 1:1 — 180 parcels totaling 30 acres. Using improvement-to-land value ratios as an indicator of redevelopment potential suggests that some redevelopment potential exists in Klamath Falls at this time. At typical multifamily densities (8.8 dwelling units per net acre in apartment residential and 6.4 dwelling units per net acre in high-density residential), the 30 acres have a capacity for about 224 new dwelling units.

**Exhibit 10. Developed Residential Parcels by Improvement/Land Value Ratio, Klamath Falls UGB, 2018**

Re-Development Potential	Improvement to Land Value Ratio	Apartment Residential		High Density Residential (County)		Total	
		Parcels	Acres	Parcels	Acres	Parcels	Acres
Higher	0-0.24	0	0	5	2	5	2
	0.25-0.49	14	2	21	7	35	9
	0.5-0.74	53	5	15	5	68	10
	0.75-0.99	64	7	8	3	72	10
Lower	1+	554	76	60	21	614	97
	<b>Total</b>	<b>685</b>	<b>90</b>	<b>109</b>	<b>37</b>	<b>794</b>	<b>127</b>

Source: Data from Klamath Co., Analysis by ECONorthwest.

Although Klamath Falls has redevelopment potential, the report does not factor in a redevelopment assumption for calculation of available capacity of vacant land. The reasons for this are that (1) Klamath Falls has a large amount of land capacity on vacant land, (2)

<sup>4</sup> In the context of a buildable lands inventory, we are only interested in redevelopment that increases the density or intensity of use. For example, a demolition of a dilapidated single-family home in an R-1 district for a new single-family residence creates a new housing unit but does not increase the number of residences on the site (or the density). Because we are only interested in development that increases residential density, the definition of potentially redevelopable land for this analysis includes only those developed parcels in designations that allow two-family or multifamily residential development (i.e., apartment residential and high-density residential).

<sup>5</sup> Developed parcels include parcels that are fully developed and the developed portion of partially developed parcels.



development densities (especially in the unincorporated parts of the UGB) are relatively low and would need to increase before substantial redevelopment would be likely, and (3) the relatively low rents and housing costs in Klamath Falls may not support substantial redevelopment over the planning period.

### 3. Historical and Recent Development Trends

---

Analysis of historical development trends in Klamath Falls provides insight into the functioning of the local housing market. The mix of housing types and densities, in particular, are key variables in forecasting the capacity of residential land to accommodate new housing and to forecast future land need. The specific steps are described in Task 2 of the *DLCD Planning for Residential Lands Workbook* as:

1. Determine the time period for which the data will be analyzed.
2. Identify types of housing to address (all needed housing types).
3. Evaluate permit/subdivision data to calculate the actual mix, average actual gross density, and average actual net density of all housing types.

This HNA examines changes in Klamath Falls' housing market from January 2000 to December 2017. We selected this time period because it provides information about Klamath Falls' housing market before and after the national housing market bubble's growth and deflation, in addition to factoring in the recent increase in housing costs. The data about Klamath Falls' housing market during this period was also readily available from sources such as the Census and the County building permit database (which provides information for 2000 onward).

The HNA presents information about residential development by housing type. There are multiple ways that housing types can be grouped. For example, they can be grouped by:

1. Structure type (e.g., single-family detached, apartments, etc.).
2. Tenure (e.g., distinguishing unit type by owner or renter units).
3. Housing affordability (e.g., subsidized housing or units affordable at given income levels).
4. Some combination of these categories.

For the purposes of this study, we grouped housing types based on: (1) whether the structure is stand-alone or attached to another structure and (2) the number of dwelling units in each structure. The housing types used in this analysis are consistent with needed housing types as defined in ORS 197.303:<sup>6</sup>

- **Single-family detached** includes single-family detached units, manufactured homes on lots and in mobile home parks, and accessory dwelling units.

---

<sup>6</sup> ORS 197.303 defines needed housing as "all housing on land zoned for residential use or mixed residential and commercial use that is determined to meet the need shown for housing within an Urban Growth Boundary at price ranges and rent levels that are affordable to households within the county with a variety of incomes."

- **Single-family attached** refers to all structures with a common wall where each dwelling unit occupies a separate lot, such as row houses or townhouses.
- **Multifamily** refers to all attached structures (e.g., duplexes, triplexes, quadplexes, and structures with five or more units) other than single-family detached units, manufactured units, or single-family attached units.

In Klamath Falls, government assisted housing (ORS 197.303[b]) and housing for farmworkers (ORS 197.303[e]) can be any of the housing types listed above. Analysis within this report discusses housing affordability at a variety of incomes, as required in ORS 197.303.

## Data Used in this Analysis

Throughout this analysis (including the subsequent Chapter 4), we used data from multiple sources, choosing data from well-recognized and reliable data sources. One of the key sources for housing and household data is the U.S. Census. This report primarily uses data from two Census sources:

- The **Decennial Census**, which is completed every ten years and is a survey of all households in the U.S. The Decennial Census is considered the best available data for information such as demographics (e.g., number of people, age distribution, or ethnic or racial composition), household characteristics (e.g., household size and composition), and housing occupancy characteristics. As of 2010, the Decennial Census does not collect more detailed household information, such as income, housing costs, housing characteristics, and other important household information. Decennial Census data is available for 2000 and 2010.
- The **American Community Survey (ACS)** is a yearly sample of households in the U.S. From 2012 to 2016 and 2013 to 2017, the ACS sampled an average of 3.5 million households per year, or about 2.6% and 2.9% of the households in the nation. The ACS collects detailed information about households, including demographics (e.g., number of people, age distribution, ethnic or racial composition, country of origin, language spoken at home, and educational attainment), household characteristics (e.g., household size and composition), housing characteristics (e.g., type of housing unit, year unit was built, and number of bedrooms), housing costs (e.g., rent, mortgage, utility, and insurance), housing value, income, and other characteristics.
- The **U.S. Department of Housing and Urban Development SOCDS** database, which includes information on permits issued within Klamath County.
- **Zillow and Redfin**, which are online platforms providing real estate and property owner data. We use these sources to collect housing sale price data in aggregate and by property.

This report uses data from the 2012–2016 and 2013–2017 ACS for Klamath Falls (City Limits).<sup>7</sup> Where information is available and relevant, we report information from the 2000 and 2010 Decennial Census. Among other data points, this report includes population, income, and housing price data from the Oregon Office of Economic Analysis, the Oregon Bureau of Labor and Industries, the U.S. Department of Housing and Urban Development, Redfin, and Zillow. It also uses the Oregon Housing and Community Services Department’s affordable housing inventory and Oregon’s Manufactured Dwelling Park Inventory.

The foundation of the Housing Needs Analysis is the population forecast for Klamath Falls from the Oregon Population Forecast Program. The forecast is prepared by the Portland State University Population Research Center.

It is worth commenting on the methods used for the American Community Survey (ACS).<sup>8</sup> The ACS is a national survey that uses continuous measurement methods. It uses a sample of about 3.54 million households to produce annually updated estimates for the same small areas (census tracts and block groups) formerly surveyed via the Decennial Census long-form sample. It is also important to keep in mind that all ACS data are estimates that are subject to sample variability. This variability is referred to as “sampling error” and is expressed as a band or “margin of error” (MOE) around the estimate.

This report uses Census and ACS data because, despite the inherent methodological limits, they represent the most thorough and accurate data available to assess housing needs. We consider these limitations in making interpretations of the data and have strived not to draw conclusions beyond the quality of the data.

## Trends in Housing Mix

This section provides an overview of changes in the mix of housing types in Klamath Falls and compares Klamath Falls to Klamath County and to Oregon. These trends demonstrate the types of housing developed in Klamath Falls historically. Unless otherwise noted, this chapter uses data from the 2000 and 2010 Decennial Census and the 2013–2017 ACS five-year estimates.

This section shows the following trends in housing mix in Klamath Falls:

- **A majority of Klamath Falls’ housing stock is single-family detached housing units.** Sixty-eight percent of Klamath Falls’ housing stock is single-family detached, 25% is multifamily (e.g., townhouses), and 7% is single-family attached.

---

<sup>7</sup> The U.S. Census provides information about Klamath Falls’ population and housing market within Klamath Falls’ City limits (rather than within its Urban Growth Boundary). We make this distinction in Exhibit titles and as appropriate in the report’s narrative. This distinction is important in Klamath Falls, as more than half of Klamath Falls’ population falls outside the City Limits but inside Klamath Falls Urban Growth Boundary (technically unincorporated Klamath Falls).

<sup>8</sup> A thorough description of the ACS can be found in the Census Bureau’s publication “What Local Governments Need to Know.” <https://www.census.gov/library/publications/2009/acs/state-and-local.html>

- Since 2000, the share of Klamath Falls' housing mix has shifted away from **multifamily housing**. Klamath Falls' housing stock grew by about 14% (about 1,235 new units) between 2000 and the 2013–2017 period. In this time, Klamath Falls saw an increase in the share of single-family attached housing.
- **Much of the multifamily housing in Klamath County is located in Klamath Falls.** Sixty-seven percent of housing in structures with two or more units in the County is located in Klamath Falls.
- **Single-family detached housing accounted for the majority of new housing growth in Klamath County between 2000 and 2017.** Ninety percent of new housing permitted between 2000 and 2017 was single-family detached housing.

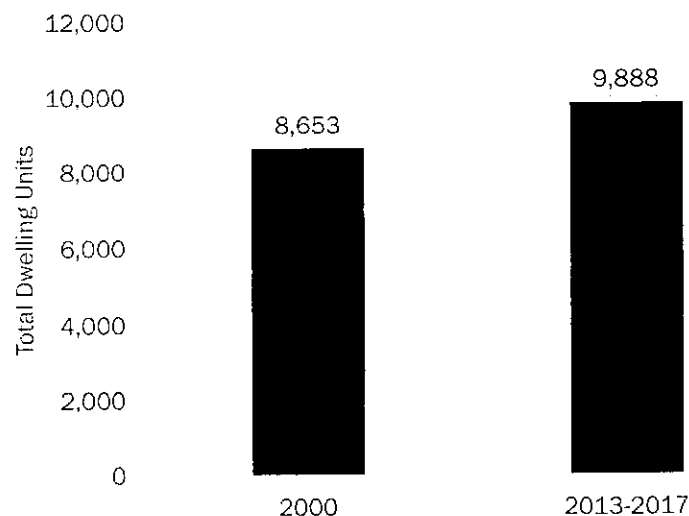
## Housing Mix

The total number of dwelling units in Klamath Falls increased by **14%** from 2000 to 2013–2017.

Klamath Falls added 1,235 units since 2000.

**Exhibit 11. Total Dwelling Units, Klamath Falls (City Limits), 2000 and 2013–2017**

Source: U.S. Census Bureau, 2000 Decennial Census, SF3 Table H030, and 2013–2017 ACS Table B25024.

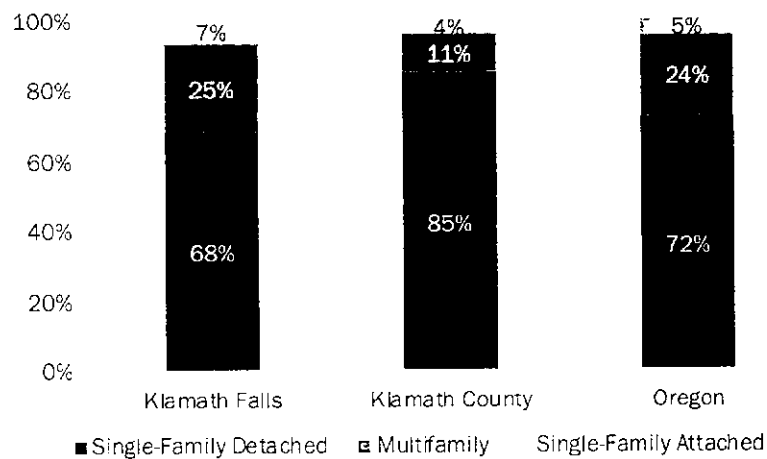


Almost 70% of Klamath Falls' housing stock is single-family detached.

Klamath Falls has a larger share of multifamily housing than Klamath County and a similar share to Oregon.

**Exhibit 12. Housing Mix, Klamath Falls (City Limits), Klamath County, and Oregon, 2013–2017**

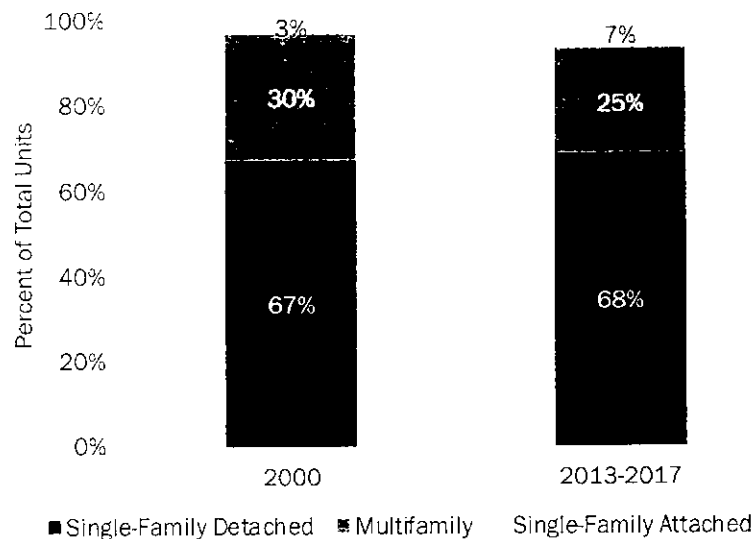
Source: U.S. Census Bureau, 2013–2017 ACS Table B25024.



From 2000 to 2013–2017, the share of multifamily housing in Klamath Falls decreased by 5%. In the same time, single-family detached housing stayed about the same and single-family attached housing increased slightly.

**Exhibit 13. Change in Housing Mix, Klamath Falls (City Limits), 2000 and 2013–2017**

Source: U.S. Census Bureau, 2000 Decennial Census, SF3 Table H030, and 2013–2017 ACS Table B25024.



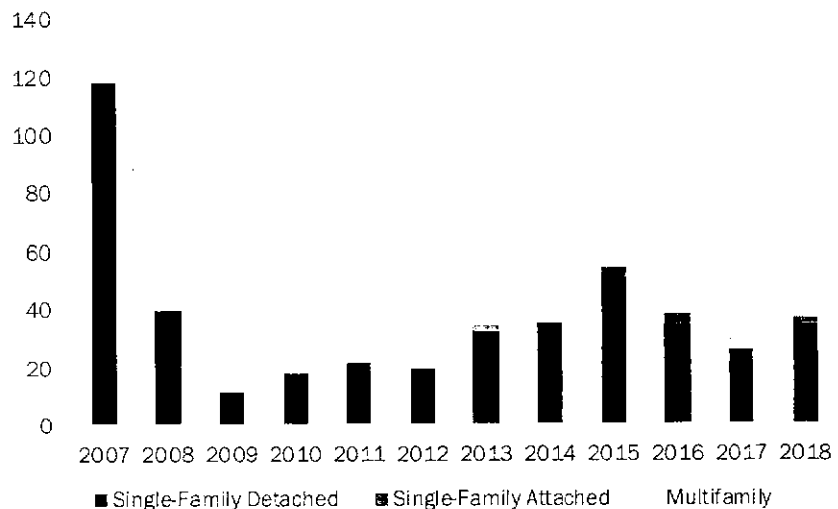
## Housing Development

Between 2007 and 2018, Klamath Falls permitted **509 dwelling units**.

Of these units, 84% were single-family detached units, 3% were single-family attached units, and 13% were multifamily units).

**Exhibit 14. New Residential Dwelling Units Permitted, Klamath Falls UGB, 2007 to 2018**

Source: Klamath County.



About 36% of Klamath Falls housing stock was built prior to 1950. About 1% of Klamath Falls housing stock was built in 2010 or later.

**Exhibit 15. Housing Structure by Year Structure was Built, Klamath Falls (City Limits), 1950 and earlier to 2010 and Later**

Source: U.S. Census Bureau, 2013–2017 5-year American Community Survey, Table B25034.

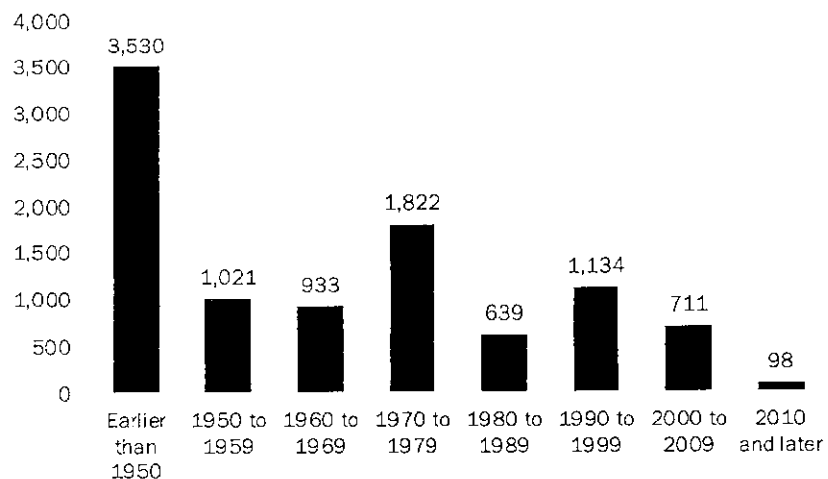
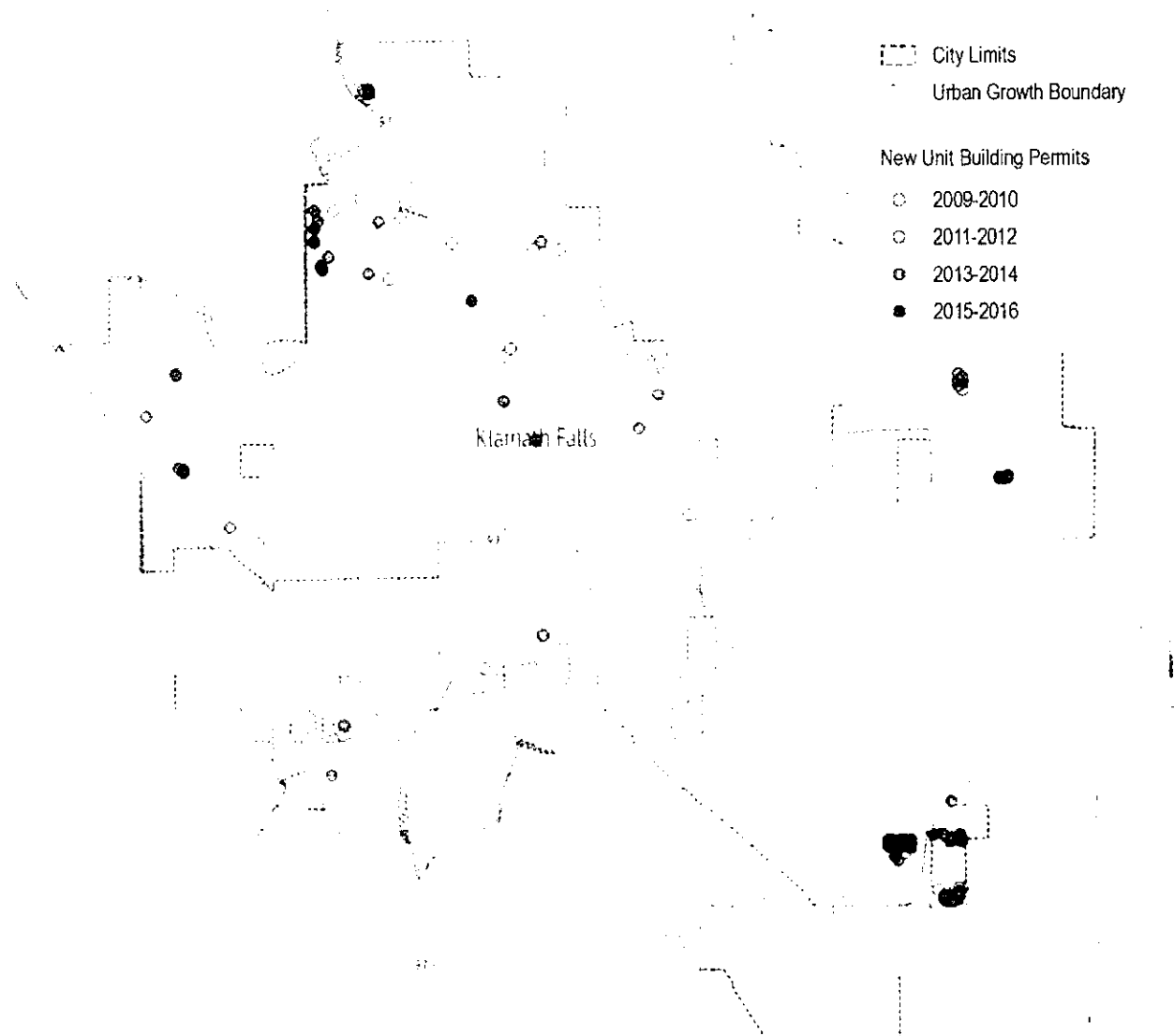


Exhibit 16 shows the location of building permits issued in Klamath Falls Urban Growth Boundary between 2009 and 2016.

#### Exhibit 16. Housing Permits by Location, Klamath Falls, 2009–2016

Source: Leland Consulting Group (2016), Klamath Falls Downtown Housing Analysis. Data Source: City of Klamath Falls (note: 2016 data is preliminary).





## Trends in Housing Density

Housing density is the density of residential structures by structure type, expressed in dwelling units per net or gross acre.<sup>9</sup> The U.S. Census does not track residential development density. Thus, this study analyzes housing density based on Klamath Falls' permit database for development between 2007 and 2018.

Between 2007 and 2018, Klamath Falls permitted 509 new dwelling units. Of the 509 new units, 427 units were single-family detached (84%), 14 were single-family attached (3%), and 68 units were multifamily (13%). During this time, housing in Klamath Falls (City Limits) developed at an average net density of 5.2 dwelling units per net acre. Housing in Klamath Falls (area between City Limits and UGB) developed at an average net density of 2.0 dwelling units per net acre. Exhibit 17 shows average net residential density by structure type for the historical analysis period (2007-2018). In Klamath Falls City Limits, single-family detached housing developed at 4.5 dwelling units per net acre, single-family attached housing developed at 6.2 dwelling units per net acre, and multifamily housing developed at 9.4 dwelling units per net acre.

### Exhibit 17. Net Density by Structure Type and Plan Designation, Klamath Falls, 2007–2018

Source: City of Klamath Falls Permit Database. Note: UGB is Urban Growth Boundary).

	Single-Family Detached			Single-Family Attached			Multifamily			Total, Combined		
	Dwellin g Units	Acres	Net Density	Dwellin g Units	Acres	Net Density	Dwellin g Units	Acres	Net Density	Units	Acres	Net Density
City of Klamath Falls (City Limits)												
Single-family Residential	145	32	4.6	-	-	-	-	-	-	145	32	4.6
Medium Density Residential	45	8	5.7	12	2	5.9	18	2	11.4	75	9	7.9
Apartment Residential							43	5	8.8	43	5	8.8
Planned Unit Development	57	16	3.6	2	0	8.0	-	-	-	59	16	3.7
Sub-total	247	55	4.5	14	2	6.2	61	6	9.4	322	62	5.2
Klamath County (Area between City Limits & UGB)												
Suburban Residential	58	41	1.4	-	-	-	-	-	-	58	41	1.4
Low Density Residential	63	23	2.8	-	-	-	-	-	-	63	23	2.8
Medium Density Residential	58	30	2.0	-	-	-	4	1	3.4	62	31	2.0
High Density Residential	1	0	2.7	-	-	-	3	0	6.4	4	1	4.7
Sub-total	180	93	1.9	-	-	-	7	2	4.2	187	95	2.0
<b>TOTAL</b>	<b>427</b>	<b>149</b>	<b>2.9</b>	<b>14</b>	<b>2</b>	<b>6.2</b>	<b>68</b>	<b>8</b>	<b>8.4</b>	<b>509</b>	<b>157</b>	<b>3.2</b>

<sup>9</sup> OAR 660-024-0010(6) uses the following definition of net buildable acre. "Net Buildable Acre" consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads. While the administrative rule does not include a definition of a gross buildable acre, using the definition above, a gross buildable acre will include areas used for rights-of-way for streets and roads. Areas used for rights-of-way are considered unbuildable.

## Trends in Tenure

Housing tenure describes whether a dwelling is owner- or renter-occupied. This section shows:

- **Homeownership rates in Klamath Falls City limits declined slightly between 2000 and 2012–2016.** In 2000, 49% of Klamath Falls City households were homeowners. This dropped to 44% in 2012–2016.
- **Nearly all Klamath Falls homeowners (97%) live in single-family detached housing, while half of renters (50%) live in single-family detached housing.**

The implications for the forecast of new housing are: (1) opportunities for rental housing in Klamath Falls are limited, given that more than half of renters live in multifamily housing and limited multifamily housing has been built in Klamath Falls since 2007 (13% of new dwelling units between 2007 and 2018 were in multifamily dwellings), and (2) there may be opportunities to encourage development of a wider variety of affordable attached housing types for homeownership, such as townhomes.

The homeownership rate in Klamath Falls has declined by 5% since 2000.

### Exhibit 18. Tenure, Occupied Units, Klamath Falls (City Limits), 2000, 2010, 2012–2016

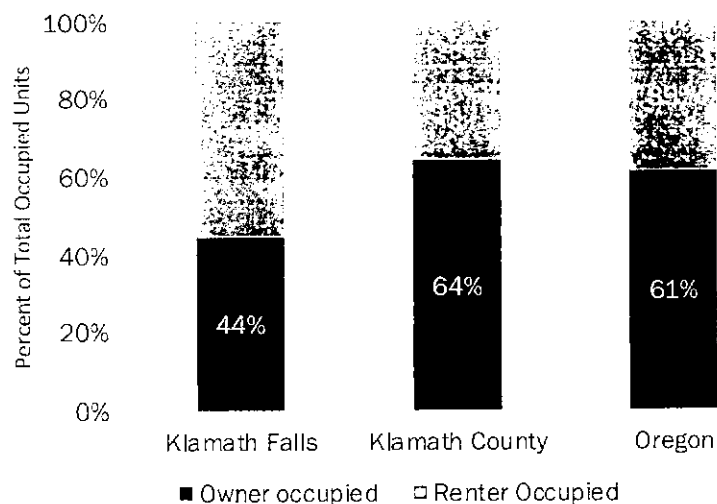
Source: U.S. Census Bureau, 2000 Decennial Census SF1 Table H004, 2010 Decennial Census SF1 Table H4, 2012–2016 ACS Table B25003.



Over half of Klamath Falls City households are renters (56%). Klamath Falls has a larger share of renters than Klamath County and Oregon.

**Exhibit 19. Tenure, Occupied Units, Klamath Falls (City Limits), Klamath County, and Oregon, 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS Table B24003.

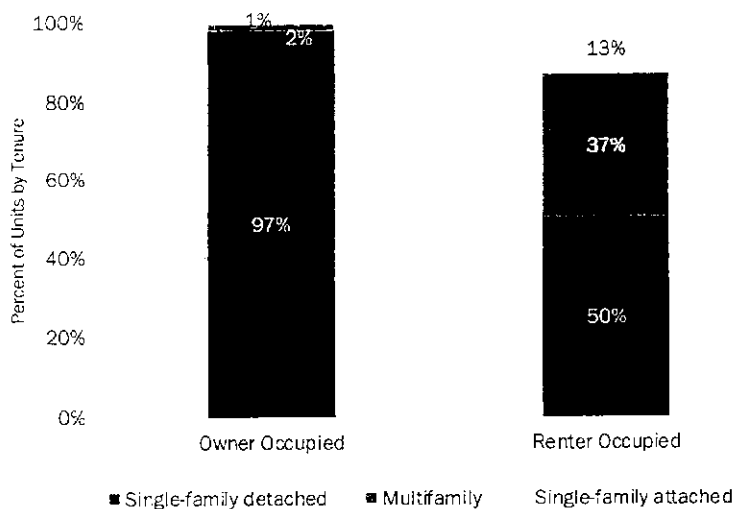


Nearly all homeowners (97%) and half of renters (50%) live in single-family detached housing.

Thirteen percent of renters live in single-family attached housing (such as townhomes).

**Exhibit 20. Housing Units by Type and Tenure, Klamath Falls (City Limits), 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS Table B25032.



## Vacancy Rates

Housing vacancy is a measure of housing that is available to prospective renters and buyers. It is also a measure of unutilized housing stock. The Census defines vacancy as "unoccupied housing units "...determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only." The 2010 Census identified vacancy through an enumeration, separate from (but related to) the survey of households. Enumerators are obtained using information from property owners and managers, neighbors, rental agents, and others.

According to the 2013–2017 Census, the vacancy rate in Klamath Falls (City Limits) was 10.1%, compared to 18.4% for Klamath County and 9.3% for Oregon.

## Government-Assisted Housing

Governmental agencies and nonprofit organizations offer a range of housing assistance to low- and moderate-income households in renting or purchasing a home. There are 22 government-assisted housing developments in the Klamath Falls UGB:

### Exhibit 21. Government-Assisted Housing, Klamath Falls UGB, 2018

Source: Oregon Housing and Community Services. (Jan. 2018). Affordable Housing Inventory in Oregon. Retrieved from: <http://www.oregon.gov/ohcs/Pages/research-multifamily-housing-inventory-data.aspx>.

Development Name	Total Units	Total Affordable Units	Population Served
1105 Alameda	1	1	Family
117 Trinity	8	8	Family
1445 Avalon	14	14	Family
1717 Fargo	12	12	Family
2527 Crest	4	4	Family
4071 Adelaide	4	4	Family
729 California	1	1	Family
763 California	1	1	Family
Applegate Trail	50	49	Family
Country Village Apartments	24	24	Agricultural Workers, Family
Crestview Commons	64	63	Senior, Family
Harvest House Supportive Housing	5	5	Unknown
Haven	8	8	Family
High Valley Estates	36	36	Family
Iris Glen Townhomes	37	37	Family
Klamath View Retirement Center	40	40	Senior
Lake Park Towers	39	39	Senior
Luther Square Retirement Village	30	30	Senior
Sky Meadows	37	37	Unknown
Trails View Apartments	8	8	Homeless
Union Station	9	9	Unknown
Victory Commons	10	10	Veteran
Total	442	440	

## Manufactured Homes

Manufactured homes provide a source of affordable housing in Klamath Falls. They provide a form of homeownership that can be made available to low- and moderate-income households. Cities are required to plan for manufactured homes—both on lots and in parks (ORS 197.475-492).

Generally, manufactured homes in parks are owned by the occupants who pay rent for the space. Monthly housing costs are typically lower for a homeowner in a manufactured home park for several reasons, including the fact that property taxes levied on the value of the land are paid by the property owner, rather than the manufactured homeowner. The value of the manufactured home also generally does not appreciate in the way a conventional home would. Manufactured homeowners in parks are however subject to the mercy of the property owner in terms of rent rates and increases. It is generally not within the means of a manufactured homeowner to relocate to another manufactured home to escape rent increases. Homeowners living in a park is desirable to some because it can provide a more secure community with on-site managers and amenities, such as laundry and recreation facilities.

OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned and zoned (or generally used) for commercial, industrial, or high-density residential development. As of 2018, the Klamath Falls UGB had 31 manufactured housing parks with 1,337 total spaces.

Oregon's Manufactured Dwelling Park Inventory identified 31 manufactured home parks within Klamath Falls' UGB. Within these parks, there are a total of 1,337 spaces, 147 of which were vacant as of October 2018.

## Exhibit 22. Inventory of Mobile/Manufactured Home Parks, Klamath Falls UGB, 2018

Source: Oregon Manufactured Dwelling Park Directory.

Name	Location	Type	Total Spaces	Vacant Spaces	Comprehensive Plan Designation
Aspen Mobile Village	3950 Homedale Rd	Family	82	2	Suburban Residential
Alpine Meadows Mobile Estate	4200 Summers Lane	55+	90	-	Medium Density Residential
Altamont Gardens	2625 Altamont Drive	Family	20	10	General Commercial
Altamont Mobile Estates	3333 Anderson Avenue	Family	59	-	Suburban Residential
Arrowhead Mobile Home Lodge	3340 Alva Avenue	Family	31	1	High Density Residential
Bartlett Village Trailer Park	4420 Bartlett Avenue	Family	19	3	Medium Density Residential
Bristol Mobile Home Park	3113 Bristol Avenue	Family	56	2	Medium Density Residential
Campus Green	3611 Hwy 97N	Family	70	36	Apartment Residential
Crest Street Manor	3415 Crest Street	Family	36	1	Suburban Residential
EZ Living Mobile Home Park	1340 Madison Street	Family	14	3	Suburban Residential
Elmwood Mobile Home Park	3235 Bristol Avenue	55+	13	-	Suburban Residential
Emerald Estates	4751 Bellm Drive	Family	100	8	Medium Density Residential
Fair Acres Mobile Home Park	1622 Madison Street	55+	14	1	Suburban Residential
Fantasy MHP	5001 Miller Avenue	Family	5	-	Suburban Residential
Greensprings Mobile Home Park	2055 Greensprings Drive	Family	33	4	Medium Density Residential
Klamath Mobile Estates	5861 S 6th Street	Family	19	3	General Commercial
Klamath View Estates	1163 Greensprings Drive	Family	61	9	Low Density Residential
Madison Village Mobile Home Communi	1505 Madison Street	Family	83	-	Suburban Residential
Mobililia East Mobile Home	5428-5498 Shasta Way	55+	15	1	Suburban Residential
Plaza Gardens MHP	3333 Shasta Way	Family	53	8	Recreational Commerical
Plaza Manor	2425 Summers Lane	Family	41	3	Suburban Residential
Shasta Glen	4647 Winter Avenue	Family	93	30	General Commercial
Shasta Mobile Estates	5209-5239 Shasta Way	55+	10	1	Suburban Residential
South Mobile Village	2934 Summers Lane	55+	28	2	Medium Density Residential
Summers Lane Estates	3500 Summers Lane	55+	50	1	Medium Density Residential
Town & Country Mobile Estates	4741 S 6th Street	Family	47	3	Suburban Residential
Venture Square Mobile Home Park	3646 Summers Lane	Family	14	-	Suburban Residential
Villa West Mobile Home Estates	2241 Grensprings Drive	Family	75	7	Medium Density Residential
Willow Manor	1900 Burns Street	Family	21	5	High Density Residential
Wiseman S Mobile Home & RV Park	6800 S 6th Street	Family	73	2	General Commercial
Woodland Mobile Home Park - Klamath	5602 Denver Avenue	55+	12	1	Suburban Residential
Total			1,337	147	

## 4. Demographic and Other Factors Affecting Residential Development in Klamath Falls

---

Demographic trends are important for a thorough understanding of the dynamics of the Klamath Falls housing market. Klamath Falls exists in a regional economy and trends in the region impact the local housing market. This chapter documents demographic, socioeconomic, and other trends relevant to Klamath Falls at the national, state, and regional levels.

Demographic trends provide a context for growth in a region; factors such as age, income, migration, and other trends show how communities have grown and how they will shape future growth. To provide context, we compare Klamath Falls to Klamath County and Oregon. Characteristics such as age and ethnicity are indicators of how the population has grown in the past and provide insight into factors that may affect future growth.

A recommended approach to conducting a Housing Needs Analysis is described in *Planning for Residential Growth: A Workbook for Oregon's Urban Areas*, the Department of Land Conservation and Development's guidebook on local housing needs studies. As described in the Workbook, the specific steps in the Housing Needs Analysis are:

1. Project the number of new housing units needed in the next 20 years.
2. Identify relevant national, state, and local demographic and economic trends and factors that may affect the 20-year projection of structure type mix.
3. Describe the demographic characteristics of the population and, if possible, the housing trends that relate to demand for different types of housing.
4. Determine the types of housing that are likely to be affordable to the projected households based on household income.
5. Determine the needed housing mix and density ranges for each plan designation and the average needed net density for all structure types.
6. Estimate the number of additional needed units by structure type.

This chapter presents data to address steps 2, 3, and 4 in this list. Chapter 5 presents data to address steps 1, 5, and 6 in this list.

# Demographic and Socioeconomic Factors Affecting Housing Choice<sup>10</sup>

Analysts typically describe housing demand as the *preferences* for different types of housing (e.g., single-family detached or apartment), and the *ability to pay* for that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing; in other words, income or wealth).

Many demographic and socioeconomic variables affect housing choice. However, the literature about housing markets finds that age of the household, size of the household, and income are most strongly correlated with housing choice.

- **Age of household** is the age of the person identified (in the Census) as the head of household. Households make different housing choices at different stages of life. This chapter discusses generational trends, such as housing preferences of Baby Boomers, people born from about 1946 to 1964, and Millennials, people born from about 1980 to 2000.
- **Size of household** is the number of people living in the household. Younger and older people are more likely to live in single-person households. People in their middle years are more likely to live in multiple person households (often with children).
- **Income** is the household income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and the type of household tenure (e.g., rent or own).

This chapter focuses on these factors, presenting data that suggests how changes to these factors may affect housing need in Klamath Falls over the next 20 years.

---

<sup>10</sup> The research in this chapter is based on numerous articles and sources of information about housing, including:

- American Planning Association. "Investing in Place: Two Generations' View on the Future of Communities," 2014.
- D. Myers and S. Ryu. "Aging Baby Boomers and the Generational Housing Bubble." *Journal of the American Planning Association*, Winter 2008.
- Davis, Hibbits & Midghal Research. "Metro Residential Preference Survey." May 2014.
- L. Lachman and D. Brett. "Generation Y: America's New Housing Wave." Urban Land Institute, 2010.
- George Galster. "People Versus Place, People and Place, or More? New Directions for Housing Policy." *Housing Policy Debate*, 2017.
- Herbert, Christopher and Hrabchak Molinsky. "Meeting the Housing Needs of an Aging Population," 2015.
- J. McIlwain. *Housing in America: The Next Decade*. Urban Land Institute, 2010.
- Schuetz, Jenny. Who is the new face of American homeownership? Brookings, 2017.
- Transportation for America. "Access to Public Transportation a Top Criterion for Millennials When Deciding Where to Live, New Survey Shows," 2014.



## National Trends<sup>11</sup>

This brief summary on national housing trends builds on previous work by ECONorthwest, the Urban Land Institute (ULI) reports, and conclusions from the *State of the Nation's Housing 2018* report from the Joint Center for Housing Studies of Harvard University. The Harvard report summarizes the national housing outlook as follows:

By many metrics, the housing market is on sound footing. With the economy near full employment, household incomes are increasing and boosting housing demand. On the supply side, a decade of historically low single-family construction has left room for expansion of this important sector of the economy. Although multifamily construction appears to be slowing, vacancy rates are still low enough to support additional rentals. In fact, to the extent that growth in supply outpaces demand, a slowdown in rent growth should help to ease affordability concerns.

However, challenges to a strong domestic housing market remain. High mortgage rates make housing unaffordable for many Americans, especially younger Americans. In addition to rising housing costs, wages have also failed to keep pace, worsening affordability pressures. Single-family and multifamily housing supplies remain tight, which compound affordability issues. The *State of the Nation's Housing* report emphasizes the importance of government assistance and intervention to keep housing affordable moving forward. Several challenges and trends shaping the housing market are summarized below:

- **Moderate new construction and tight housing supply, particularly for affordable housing.** New construction experienced its eighth year of gains in 2017 with 1.2 million units added to the national stock. Estimates for multifamily starts range between 350,000 and 400,000 (2017). The supply of homes for sale in 2017 averaged 3.9 months, below what is considered balanced (six months), and lower-cost homes are considered especially scarce. The *State of the Nation's Housing* report cites lack of skilled labor, higher building costs, scarce developable land, and the cost of local zoning and regulation as impediments to new construction.
- **Demand shift from renting to owning.** After years of decline, the national homeownership rate increased from a 50-year low of 62.9% in 2016 (Q2) to 63.7% in 2017 (Q2). Trends suggest homeownership among householders aged 65 and older have remained strong and homeownership rates among young adults have begun stabilizing after years of decline.
- **Housing affordability.** In 2016, almost one-third of American households spent more than 30% of their income on housing. This figure is down from the prior year, bolstered by a considerable drop in the owner share of cost-burdened households. Low-income households face an especially dire hurdle to afford housing. With such

---

<sup>11</sup> These trends are based on information from: (1) The Joint Center for Housing Studies of Harvard University's publication *The State of the Nation's Housing 2018*, (2) Urban Land Institute, "2018 Emerging Trends in Real Estate," and (3) the U.S. Census.

a large share of households exceeding the traditional standards for affordability, policymakers are focusing efforts on the severely cost burdened. Among those earning less than \$15,000, more than 70% of households paid more than half of their income on housing.

- **Long-term growth and housing demand.** The Joint Center for Housing Studies forecasts that nationally, demand for new homes could total as many as 12 million units between 2017 and 2027. Much of the demand will come from Baby Boomers, Millennials,<sup>12</sup> and immigrants. The Urban Land Institute cites the trouble of overbuilding in the luxury sector while demand is in mid-priced single-family houses affordable to a larger buyer pool.
- **Growth in rehabilitation market.**<sup>13</sup> Aging housing stock and poor housing conditions are growing concerns for jurisdictions across the United States. With almost 80% of the nation's housing stock at least 20 years old (40% at least 50 years old), Americans are spending in excess of \$400 billion per year on residential renovations and repairs. As housing rehabilitation becomes the go-to solution to address housing conditions, the home remodeling market has grown more than 50% since the recession ended—generating 2.2% of national economic activity (in 2017).

Despite trends suggesting growth in the rehabilitation market, rising construction costs and complex regulatory requirements pose barriers to rehabilitation. Lower-income households or households on fixed incomes may defer maintenance for years due to limited financial means and escalating rehabilitation costs. At a certain point, the cost of improvements may outweigh the value of the structure, which may necessitate new responses such as demolition or redevelopment.

- **Changes in housing preference.** Housing preference will be affected by changes in demographics; most notably, the aging of Baby Boomers, housing demand from Millennials, and growth of immigrants.
  - *Baby Boomers.* The housing market will be affected by the continued aging of Baby Boomers, the oldest of whom were in their seventies in 2018 and the youngest of whom were in their fifties in 2018. Baby Boomers' housing choices will affect housing preference and homeownership. Addressing housing needs for those moving through their sixties, seventies, and eighties (and beyond) will require a range of housing opportunities. For example, the "82-to-86-year-old cohort dominates the assisted living and more intensive care sector" while new

---

<sup>12</sup> According to the Pew Research Center, Millennials were born between the years of 1981 to 1996 (inclusive). Read more about generations and their definitions here: <http://www.pewresearch.org/fact-tank/2018/03/01/defining-generations-where-millennials-end-and-post-millennials-begin/>.

To generalize, and because there is no official generation of Millennial, we define this cohort as individuals born between 1980 and 2000.

<sup>13</sup> These findings are copied from: Joint Center for Housing Studies of Harvard University. *Improving America's Housing 2019*. [https://www.jchs.harvard.edu/sites/default/files/Harvard\\_JCHS\\_Improving\\_Americas\\_Housing\\_2019.pdf](https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Improving_Americas_Housing_2019.pdf)

or near-retirees may prefer aging in place or active, age-targeted communities.<sup>14</sup> Characteristics like immigration and ethnicity play a role too, as “older Asians and Hispanics are more likely than whites or blacks to live in multigenerational households.”<sup>15</sup> Senior households earning different incomes may make distinctive housing choices. For instance, low-income seniors may not have the financial resources to live out their years in a nursing home and may instead choose to downsize to smaller, more affordable units. Seniors living in close proximity to relatives may also choose to live in multigenerational households.

- Research shows that “older people in western countries prefer to live in their own familiar environment as long as possible,” but aging in place does not only mean growing old in their own homes.<sup>16</sup> A broader definition exists which explains that aging in place also means “remaining in the current community and living in the residence of one’s choice.”<sup>17</sup> Therefore, some Boomers are likely to stay in their home as long as they are able, and some will prefer to move into other housing products, such as multifamily housing or age-restricted housing developments, before they move into to a dependent living facility or into a familial home. Moreover, the “aging of the U.S. population, [including] the continued growth in the percentage of single-person households, and the demand for a wider range of housing choices in communities across the country is fueling interest in new forms of residential development, including tiny houses.”<sup>18</sup>
- *Millennials*. Over the last several decades, young adults have increasingly lived in multigenerational housing—and increasingly more so than older demographics.<sup>19</sup> Despite this trend, as Millennials age over the next 20 years, they will be forming households and families. In 2018, the oldest Millennials were in their late 30s and the youngest were in their late teens. By 2040, Millennials will be between 40 and 60 years old.

At the beginning of the 2007-2009 recession Millennials only started forming their own households. Today, Millennials are driving much of the growth in new households, albeit at slower rates than previous generations. From 2012 to 2017, Millennials formed an average of 2.1 million net new household each year. Twenty-six percent of Millennials aged 25 to 34 lived with their parents (or other relatives) in 2017.

---

<sup>14</sup> Urban Land Institute. *Emerging Trends in Real Estate, United States and Canada 2018*.

<sup>15</sup> Herbert, Christopher and Hrabchak Molinsky. “Meeting the Housing Needs of an Aging Population,” 2015. [https://shelterforce.org/2015/05/30/meeting\\_the\\_housing\\_needs\\_of\\_an\\_aging\\_population/](https://shelterforce.org/2015/05/30/meeting_the_housing_needs_of_an_aging_population/)

<sup>16</sup> Vanleerberghe, Patricia, et al. “The Quality of Life of Older People Aging in Place: A Literature Review,” 2017.

<sup>17</sup> Ibid.

<sup>18</sup> American Planning Association. “Making Space for Tiny Houses, Quick Notes.”

<sup>19</sup> According to the Pew Research Center, in 1980, just 11% of adults aged 25 to 34 lived in a multigenerational family household, and by 2008, this had increased to 20% (a change of 82%). Comparatively, 17% of adults aged 65 and older lived in a multigenerational family household, and by 2008, this had increased to 20% (a change of 18%).

Millennials' average wealth may remain far below Boomers and Gen Xers, and student loan debt will continue to hinder consumer behavior and affect retirement savings. As of 2015, Millennials comprised 28% of active home buyers, while Gen Xers comprised 32% and Boomers 31%.<sup>20</sup> That said, "Over the next 15 years, nearly \$24 trillion will be transferred in bequests," presenting new opportunities for Millennials (as well as Gen Xers).

- *Immigrants.* Research on foreign-born populations find that immigrants, more than native-born populations, prefer to live in multigenerational housing. Still, immigration and increased homeownership among minorities could also play a key role in accelerating household growth over the next 10 years. Current Population Survey estimates indicate that the number of foreign-born households rose by nearly 400,000 annually between 2001 and 2007, and they accounted for nearly 30% of overall household growth. Beginning in 2008, the influx of immigrants was staunch by the effects of the Great Recession. After a period of declines, however, foreign born populations are again contributing to household growth. The Census Bureau's estimates of net immigration in 2017–2018 indicate that 1.2 million immigrants moved to the U.S. from abroad, down from 1.3 million immigrants in 2016–2017 but higher than the average annual pace of 850,000 during the period of 2009–2011. However, if recent Federal policies about immigration are successful, growth in undocumented and documented immigration could slow and cause a drag on household growth in the coming years.
- *Diversity.* The growing diversity of American households will have a large impact on the domestic housing markets. Over the coming decade, minorities will make up a larger share of young households and constitute an important source of demand for both rental housing and small homes. The growing gap in homeownership rates between whites and blacks, as well as the larger share of minority households that are cost burdened, warrants consideration. Since 1994, the difference in homeownership rates between whites and blacks rose by 1.9 percentage points to 29% in 2017. Alternatively, the gap between white and Latino homeownership rates, and white and Asian homeownership rates, decreased during this period—but they remained sizable at 26.1 and 16.5 percentage points, respectively. Although homeownership rates are increasing for some minorities, large shares of minority households are more likely to live in high-cost metro areas. This, combined with lower incomes than white households, leads to higher rates of cost burden for minorities—47% for blacks, 44% for Latino, 37% for Asians/others, and 28% for whites in 2015.
- *Changes in housing characteristics.* The U.S. Census Bureau's 2017 *Characteristics of New Housing* report presents data that show trends in the characteristics of new

---

<sup>20</sup> Srinivas, Val and Goradia, Urval (2015). The future of wealth in the United States, Deloitte Insights. <https://www2.deloitte.com/insights/us/en/industry/investment-management/us-generational-wealth-trends.html>

housing for the nation, state, and local areas. Several long-term trends in the characteristics of housing are evident from the *New Housing* report:<sup>21</sup>

- *Larger single-family units on smaller lots.* Between 1999 and 2017, the median size of new single-family dwellings increased by 20% nationally, (from 2,028 sq. ft. to 2,426 sq. ft.), and 20% in the western region (from 2,001 sq. ft. to 2,398 sq. ft.). Moreover, the percentage of new units smaller than 1,400 sq. ft. nationally, decreased by more than half, from 15% in 1999 to 6% in 2017. The percentage of units greater than 3,000 sq. ft. increased from 17% in 1999 to 25% of new single-family homes completed in 2017. In addition to larger homes, a move toward smaller lot sizes are seen nationally. Between 2009 and 2017, the percentage of lots less than 7,000 sq. ft. increased from 25% to 31% of lots.
- *Larger multifamily units.* Between 1999 and 2017, the median size of new multifamily dwelling units increased by 5.3% nationally and 2.4% in the western region. Nationally, the percentage of new multifamily units with more than 1,200 sq. ft. increased from 28% in 1999 to 33% in 2017 and increased from 25% to 28% in the western region.
- *Household amenities.* Across the U.S. since 2013, an increasing number of new units had air-conditioning (fluctuating year by year at over 90% for both new single-family and multifamily units). In 2000, 93% of new single-family houses had two or more bathrooms, compared to 97% in 2017. The share of new multifamily units with two or more bathrooms decreased from 55% of new multifamily units to 45%. As of 2017, 65% of new single-family houses in the U.S. had one or more garages (from 69% in 2000).
- *Shared amenities.* Housing with shared amenities are growing in popularity, as it may improve space efficiencies and reduce per unit costs/maintenance costs. Single-Room Occupancies (SROs),<sup>22</sup> Cottage Clusters, cohousing developments, and multifamily products are common housing types that take advantage of this trend. Shared amenities may take many forms, including bathrooms; kitchens and other home appliances (e.g., laundry facilities, outdoor grills); security systems; outdoor areas (e.g., green space, pathways, gardens, rooftop lounges); fitness rooms, swimming pools, tennis courts; and parking.<sup>23</sup>

---

<sup>21</sup> U.S. Census Bureau. "Highlights of Annual 2017 Characteristics of New Housing." Retrieved from: <https://www.census.gov/construction/chars/highlights.html>.

<sup>22</sup> Single-room occupancies are residential properties with multiple single-room dwelling units occupied by a single individual. From: U.S. Department of Housing and Urban Development, 2001. *Understanding SRO*. <https://www.hudexchange.info/resources/documents/Understanding-SRO.pdf>

<sup>23</sup> Urbsworks. (n.d.). *Housing Choices Guide Book: A Visual Guide to Compact Housing Types in Northwest Oregon*. <https://www.oregon.gov/lcd/Publications/Housing-Choices-Booklet-DIGITAL.pdf>

Saiz, Albert, and Salazar, Arianna. (n.d.). "Real Trends: The Future of Real Estate in the United States." Center for Real Estate, Urban Economics Lab.

## State Trends

*Oregon's 2016–2020 Consolidated Plan Amendment* includes a detailed housing needs analysis as well as strategies for addressing housing needs statewide. The plan concludes that “a growing gap between the number of Oregonians who need affordable housing and the availability of affordable homes has given rise to destabilizing rent increases, an alarming number of evictions of low- and fixed- income people, increasing homelessness, and serious housing instability throughout Oregon.”

It identified the following issues that describe housing need statewide:<sup>24</sup>

- For housing to be considered affordable, a household should pay up to one-third of their income toward rent, leaving money left over for food, utilities, transportation, medicine, and other basic necessities. Today, one in two Oregon households pays more than one-third of their income toward rent, and one in three pays more than half of their income toward rent.
- More school children are experiencing housing instability and homelessness. The rate of K–12 homeless children increased by 12% from the 2013–2014 school year to the 2014–2015 school year.
- Oregon has 28,500 rental units that are affordable and available to renters with extremely low incomes. There are about 131,000 households that need those apartments, leaving a gap of 102,500 units.
- Housing instability is fueled by an unsteady, low-opportunity employment market. Over 400,000 Oregonians are employed in low-wage work. Low-wage work is a growing share of Oregon's economy. When wages are set far below the cost needed to raise a family, the demand for public services grows to record heights.
- Women are more likely than men to end up in low-wage jobs. Low wages, irregular hours, and part-time work compound issues.
- People of color historically constitute a disproportionate share of the low-wage work force. About 45% of Latino, and 50% of African Americans, are employed in low-wage industries.
- The majority of low-wage workers are adults over the age of 20, many of whom have earned a college degree or some level of higher education.
- In 2019, minimum wage in Oregon<sup>25</sup> was \$11.25, \$12.50 in the Portland Metro, and \$11.00 for non-urban counties.

---

<sup>24</sup> These conclusions are copied directly from the report: *Oregon's 2016–2020 Consolidated Plan Amendment*. <http://www.oregon.gov/ohcs/docs/Consolidated-Plan/2016-2020-Consolidated-Plan-Amendment.pdf>.

<sup>25</sup> The 2016 Oregon Legislature, Senate Bill 1532, established a series of annual minimum wage rate increases beginning July 1, 2016, through July 1, 2022. <https://www.oregon.gov/boli/whd/omw/pages/minimum-wage-rate-summary.aspx>

Oregon's 2018 *Statewide Housing Plan* identified six housing priorities to address in communities across the State from 2019 to 2023, summarized below. It includes relevant data to help illustrate the rationale for each priority. The 2018 *Statewide Housing Plan* describes the Oregon Housing and Community Services' (OHCS) goals and implementation strategies for achieving the goals.<sup>26</sup>

- **Equity and Racial Justice.** *Advance equity and racial justice by identifying and addressing institutional and systemic barriers that have created and perpetuated patterns of disparity in housing and economic prosperity.*
  - Summary of the issue: In Oregon, 26% of people of color live below the poverty line in Oregon, compared to 15% of the white population.
  - 2019–2023 Goal: Communities of color will experience increased access to OHCS resources and achieve greater parity in housing stability, self-sufficiency, and homeownership. OHCS will collaborate with its partners and stakeholders to create a shared understanding of racial equity and overcome systemic injustices faced by communities of color in housing discrimination, access to housing, and economic prosperity.
- **Homelessness.** *Build a coordinated and concerted statewide effort to prevent and end homelessness, with a focus on ending unsheltered homelessness of Oregon's children and veterans.*
  - Summary of the issue: According to the Point-in-Time count, approximately 14,000 Oregonians experienced homelessness in 2017, an increase of nearly 6% since 2015. Oregon's unsheltered population increased faster than the sheltered population, and the state's rate of unsheltered homelessness is the third highest in the nation at 57%. The state's rate of unsheltered homelessness among people in families with children is the second highest in the nation at 52%.
  - 2019–2023 Goal: OHCS will drive toward impactful homelessness interventions by increasing the percentage of people who are able to retain permanent housing for at least six months after receiving homeless services to at least 85 percent. We will also collaborate with partners to end veterans' homelessness in Oregon and build a system in which every child has a safe and stable place to call home.
- **Permanent Supportive Housing.** *Invest in permanent supportive housing, a proven strategy to reduce chronic homelessness and reduce barriers to housing stability.*
  - Summary of the issue: Oregon needs about 12,388 units of permanent supportive housing to serve individuals and families with a range of needs and challenges.
  - 2019–2023 Goal: OHCS will increase our commitment to permanent supportive housing by funding the creation of 1,000 or more additional permanent

---

<sup>26</sup> Priorities and factoids are copied directly from the report: *Oregon Housing and Community Services* (November 2018). "Breaking New Ground, Oregon's Statewide Housing Plan," Draft.  
<https://www.oregon.gov/ohcs/DO/shp/OregonStatewideHousingPlan-PublicReviewDraft-Web.pdf>

supportive housing units to improve the future long-term housing stability for vulnerable Oregonians.

- **Affordable Rental Housing.** *Work to close the affordable rental housing gap and reduce housing cost burden for low-income Oregonians.*
  - Summary of the issue: Statewide, over 85,000 new units are needed to house those households earning below 30% of Median Family Income (MFI) in units affordable to them. The gap is even larger when accounting for the more than 16,000 units affordable at 30% of MFI, which are occupied by households at other income levels.
  - 2019–2023 Goal: OHCS will triple the existing pipeline of affordable rental housing—up to 25,000 homes in the development pipeline by 2023. Residents of affordable rental housing funded by OHCS will have reduced cost burden and more opportunities for prosperity and self-sufficiency.
- **Homeownership.** *Provide more low- and moderate-income Oregonians with the tools to successfully achieve and maintain homeownership, particularly in communities of color.*
  - Summary of the issue: In Oregon, homeownership rates for all categories of people of color are lower than for white Oregonians. For white non-Latino Oregonians, the homeownership rate is 63%. For Latino and nonwhite Oregonians, it is 42%. For many, homeownership rates have fallen between 2005 and 2016.
  - 2019–2023 Goal: OHCS will assist at least 6,500 households in becoming successful homeowners through mortgage lending products while sustaining efforts to help existing homeowners retain their homes. OHCS will increase the number of homebuyers of color in our homeownership programs by 50% as part of a concerted effort to bridge the homeownership gap for communities of color while building pathways to prosperity.
- **Rural Communities.** *Change the way OHCS does business in small towns and rural communities to be responsive to the unique housing and service needs and unlock the opportunities for housing development.*
  - Summary of the issue: While housing costs may be lower in rural areas, incomes are lower as well: median family income is \$42,750 for rural counties versus \$54,420 for urban counties. Additionally, the median home values in rural Oregon are 30% higher than in the rural United States, and median rents are 16% higher.
  - 2019–2023 Goal: OHCS will collaborate with small towns and rural communities to increase the supply of affordable and market-rate housing. As a result of tailored services, partnerships among housing and service providers, private industry, and local governments will flourish, leading to improved capacity, leveraging of resources, and a doubling of the housing development pipeline.



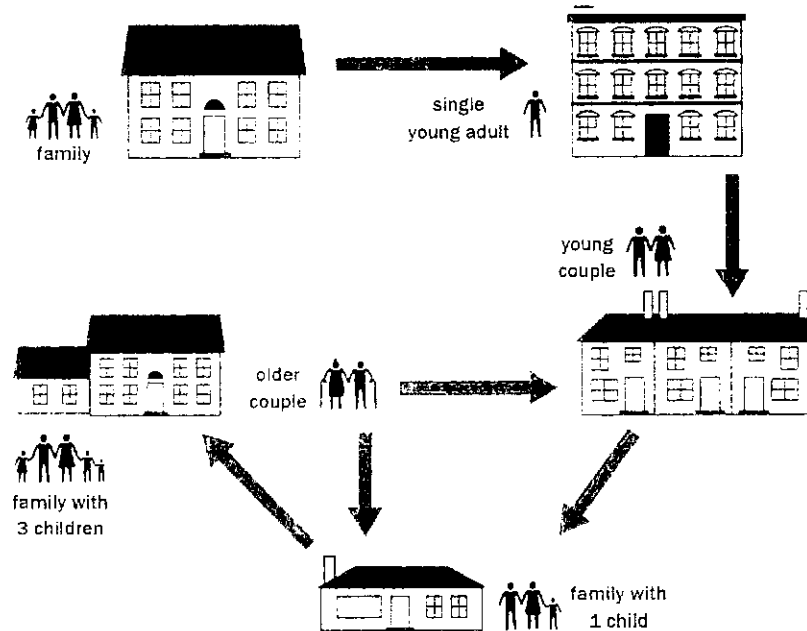
## Regional and Local Demographic Trends that May Affect Housing Need in Klamath Falls

Demographic trends that might affect the key assumptions used in the baseline analysis of housing need are: (1) the aging population, (2) changes in household size and composition, and (3) increases in diversity.

An individual's housing needs change throughout their life, with changes in income, family composition, and age. The types of housing needed by a 20-year-old college student differ from the needs of a 40-year-old parent with children, or an 80-year-old adult. As Klamath Falls' population ages, different types of housing will be needed to accommodate older residents. The housing characteristics by age data below reveal this cycle in action in Klamath Falls.

**Housing needs and preferences change in predictable ways over time, such as with changes in marital status and size of family.**  
Families of different sizes need different types of housing.

**Exhibit 23. Effect of Demographic Changes on Housing Need**  
Source: ECONorthwest, adapted from Clark, William A.V. and Frans M. Dieleman, 1996. *Households and Housing*. New Brunswick, NJ: Center for Urban Policy Research.



## Growing Population

Klamath Falls' population growth will drive future demand for housing in the City over the planning period. The population forecast in Exhibit 25 is Klamath Falls' official population forecast, from the Oregon Population Forecast Program. Klamath Falls must use this forecast as the basis for forecasting housing growth over the 2019 to 2039 period.

**Klamath Falls' population grew by 23% between 1990 and 2017.**

Klamath Falls added about 4,000 new residents in this time frame, at an average annual growth rate of 0.8%.

### Exhibit 24. Population, Klamath Falls (City Limits), Klamath County, Oregon, U.S., 1990–2017

Source: U.S. Decennial Census 1990, and Portland State University, Population Research Center.

	1990	2017	Change 1990 to 2017		
			Number	Percent	AAGR
U.S.	248,709,873	325,719,178	77,009,305	31%	1.0%
Oregon	2,842,321	4,141,100	1,298,779	46%	1.4%
Klamath County	57,702	67,690	9,988	17%	0.6%
Klamath Falls	17,737	21,770	4,033	23%	0.8%

**Klamath Falls' population within the Urban Growth Boundary is projected to grow by 1,255 people between 2019 and 2039, at an average annual growth rate of 0.14%.<sup>27</sup>**

### Exhibit 25. Forecast of Population Growth, Klamath Falls UGB, 2019–2039

Source: Oregon Population Forecast Program, Portland State University, Population Research Center, June 2018.

<b>43,921</b>	<b>45,176</b>	<b>1,255</b>	<b>3% increase</b>
Residents in 2019	Residents in 2039	New residents 2019 to 2039	0.14% AAGR

## Aging Population

This section shows two key characteristics of Klamath Falls' population, with implications for future housing demand in Klamath Falls:

- **Seniors.** Klamath Falls currently has a smaller share of elderly residents than Klamath County and state averages. As Klamath Falls' elderly population grows, it will have increasing demand for housing that is suitable for elderly residents.

Demand for housing for retirees will grow over the planning period, as Baby Boomers continue to age and retire. The Klamath County forecast share of residents aged 60 years and older will account for 36% of its population (2040), compared to around 21% in 2016.

The impact of growth in seniors in Klamath Falls will depend, in part, on whether older people already living in Klamath Falls continue to reside there as they retire. National

<sup>27</sup> This forecast of population growth is based on Klamath Falls' Urban Growth Boundary official population forecast from the Oregon Population Forecast Program. ECONorthwest extrapolated the population forecast for 2018 (to 2019) and 2035 (to 2039) based on the methodology specified in the following file (from the Oregon Population Forecast Program website):

[http://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Population\\_Interpolation\\_Template.xlsx](http://www.pdx.edu/prc/sites/www.pdx.edu/prc/files/Population_Interpolation_Template.xlsx)

surveys show that, in general, most retirees prefer to age in place by continuing to live in their current home and community as long as possible.<sup>28</sup>

Growth in the number of seniors will result in demand for housing types specific to seniors, such as small and easy-to-maintain dwellings, assisted living facilities, or age-restricted developments. Senior households will make a variety of housing choices as their health declines, including remaining in their homes as long as possible, downsizing to smaller single-family homes (detached and attached) or multifamily units, or moving into group housing (such as assisted living facilities or nursing homes). The challenges aging seniors face in continuing to live in their community include changes in healthcare needs, loss of mobility, difficulties with home maintenance, financial concerns, and increases in property taxes.<sup>29</sup>

- **Millennials and other younger people.** Klamath Falls has a proportional level of younger people as Klamath County and Oregon. About 31% of Klamath Falls' population is 20 to 40 years old, compared to 23% of Klamath County's and 27% of Oregon's population. As of 2019, people aged 19 to 39 are referred to as the Millennial generation and account for the largest share of population in Oregon. By 2040, they will be aged 40 to 60. The forecast for Klamath County shows the share of Millennials remaining relatively static from about 22% of the population in 2020 to about 25% of the population in 2040.

Klamath Falls' ability to attract people in this age group will depend, in large part, on whether the City has opportunities for housing that both appeals to and is affordable to Millennials. Retaining (or attracting) Millennials will depend on availability of housing types (such as townhouses, cottages, duplexes, and similar-scale multifamily housing and apartments).

In the near-term, Millennials may increase demand for rental units. The long-term housing preference of Millennials is uncertain. Research suggests that Millennial housing preferences may be similar to Baby Boomers, with a preference for smaller, less costly units. Recent surveys about housing preference suggest that Millennials want affordable single-family homes in areas that offer transportation alternatives to cars, such as suburbs or small cities with walkable neighborhoods.

A recent survey of people living in the Portland region shows that Millennials prefer single-family detached housing. The survey finds that housing price is the most important factor in choosing housing for younger residents.<sup>30</sup> The survey results suggest Millennials are more likely than other groups to prefer housing in an urban neighborhood or town center. While this survey is for the Portland region, it shows similar results as national surveys and studies about housing preference for Millennials.

---

<sup>28</sup> A survey conducted by the AARP indicates that 90% of people 50 years and older want to stay in their current home and community as they age. See <http://www.aarp.org/research>.

<sup>29</sup> "Aging in Place: A toolkit for Local Governments" by M. Scott Ball.

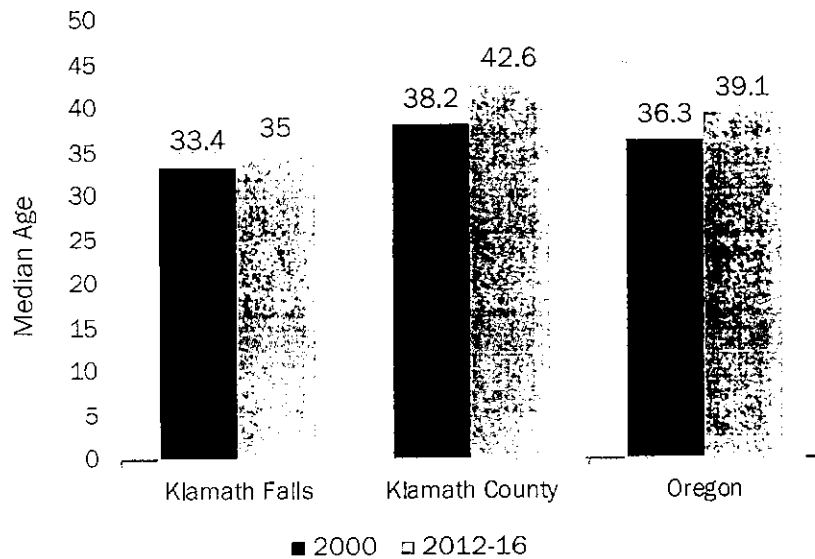
<sup>30</sup> Davis, Hibbits & Midghal Research, "Metro Residential Preference Survey," May 2014.

As Millennials age in Klamath Falls, there will be increased demand for both affordable single-family detached housing (including cottages), affordable townhouses and multifamily housing, and both ownership and rental opportunities. There is potential for attracting new residents to housing in Klamath Falls' commercial areas, especially if the housing is relatively affordable and located in proximity to services.

From 2000 to 2012–2016, Klamath Falls' median age increased from 33.4 to 35 years.

**Exhibit 26. Median Age, Klamath Falls (City Limits), Klamath County, Oregon, 2000 to 2012–2016**

Source: U.S. Census Bureau, 2000 Decennial Census Table BC1002, 2012–2016 ACS, Table B01002.

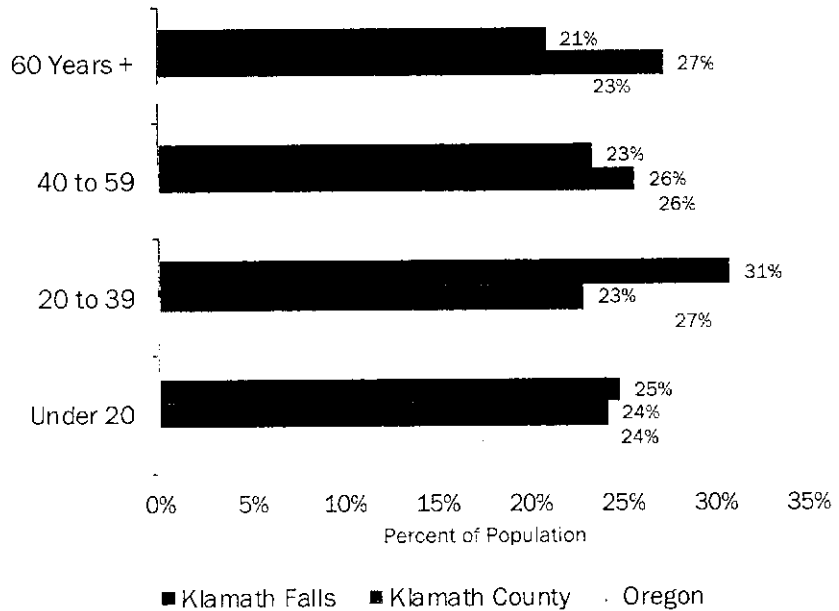


From 2012–2016, about 56% of Klamath Falls' residents were below the age of 40.

About 21% of Klamath Falls' population is 60 years or older, compared to 27% of Klamath County's population and 23% of Oregon's.

**Exhibit 27. Population Distribution by Age, Klamath Falls (City Limits), Klamath County, Oregon, 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS, Table B01001.

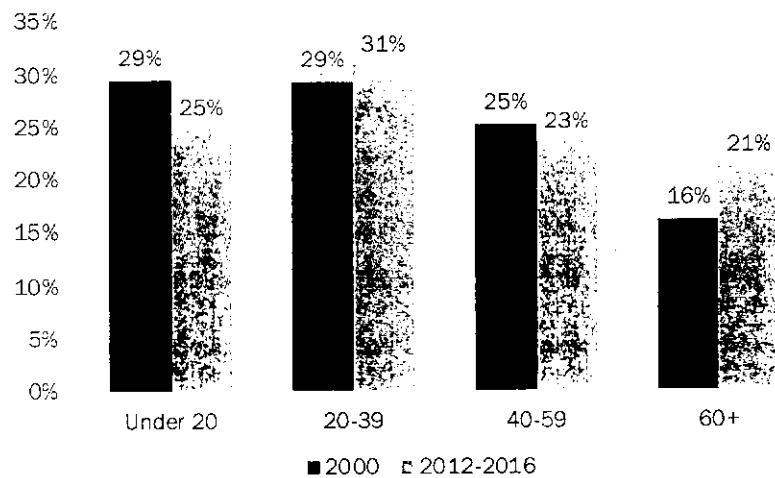


Klamath Falls' population 60 years and older had the greatest rate of growth from 2000 to 2016 (40%).

Klamath Falls' population aged 20 to 39 make up the largest share (31% as of 2012–2016).

**Exhibit 28. Population Growth by Age, Klamath Falls (City Limits), 2000 to 2012–2016**

Source: U.S. Census Bureau, 2000 Decennial Census Table P012 and 2012–2016 ACS, Table B01001.



By 2040, Klamath County's population over 60 years old is forecast to grow 24%.

The population under 39 years of age is forecast to decline between 2020 and 2040.

### Exhibit 29. Fastest-Growing Age Groups, Klamath County, 2020–2040

Source: Portland State University, Population Research Center, Klamath County Forecast, June 2015.

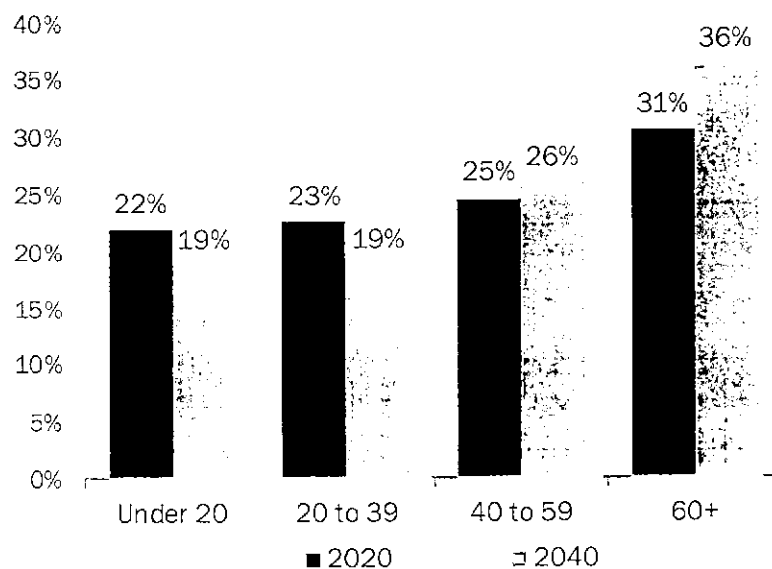
-10%	-13%	11%	24%
-1,498 People	-1,956 People	1,828 People	5,027 People
<b>Under 20</b>	<b>20-39 Yrs</b>	<b>40-59 Yrs</b>	<b>60+ Yrs</b>

By 2040, it is forecasted that Klamath County residents over the age of 40 will make up 62% of the County's total population.

This accounts for a 6% increase from the County's 2015 age group estimate.

### Exhibit 30. Population Growth by Age Group, Klamath County, 2020–2040

Source: Portland State University, Population Research Center, Klamath County Forecast, June 2015.



## Increased Ethnic Diversity

Klamath Falls is becoming more ethnically diverse. The Latino population grew from 9% of Klamath Falls' population in 2000 to 14% of the population in the 2012–2016 period, adding about 1,157 new Latino residents. Klamath Falls has a higher percentage of Latino residents than Klamath County and Oregon.

The U.S. Census Bureau forecasts that at the national level, the Latino population will continue growing faster than most other non-Latino populations between 2019 and 2039. The Census forecasts that the Latino population will increase 93% from 2016 to 2060 and foreign-born Latino populations will increase by about 40% in that same time.<sup>31</sup>

Continued growth in the Latino population will affect Klamath Falls' housing needs in a variety of ways.<sup>32</sup> Growth in first-generation Latino immigrants—and, to a lesser extent, growth in second and third generations—will increase demand for larger dwelling units to accommodate the, on average, larger household sizes for these households. Foreign-born households, including Latino immigrants, are more likely to include multiple generations, requiring more space than smaller household sizes. As Latino households integrate over generations, household size typically decreases, and housing needs become similar to housing needs for all households.

According to the *State of Hispanic Homeownership* report from the National Association of Hispanic Real Estate Professionals,<sup>33</sup> Latino households accounted for 29% of the nation's household formation in 2017. Household formations, for Latino homeowners specifically, accounted for 15% of the nation's net homeownership growth. The rate of homeownership for Latino households increased from 45% in 2014<sup>34</sup> to 46% in 2017. The only demographic that increased their rate of homeownership from 2016 to 2017 was Latino.

The *State of Hispanic Homeownership* report also cites the lack of affordable housing products as a substantial barrier to homeownership. The report finds that Latino households are more likely than non-Latino households to be nuclear households, to be composed of married couples with children, and to be multiple-generation households (such as parents and adult children living together).

These housing preferences—affordability and larger household size—will influence the Klamath Falls housing market as the Latino population continues to grow. <sup>35</sup> **Accordingly,**

---

<sup>31</sup> U.S. Census Bureau. *Demographic Turning Points for the United States: Population Projections for 2020 to 2060*, pg. 7, [https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25\\_1144.pdf](https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.pdf).

<sup>32</sup> Pew Research Center. *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, February 7, 2013, Appendix 8, <http://www.pewsocialtrends.org/2013/02/07/appendix-1-detailed-demographic-tables/>.  
National Association of Hispanic Real Estate Professionals. *2017 State of Hispanic Homeownership Report*, 2017.

<sup>33</sup> National Association of Hispanic Real Estate Professionals. *2017 State of Hispanic Homeownership Report*.

<sup>34</sup> National Association of Hispanic Real Estate Professionals. *2014 State of Hispanic Homeownership Report*.

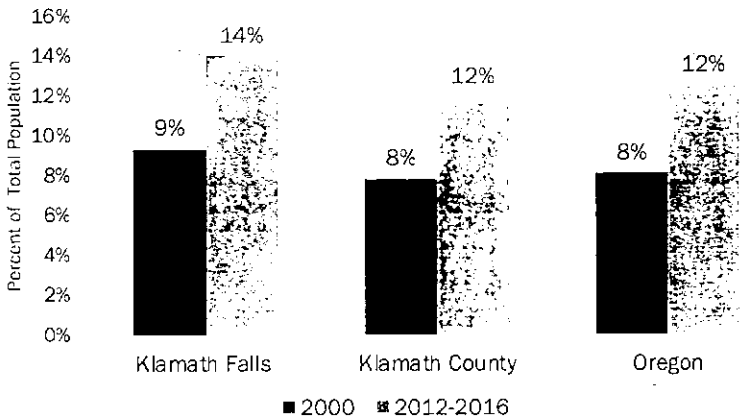
<sup>35</sup> National Association of Hispanic real Estate Professionals. *2017 Sate of Hispanic Homeownership Report*.

growth in Latino households will result in increased demand for housing of all types, both for ownership and rentals, with an emphasis on housing that is comparatively affordable.

The share of Klamath Falls' population identifying as Latino grew by 5% between 2000 and 2016. Klamath Falls has a slightly higher share of Latino residents than the County and State.

**Exhibit 31. Latino Population as a Percent of the Total Population, Klamath Falls (City Limits), Klamath County, Oregon, 2000, 2012–2016**

Source: U.S. Census Bureau, 2000 Decennial Census Table P008, 2012–2016 ACS Table B03002.



Household Size and Composition

Klamath Falls' household size and composition show that households in Klamath Falls are somewhat different from Klamath County and statewide averages. Klamath Falls' households are smaller than the County's and Oregon's households. About 43% of Klamath Falls' households are nonfamily households (i.e., roommates or one-person households) and about a third of households are one-person households. The number of one-person households grew by 11% from 2000 to 2013–2017.

Klamath Falls' average household size is smaller than Klamath County's and Oregon's.

**Exhibit 32. Average Household Size, Klamath Falls (City Limits), Klamath County, Oregon, 2013–2017**

Source: U.S. Census Bureau, 2013–2017 ACS 5-year estimate, Table B25010.

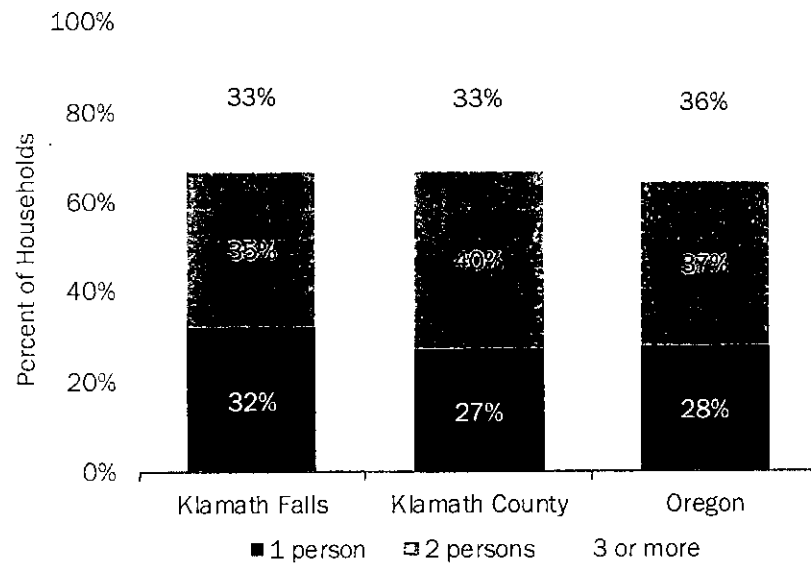




Klamath Falls has a slightly larger share of 1-person households than the County and State.

**Exhibit 33. Household Size, Klamath Falls (City Limits), Klamath County, Oregon, 2013–2017**

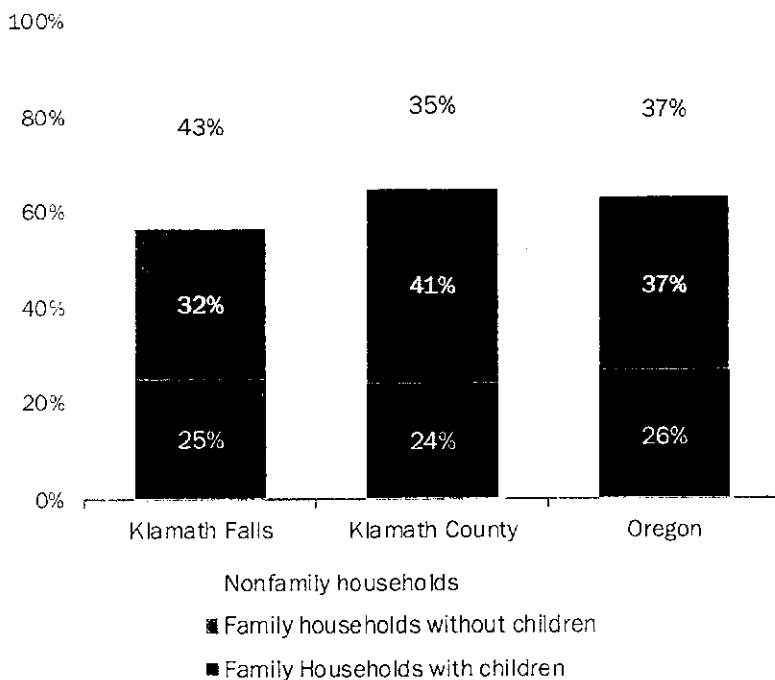
Source: U.S. Census Bureau, 2013–2017 ACS 5-year estimate, Table B25009.



Klamath Falls has a smaller share of family households without children and a larger share of nonfamily households than Klamath County and Oregon.

**Exhibit 34. Household Composition, Klamath Falls (City Limits), Klamath County, Oregon, 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS 5-year estimate, Table DP02.



## Income of Klamath Falls Residents

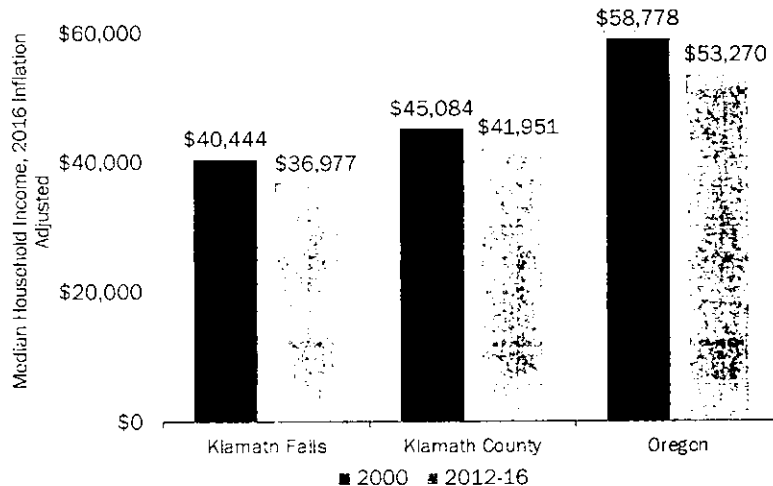
Income is a key determinant in housing choice and a household's ability to afford housing. Income for residents living in Klamath Falls is lower than those living in Klamath County and Oregon.

After adjusting for inflation, Klamath Falls' median household income (MHI) decreased by 9% from 2000 to 2012-2016, from \$40,444 to \$36,977 per year.

MHI in Klamath County decreased by 7% and MHI in Oregon's decreased by 9%.

**Exhibit 35. Median Household Income, Klamath Falls (City Limits), Klamath County, Oregon, 2000 to 2012-2016, (2016 Inflation-Adjusted)**

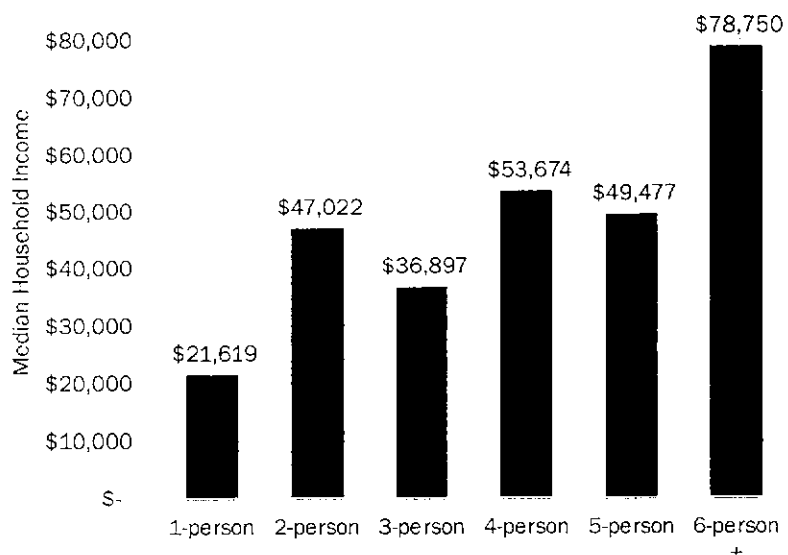
Source: U.S. Census Bureau, 2000 Decennial Census, Table HCT012; 2012-2016 ACS 5-year estimate, Table B25119.



The median household income for a 1-person household is 40% of the median household income for a 3-person household.

**Exhibit 36. Median Household Income by Household Size, Klamath Falls (City Limits), 2013-2017**

Source: U.S. Census Bureau, 2013-2017 ACS 5-year estimate, Table B19019.



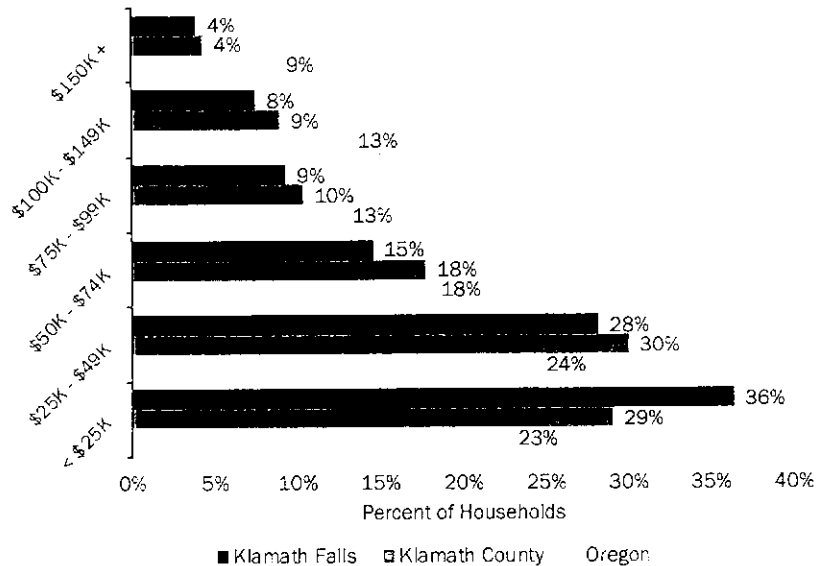
Klamath Falls has more households that make less than \$25,000 than the County or State.

For the 2012–2016 period, about 36% of Klamath Falls' households made less than \$25,000 per year, compared to 29% of Klamath County households, and 23% of Oregon households.

Similarly, Klamath Falls has fewer households making \$50,000 or more compared to Klamath County and Oregon.

**Exhibit 37. Household Income, Klamath Falls (City Limits), Klamath County, Oregon, 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS 5-year estimate, Table B19001.



## Commuting Trends

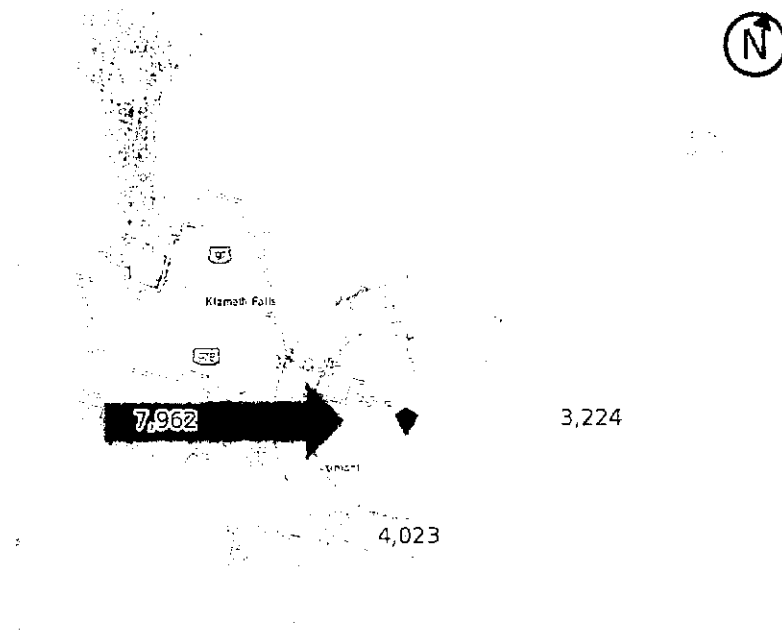
Klamath Falls is part of the complex, interconnected economy of Klamath County. Of the more than 11,985 people who work in Klamath Falls, more than 66% of workers commute into Klamath Falls from other areas—most notably in an area southeast of Klamath Falls City Limits within Klamath Falls' Urban Growth Boundary. More than 3,000 residents of Klamath Falls commute out of the City for work, many of them to the area between City limits and the UGB.

**Klamath Falls is part of an interconnected regional economy.**

More than 7,900 people commute into Klamath Falls for work, and more than 3,200 people living in Klamath Falls commute out of the City for work.

**Exhibit 38. Commuting Flows, Klamath Falls (City Limits), 2015**

Source: U.S. Census Bureau, Census On the Map.



**About 34% of people who work at businesses located in Klamath Falls also live in Klamath Falls.**

The remainder commute from outside City limits (UGB), Medford, and other parts of the state.

**Exhibit 39. Places Where Workers at Businesses in Klamath Falls Lived, 2015**

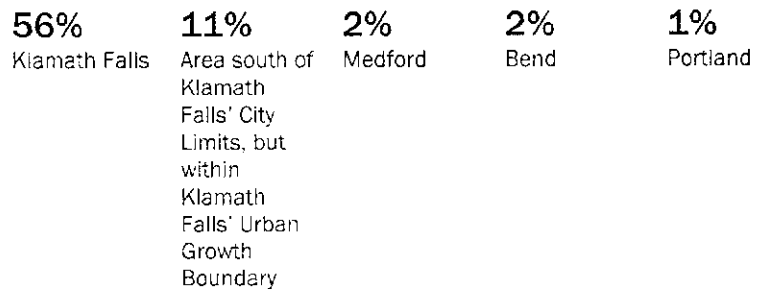
Source: U.S. Census Bureau, Census On the Map.

<b>34%</b>	<b>29%</b>	<b>1%</b>	<b>0.8%</b>	<b>0.4%</b>
Klamath Falls	Area south of Klamath Falls' City Limits, but within Klamath Falls' Urban Growth Boundary	Medford	Bend	Eugene

About 56% of Klamath Falls residents work in Klamath Falls.

#### Exhibit 40. Places Where Klamath Falls Residents Were Employed, 2015

Source: U.S. Census Bureau, Census On the Map.

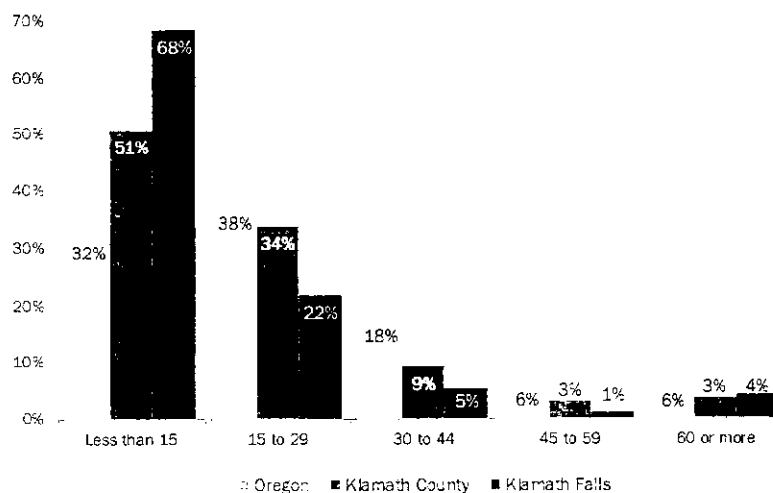


Most Klamath Falls residents (68%) have a commute time that takes less than 15 minutes.

Comparatively, 51% of Klamath County residents and 32% of Oregon residents have a commute time of less than 15 minutes.

#### Exhibit 41. Commute Time by Place of Residence, Klamath Falls, Klamath County, Oregon, 2012–2016

Source: U.S. Census Bureau, 2012–2016 ACS 5-year estimate, Table B08303.



# Regional and Local Trends Affecting Affordability in Klamath Falls

This section describes changes in housing costs, rents, and housing affordability in Klamath Falls, Klamath County, and Oregon since 2000.

## Changes in Housing Costs

Klamath Falls' housing prices fluctuated over the October 2008 to September 2018 time frame but remained consistently below that of housing prices for the state.

As of September of 2018, median housing sale prices in Klamath Falls Metro Areas were roughly \$166,000.

**Exhibit 42. Median Sale Prices, Klamath Falls Metro Area and Oregon, September 2018**

Source: Zillow.

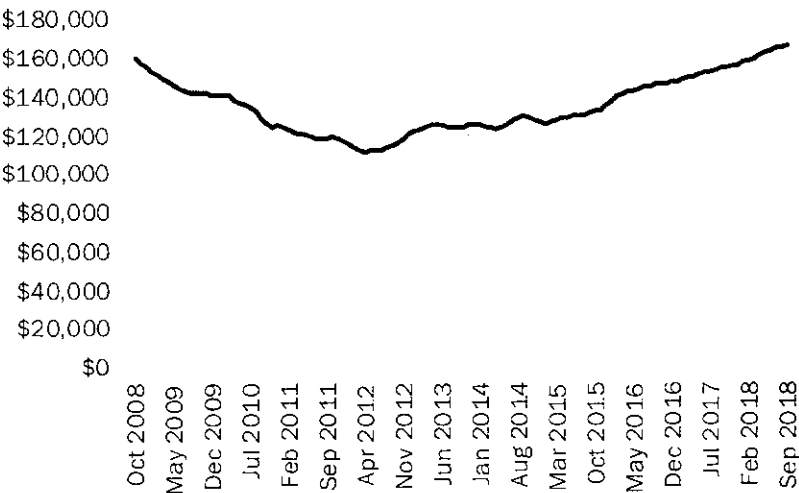
**\$165,800                      \$338,300**

Klamath Falls Metro Area      Oregon

Median housing sale prices grew at an average monthly growth rate of 0.6% from 2015-2018 .

**Exhibit 43. Monthly Median Sale Prices, Klamath Falls Metro Area, October 2015 through September 2018**

Source: Zillow.

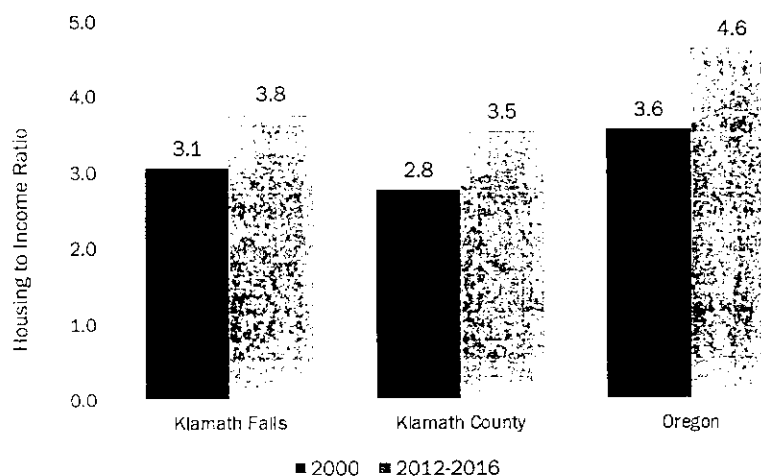


Since 2000, housing costs in Klamath Falls have increased faster than incomes.

The median housing value increased from 3.1 times the median household income in 2000 to 3.8 times the median household income in 2012–2016. This increase shows that housing values increased faster than income grew.

**Exhibit 44. Ratio of Median Housing Value to Median Household Income, Klamath Falls (City Limits), Klamath County, Oregon, 2000 to 2012–2016<sup>36</sup>**

Source: U.S. Census Bureau, 2000 Decennial Census, Tables HCT012 and H085, and 2012–2016 ACS, Tables B19013 and B25077.



<sup>36</sup> This ratio compares the median value of housing in Klamath Falls (and other places) to the median household income. Inflation-adjusted median owner values in Klamath Falls decreased slightly from \$123,696 in 2000 to \$139,300 in 2012–2016. Over the same period, median income decreased from \$40,444 to \$36,977.

## Rental Costs

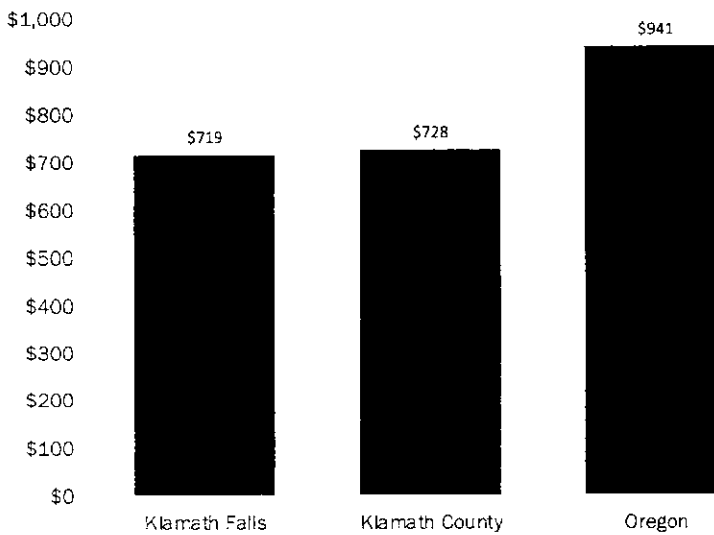
Rent costs in Klamath Falls are similar to averages for Klamath County and are lower than statewide averages. The following charts show gross rent (which includes the cost of rent plus utilities) for Klamath Falls based on Census data.

**The median gross rent in Klamath Falls is \$719.**

Rent in Klamath Falls is similar to Klamath County's median rent but is \$222 less than Oregon's.

**Exhibit 45. Median Gross Rent, Klamath Falls (City Limits), Klamath County, Oregon, 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS 5-year estimate, Table B25064.

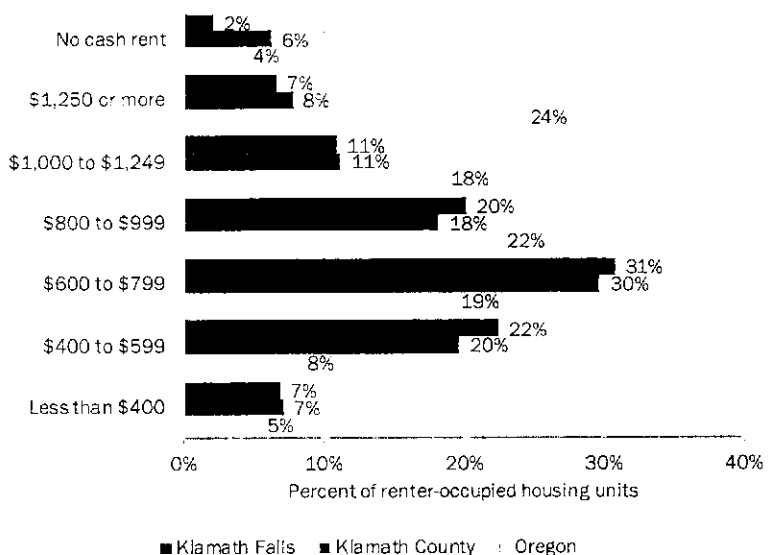


**About 80% of renters in Klamath Falls pay less than \$1,000 per month.**

About 7% of Klamath Falls' renters pay \$1,250 or more in gross rent per month, which is similar to Klamath County (8%), but less than the state (24%).

**Exhibit 46. Gross Rent, Klamath Falls (City Limits), Klamath County, Oregon, 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS Table B25063.





In 2016, the average two-bedroom housing unit rent in Klamath Falls was \$875. A two-bedroom unit in downtown Klamath Falls is assumed to have a 20% to 30% premium over market rents.

#### Exhibit 47. Current Rents vs. Downtown Premiums, Klamath Falls, 2016

Source: Leland Consulting Group (2016), Klamath Falls Downtown Housing Analysis.

	(Average) Rent	Downtown Premium Rent
<b>Studio</b>	\$500	\$600 to \$650
<b>1 Bedroom</b>	\$600	\$720 to \$780
<b>2 Bedroom</b>	\$875	\$1,050 to \$1,140
<b>3 Bedroom</b>	\$1,100	\$1,320 to \$1,430

In general, “residential rental rates in Klamath Falls are modestly priced. The rental stock in Klamath Falls is poor to average quality... and there have been few multifamily deliveries to market in the past decade. Brokers mention that the lack of quality rental stock is a major detriment to their business, and that it is difficult to find appropriate rentals for mid to top-of-market renters. Nonetheless, brokers describe \$1,200 per month as the absolute upper limit of the market due to the low average home prices with mortgage payments at this same price.”<sup>37</sup>

<sup>37</sup> Leland Consulting Group (2016). “Residential Rental Rates in Klamath Falls,” *Klamath Falls Market Analysis*.

## Housing Affordability

A typical standard used to determine housing affordability is that a household should pay no more than a certain percentage of household income for housing, including payments and interest or rent, utilities, and insurance. The Department of Housing and Urban Development's guidelines indicate that households paying more than 30% of their income on housing experience "cost burden," and households paying more than 50% of their income on housing experience "severe cost burden." Using cost burden as an indicator is one method of determining how well a city is meeting the Goal 10 requirement to provide housing that is affordable to all households in a community.

About 40% of Klamath Falls' households are cost burdened. About 54% of renter households are cost burdened, compared with 23% of homeowners. Twenty-nine percent of households in Klamath Falls are rent burdened households.<sup>38</sup> Overall, Klamath Falls has a larger share of cost-burdened households than Klamath County and Oregon.

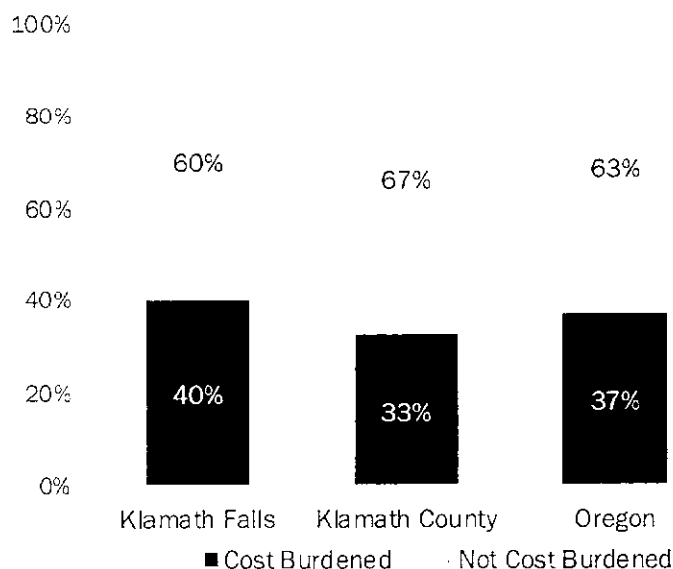
For example, about 36% of Klamath Falls households have an income of less than \$25,000 per year. These households can afford rent of less than \$625 per month, or a home with a value of less than \$62,500. Most, but not all, of these households are cost burdened.

**Overall, about 40% of all households in Klamath Falls are cost burdened.**

Klamath Falls has a larger share of cost-burdened households than Klamath County and Oregon for the 2012–2016 period.

**Exhibit 48. Housing Cost Burden, Klamath Falls (City Limits), Klamath County, Oregon, 2012–2016**

Source: U.S. Census Bureau, 2012–2016 ACS Tables B25091 and B25070.

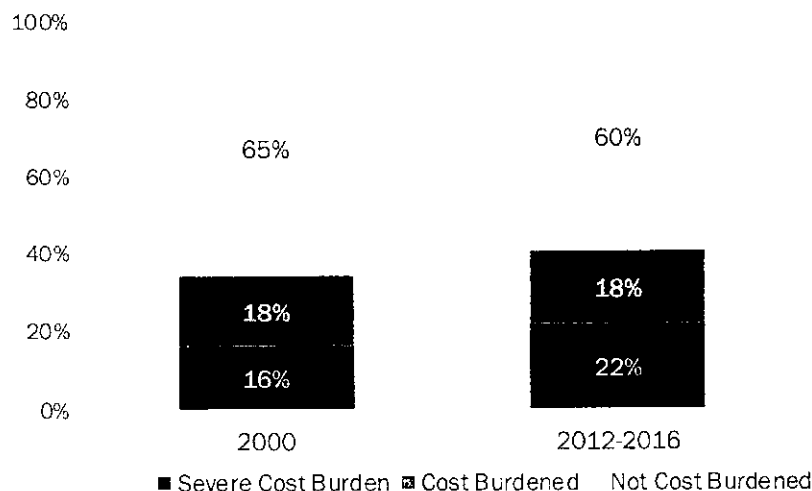


<sup>38</sup> Cities with populations larger than 10,000 are required, per HB 4006, to assess "rent burden" if more than 50% of renters are cost burdened. In Klamath Falls (City Limits) as of the 2012–2016 period, 56% of total renters were cost burdened and 29% of total households were cost-burdened renters.

The share of households that are cost burdened or severely cost burdened in Klamath Falls grew from 34% in 2000 to 40% in 2016.

#### Exhibit 49. Change in Housing Cost Burden, Klamath Falls (City Limits), 2000 and 2012–2016

Source: U.S. Census Bureau, 2000 Decennial Census H069, 2012–2016 ACS Tables B25091 and B25070.

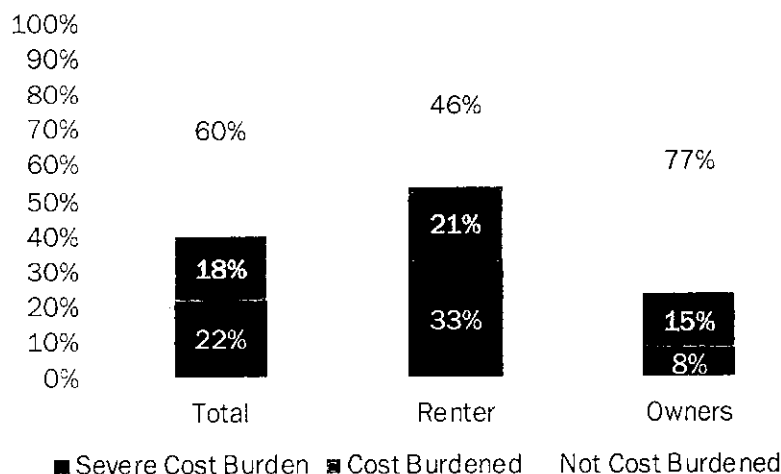


Renters are more likely to be cost burdened than homeowners.

In the 2012–2016 period, about 54% of renters were cost burdened, compared to 23% of homeowners.

#### Exhibit 50. Housing Cost Burden by Tenure, Klamath Falls (City Limits), 2012–2016

Source: U.S. Census Bureau, 2012–2016 ACS Tables B25091 and B25070.



As of 2016, 29% of households in Klamath Falls were cost-burdened renters.

#### Exhibit 51. Renter Cost Burden, Klamath Falls (City Limits), 2012–2016

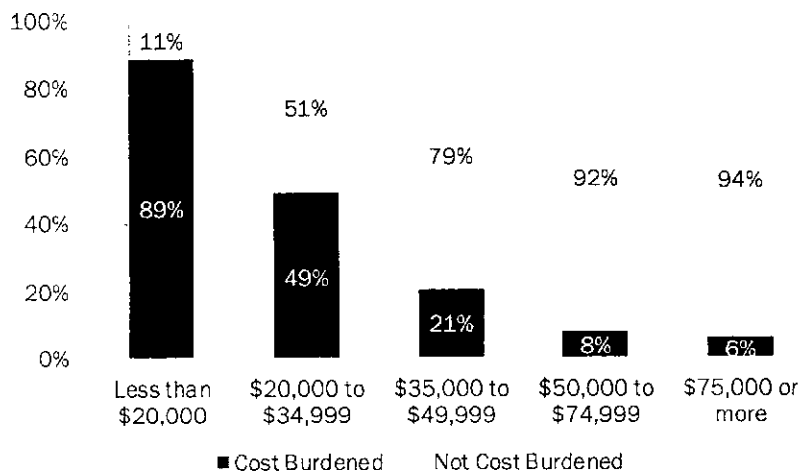
Source: U.S. Census Bureau, 2012–2016 ACS Tables B25091 and B25070.

<b>9,000</b>	<b>2,629</b>	<b>29%</b>
Total Households	Cost Burdened Renter Households	Share of Cost Burdened Renters (% of total households)

Nearly 90% of households earning less than \$20,000 per year are cost burdened. Half of households earning less than \$35,000 per year are cost burdened.

**Exhibit 52. Cost Burden by Income, Occupied Housing Units, Klamath Falls (City Limits), 2012–2016**

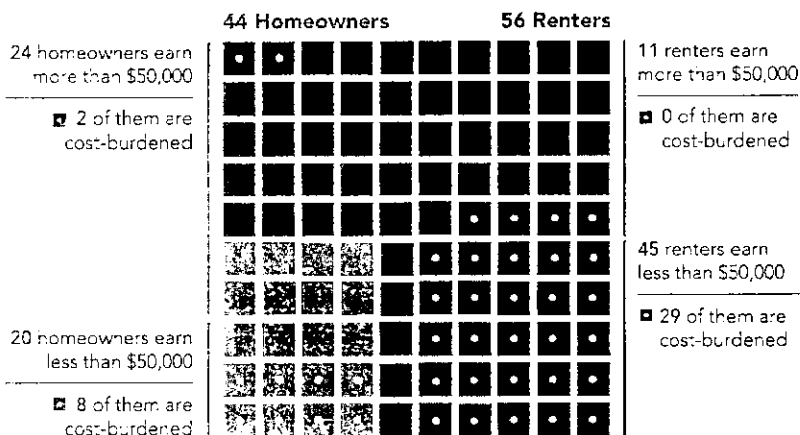
Source: U.S. Census Bureau, 2012–2016 ACS Table S2503.



Cost burden rates also vary by income. Many renter households that earn less than \$50,000 per year are cost burdened.

**Exhibit 53. Illustration of Cost Burden: If all of Klamath Falls Households (within City Limits) Were 100 Residents**

Source: U.S. Census Bureau, 2012–2016 ACS Table S2503.



While cost burden is a common measure of housing affordability, it does have some limitations. Two important limitations are:

- A household is defined as cost burdened if the housing costs exceed 30% of their income, regardless of actual income. The remaining 70% of income is expected to be spent on non-discretionary expenses, such as food or medical care, and on discretionary expenses. Households with higher incomes may be able to pay more than 30% of their income on housing without impacting the household's ability to pay for necessary non-discretionary expenses.
- Cost burden compares income to housing costs and does not account for accumulated wealth. As a result, the estimate of how much a household can afford to pay for housing does not include the impact of a household's accumulated wealth. For example, a household of retired people may have relatively low income but may have accumulated assets (such as profits from selling another house) that allow them to purchase a house that would be considered unaffordable to them based on the cost-burden indicator.

Another way of exploring the issue of financial need is to review housing affordability at varying levels of household income.

**Fair Market Rent for a 2-bedroom apartment in Klamath County is \$765.**

**Exhibit 54. HUD Fair Market Rent (FMR) by Unit Type, Klamath County, 2018**

Source: U.S. Department of Housing and Urban Development.

<b>\$448</b>	<b>\$576</b>	<b>\$765</b>	<b>\$1,092</b>	<b>\$1,173</b>
Studio	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom

**A household must earn at least \$14.71 per hour to afford a 2-bedroom unit in Klamath County.**

**Exhibit 55. Affordable Housing Wage, Klamath County, 2018**

Source: U.S. Department of Housing and Urban Development; Oregon Bureau of Labor and Industries.

**\$14.71/hour**


Affordable Housing Wage for two-bedroom Unit in Klamath County

A household earning median income (\$53,000) can afford a monthly rent of about \$1,325 or a home roughly valued between \$186,000 and \$212,000.










**Exhibit 56. Financially Attainable Housing, by Median Family Income (MFI) for Klamath County (\$52,700), Klamath Falls (City Limits), 2018**

Source: U.S. Department of Housing and Urban Development 2016, U.S. Census Bureau, 2012–2016 ACS Table 19001. Oregon Employment Department. Note: MFI is Median Family Income, determined by HUD for Klamath County. MFI for Klamath County was \$52,700 in 2018.

***If your household earns....***

	\$26,000	\$42,000	\$53,000	\$63,000
(30% of MFI)	(50% of MFI)	(80% of MFI)	(100% of MFI)	(120% of MFI)

***Then you can afford....***

\$400 monthly rent	\$800 monthly rent	\$1,050 monthly rent	\$1,325 monthly rent	\$1,575 monthly rent
		OR	OR	OR
	\$78,000- \$91,000 home sales price	\$147,000- \$168,000 home sales price	\$186,000- \$212,000 home sales price	\$221,000- \$252,000 home sales price
 Part-time Cook \$16,013	 Library Technician \$32,620	 Postal Service Clerk \$43,742	 Plumber \$54,149	 Police Officer \$64,443
 Personal Care Aid \$26,109	 Maintenance Worker \$37,064	 Graphic Designer \$48,339	 Business Operations Specialist \$58,805	

About a quarter of households are extremely low income (23%) and about a quarter are high income (26%).

# Exhibit 57. Share of Households, by Median Family Income (MFI) for Klamath County (\$52,700), Klamath Falls (City Limits), 2016

Source: U.S. Department of Housing and Urban Development 2018; U.S. Census Bureau, 2012-2016, ACS Table B19001. Note: MFI is Median Family Income, determined by HUD for Klamath County.



## Exhibit 58. Characteristics of Financially Attainable Housing by Median Family Income (MFI) for Klamath County (\$52,700)

Source: U.S. Department of Housing and Urban Development 2016. Note: MFI is Median Family Income, determined by HUD for Klamath County. MFI for Klamath County was \$52,700 in 2018.

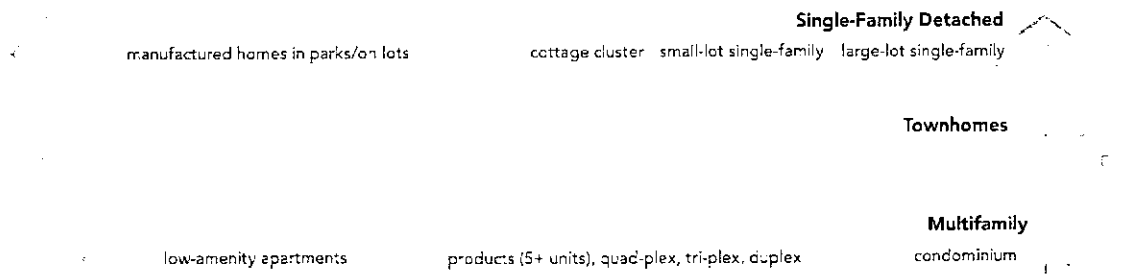
### If your household earns ...

\$17,000	\$26,000	\$42,000	\$52,000	\$63,000
(30% of MFI)	(50% of MFI)	(80% of MFI)	(100% of MFI)	(120% of MFI)

### Then you can afford ...

\$400	\$650	\$1,050	\$1,300	\$1,580
PER MONTH	PER MONTH	PER MONTH	PER MONTH	PER MONTH

### Housing types generally affordable to these households are ...



### Common characteristics ...

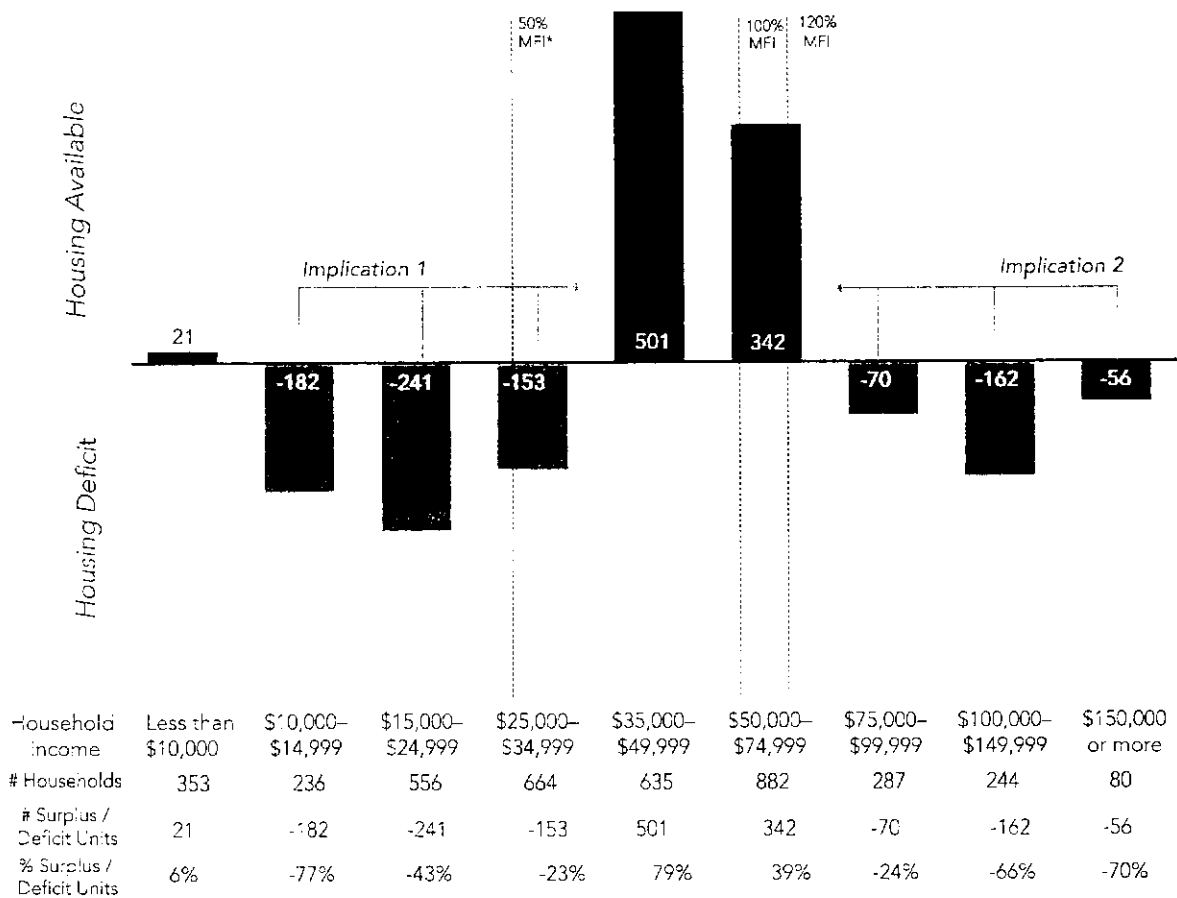
LESS EXPENSIVE	Predominantly owner occupied & new construction	MORE EXPENSIVE
Predominantly renter occupied & existing construction		
Government subsidized		



Exhibit 59 compares the number of households by income with the number of units affordable to those households in Klamath Falls. Klamath Falls currently has a deficit of housing affordable to households earning between \$10,000 and \$35,000 and to households earning more than \$75,000. Klamath Falls has a deficit of more affordable housing types such as government-subsidized housing, existing low-cost apartments (and other multifamily products like duplexes, tri- and quad-plexes), and manufactured housing, as well as higher-amenity housing types such as single-family detached units, townhomes, and high-end multifamily products.

#### Exhibit 59. Affordable Housing Costs and Units by Income Level, Klamath Falls (City Limits), 2016

Source: U.S. Census Bureau, 2012-2016 ACS. Note: MFI is Median Family Income, determined by HUD for Klamath County. MFI for Klamath County was \$52,700 in 2018.



\*Median Family Income for a family of four

##### Implication 1

Some lower-income households live in housing that is more expensive than they can afford because affordable housing is not available. These households are cost-burdened.

##### Implication 2

Some higher-income households choose housing that costs less than they can afford. This may be the result of the household's preference or it may be the result of lack of higher-cost and higher-amenity housing that would better suit their preferences.

# Summary of the Factors Affecting Klamath Falls' Housing Needs

The purpose of the analysis thus far has been to provide background on the kinds of factors that influence housing choice. While the number and interrelationships among these factors ensure that generalizations about housing choice are difficult to make and prone to inaccuracies, it is a crucial step to informing the types of housing that will be needed in the future.

There is no question that age affects housing type and tenure. Mobility is substantially higher for people aged 20 to 34. People in that age group will also have, on average, less income than people who are older, and they are less likely to have children. These factors mean that younger households are much more likely to be renters, and renters are more likely to be in multifamily housing.

The data illustrates what more detailed research has shown and what most people understand intuitively: life cycle and housing choice interact in ways that are predictable in the aggregate; age of the household head is correlated with household size and income; household size and age of household head affect housing preferences; and income affects the ability of a household to afford a preferred housing type. The connection between socioeconomic and demographic factors and housing choice is often described informally by giving names to households with certain combinations of characteristics: the "traditional family," the "never-marrieds," the "dinks" (dual income, no kids), and the "empty-nesters."<sup>39</sup> Thus, simply looking at the long wave of demographic trends can provide good information for estimating future housing demand.

Still, one is ultimately left with the need to make a qualitative assessment of the future housing market. The following is a discussion of how demographic and housing trends are likely to affect housing in Klamath Falls over the next 20 years:

- **Growth in housing will be driven by growth in population.** Between 1990 and 2017, Klamath Falls' population grew by 4,033 people (23%), with a majority of that growth occurring prior to 2000. Some of this growth was the result of annexation into the City Limits from the unincorporated areas within the UGB. The population in Klamath Falls' UGB is forecasted to grow from 43,862 to 45,176, an increase of 1,314 people (3%) between 2019 and 2039.
- **Housing affordability continue to be a challenge in Klamath Falls.** Housing prices are increasing faster than incomes in Klamath County, which is consistent with state and national trends. About 23% of Klamath Falls' housing stock is multifamily housing, and over half of renter households are cost burdened. Klamath Falls' key challenge over the next 20 years is providing opportunities for development of relatively affordable housing of all types, from lower-cost single-family housing to market-rate multifamily housing.

---

<sup>39</sup> See *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* (June 1997).

- **Without substantial changes in housing policy, on average, future housing will look a lot like past housing.** That is the assumption that underlies any trend forecast, and one that is important when trying to address demand for new housing.

The City's residential policies can impact the amount of change in Klamath Falls' housing market, to some degree. If the City adopts policies to increase opportunities to build smaller-scale single-family and multifamily housing types (particularly multifamily that is affordable to low- and moderate-income households), a larger percentage of new housing developed over the next 20 years in Klamath Falls may begin to address the City's needs. Examples of policies that the City could adopt to achieve this outcome include allowing a wider range of housing types (e.g., duplex or townhouses) in single-family zones, ensuring that there is sufficient land zoned to allow single-family attached and multifamily housing development, supporting development of government-subsidized affordable housing, and encouraging multifamily residential development in downtown. The degree of change in Klamath Falls' housing market, however, will depend on market demand for these types of housing in Klamath County.

- **If the future differs from the past, it is likely to move in the direction, on average, of smaller units and more diverse housing types.** Most of the evidence suggests that the bulk of the change will be in the direction of smaller average house and lot sizes for single-family housing. This includes providing opportunities for development of smaller single-family detached homes, townhomes, and multifamily housing.

Key demographic and economic trends that will affect Klamath Falls' future housing needs are: (1) the aging of Baby Boomers, (2) the aging of Millennials, and (3) the continued growth in the Latino population.

- *The Baby Boomer's population is continuing to age.* By 2040, people 60 years and older will account for 36% of the population in Klamath County (up from 27% in 2016). The changes that affect Klamath Falls' housing demand as the population ages are that household sizes and homeownership rates decrease. The majority of Baby Boomers are expected to remain in their homes as long as possible, downsizing or moving when illness or other issues cause them to move. Demand for specialized senior housing, such as age-restricted housing or housing in a continuum of care from independent living to nursing home care, may grow in Klamath Falls.
- *Millennials will continue to age.* By 2040, Millennials will be roughly between 40 and 60 years old. As they age, generally speaking, their household sizes will increase, and their homeownership rates will peak by about age 55. Between 2019 and 2039, Millennials will be a key driver in demand for housing for families with children. The ability to attract Millennials will depend on the City's availability of affordable renter and ownership housing. It will also depend on the location of new housing in Klamath Falls, as many Millennials prefer to live

in more walkable, urban environments.<sup>40</sup> The decline in homeownership among the Millennial generation has more to do with financial barriers rather than the preference to rent.<sup>41</sup>

- *The Latino population will continue to grow.* The U.S. Census projects that by about 2040, the Latino population will account for one-quarter of the nation's population. The share of the *Latino* population in the Western U.S. is likely to be higher. The Latino population currently accounts for about 14% of Klamath Falls' population. In addition, the Latino population is generally younger than the U.S. average, with many Latino people belonging to the Millennial generation.

Latino population growth will be an important driver in growth of housing demand, both for owner- and renter-occupied housing. Growth in Latino population will drive demand for housing for families with children. Given the lower income for Latino households, especially first-generation immigrants, growth in this group will also drive demand for affordable housing, both for ownership and renting.<sup>42</sup>

In summary, an aging population, increasing housing costs (although still lower than the Region), housing affordability concerns for Millennials and the Latino population, and other variables support the need for smaller and less expensive units and a broader array of housing choices. Growth of retirees will drive demand for small single-family detached houses and townhomes for homeownership, townhome and multifamily rentals, age-restricted housing, and assisted-living facilities. Growth in the Millennial and Latino population will drive demand for affordable housing types, including demand for small, affordable single-family units (many of which may be ownership units) and for affordable multifamily units (many of which may be rental units).

- **No amount of analysis is likely to make the distant future completely certain: the purpose of the housing forecasting in this study is to get an approximate idea about the future (so policy choices can be made today).** Economic forecasters regard any economic forecast more than three (or at most five) years out as highly speculative. At

---

<sup>40</sup> Choi, Hyun June; Zhu, Jun; Goodman, Laurie; Ganesh, Bhargavi; Storchak, Sarah. *Millennial Homeownership, Why is it So Low, and How Can We Increase It?* Urban Institute, 2018. [https://www.urban.org/research/publication/millennial-homeownership/view/full\\_report](https://www.urban.org/research/publication/millennial-homeownership/view/full_report)

<sup>41</sup> Ibid.

<sup>42</sup> The following articles describe housing preferences and household income trends for Latino families, including differences in income levels for first-, second-, and third-generation households. In short, Latino households have lower median income than the national averages. First- and second-generation Latino households have median incomes below the average for all Latino households. Latino households have a strong preference for homeownership, but availability of mortgages and availability of affordable housing are key barriers to homeownership for this group.

Pew Research Center. *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, February 7, 2012.

National Association of Hispanic Real Estate Professionals. *2014 State of Hispanic Homeownership Report*.

one year, one is protected from being disastrously wrong by the sheer inertia of the economic machine. A variety of factors or events could, however, cause growth forecasts to be substantially different.

## 5. Housing Need in Klamath Falls

---

### Projected New Housing Units Needed in the Next 20 Years

The results of the Housing Needs Analysis are based on: (1) the official population forecast for growth in Klamath Falls over the 20-year planning period, (2) information about Klamath Falls' housing market relative to Klamath County and Oregon, and (3) the demographic composition of Klamath Falls' existing population and expected long-term changes in the demographics of Klamath County.

#### Forecast for Housing Growth

This section describes the key assumptions and presents an estimate of new housing units needed in Klamath Falls between 2019 and 2039. The key assumptions are based on the best available data and may rely on safe harbor provisions, when available.<sup>43</sup>

- **Population.** A 20-year population forecast (in this instance, 2019 to 2039) is the foundation for estimating needed new dwelling units. Klamath Falls UGB will grow from 43,862 persons in 2019 to 45,176 persons in 2039, an increase of 1,314 people.
- **Persons in Group Quarters.**<sup>44</sup> Persons in group quarters do not consume standard housing units: thus, any forecast of new people in group quarters is typically derived from the population forecast for the purpose of estimating housing demand. Group quarters can have a big influence on housing in cities with colleges (dorms), prisons, or a large elderly population (nursing homes). In general, any new requirements for these housing types will be met by institutions (colleges, government agencies, health-care corporations) operating outside what is typically defined as the housing market. Nonetheless, group quarters require residential land. They are typically built at densities that are comparable to that of multifamily dwellings.

The 2013–2017 American Community Survey shows that 3.2% of Klamath Falls' population was in group quarters. **For the 2019–2039 period, we assume that 3.2%**

---

<sup>43</sup> A safe harbor is an assumption that a city can use in a housing needs analysis that the State has said will satisfy the requirements of Goal 14. OAR 660-024 defines a safe harbor as "an optional course of action that a local government may use to satisfy a requirement of Goal 14. Use of a safe harbor prescribed in this division will satisfy the requirement for which it is prescribed. A safe harbor is not the only way, or necessarily the preferred way, to comply with a requirement and is not intended to interpret the requirement for any purpose other than applying a safe harbor within this division."

<sup>44</sup> The Census Bureau's definition of group quarters is as follows: "A group quarters is a place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents." The Census Bureau classifies all people not living in housing units (house, apartment, mobile home, rented rooms) as living in group quarters. There are two types of group quarters: (1) Institutional, such as correctional facilities, nursing homes, or mental hospitals and (2) Non-Institutional, such as college dormitories, military barracks, group homes, missions, or shelters.

of Klamath Falls' new population, approximately 46 new people, will be in group quarters.

- **Household Size.** OAR 660-024 established a safe harbor assumption for average household size—which is the figure from the most-recent Census at the time of the analysis. According to the 2013–2017 American Community Survey, the average household size in Klamath Falls was 2.30 people. **Thus, for the 2019–2039 period, we assume an average household size of 2.30 persons.**
- **Vacancy Rate.** The Census defines vacancy as "unoccupied housing units... determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only." The 2010 Census identified vacant through an enumeration, separate from (but related to) the survey of households. The Census determines vacancy status and other characteristics of vacant units by enumerators obtaining information from property owners and managers, neighbors, rental agents, and others.

Vacancy rates are cyclical and represent the lag between demand and the market's response to demand for additional dwelling units. Vacancy rates for rental and multifamily units are typically higher than those for owner-occupied and single-family dwelling units.

OAR 660-024 established a safe harbor assumption for vacancy rate—which is the figure from the most-recent Decennial Census. According to the 2013–2017 American Community Survey, Klamath Falls' vacancy rate was 10.1%. **For the 2019–2039 period, we assume a vacancy rate of 10.1%.**

Klamath Falls will have demand for 609 new dwelling units over the 20-year period, with an annual average of 30 dwelling units.

#### Exhibit 60. Forecast of Demand for New Dwelling Units, Klamath Falls UGB, 2019–2039

Source: Calculations by ECONorthwest.

Variable	New Dwelling Units (2019-2039)
Change in persons	1,314
minus Change in persons in group quarters	42
equals Persons in households	1,272
Average household size	2.30
New occupied DU	553
times Aggregate vacancy rate	10.1%
equals Vacant dwelling units	56
<b>Total new dwelling units (2019-2039)</b>	<b>609</b>
<b>Annual average of new dwelling units</b>	<b>30</b>

## Housing Units Needed Over the Next 20 Years

Exhibit 60 presents a forecast of new housing in Klamath Falls' UGB for the 2019–2039 period. This section determines the future mix and density for the development of new housing developed over this 20-year period in Klamath Falls.

The preliminary conclusion for Klamath Falls is that, over the next 20 years, the need for new housing developed in the City will generally include a wider range of housing types and housing. This conclusion is based on the following information, found in Chapter 3 and Chapter 4 of this report:

- A majority of Klamath Falls' housing mix is single-family detached. In the 2013–2017 period, 68% of Klamath Falls' housing was single-family detached, 7% was single-family attached, and 25% was multifamily. In comparison, the mix of housing for the entire County was 85% single-family detached, 4% single-family attached, and 11% multifamily.
- Demographic changes across Klamath County (and in Klamath Falls) suggest increases in demand for single-family attached housing. The key demographic trends that will affect Klamath Falls' future housing needs are the aging of Baby Boomers and household formation of Millennials. The implications of the trends are increased demand for small, older (often single-person) households and increased demand for affordable housing for families, both for ownership and rent.
- Klamath Falls' households have, on average, lower incomes than Klamath County's households. Klamath Falls' median household income was \$40,444, about \$4,600 higher than Klamath County's median. Approximately 64% of Klamath Falls households earn less than \$50,000 per year, compared to 59% in Klamath County and 47% in Oregon.
- About 40% of Klamath Falls' households are cost burdened (paying 30% or more of their household income on housing costs), compared to 33% of Klamath County's households.<sup>45</sup> About 54% of Klamath Falls' **renters** are cost burdened and about 23% of Klamath Falls' **homeowners** are cost burdened.
- Klamath Falls needs more affordable housing for renters. A household earning about 100% of Klamath Falls' median household income (\$53,000) could afford about \$1,324 per month in rent, compared with the average or median rent of about \$720 to \$875. However, little multifamily housing was built in Klamath Falls since 2007, which likely exacerbated the lack of affordable multifamily housing.
- Klamath Falls needs more affordable housing for homeowners. A household earning about 100% of Klamath Falls' median household income (\$53,000) could afford a home valued between about \$186,000 and \$212,000, which is more than the median value of a home in Klamath Falls at approximately \$139,300 (2013–2017).

---

<sup>45</sup> The Department of Housing and Urban Development's guidelines indicate that households paying more than 30% of their income on housing experience "cost burden," and households paying more than 50% of their income on housing experience "severe cost burden."



- Findings from the Project Advisory Committee meetings and other regional stakeholders provided comments that, while Klamath Falls' may have availability of relatively affordable housing products, residents have limited options due to the quality and conditions of that housing.

These factors suggest that Klamath Falls' needs a broader range of housing types—at a wider range of price points and of a higher quality than are currently available in Klamath Falls' housing stock. This includes providing opportunity for development of housing types across the affordability spectrum, such as single-family detached housing (e.g., small lot, cottages, traditional, and high amenity), townhouses (traditional and high amenity), duplexes, tri- and quad-plexes, and apartment buildings (at various sizes and statures).

Exhibit 61 shows a forecast of needed housing in the Klamath Falls UGB during the 2019–2039 period. The projection is based on the following assumptions:

- **Klamath Falls' official forecast for population growth shows that the City will add 1,314 people over the 20-year period.** Exhibit 60 shows that the new population will result in need for 609 new dwelling units over the 20-year period.
- The assumptions about the mix of housing in Exhibit 61 are:
  - **About 60% of new housing will be single-family detached**, a category which includes manufactured housing. About 68% of Klamath Falls' housing was single-family detached in the 2013–2017 period.
  - **Nearly 15% of new housing will be single-family attached.** About 7% of Klamath Falls' housing was single-family attached in the 2013–2017 period.
  - **About 25% of new housing will be multifamily.** About 25% of Klamath Falls' housing was multi-family in the 2013–2017 period.

Klamath Falls will have demand for 609 new dwelling units over the 20-year period, 60% of which will be single-family detached housing.

**Exhibit 61. Forecast of Demand for New Dwelling Units, Klamath Falls UGB, 2019–2039**

Source: Calculations by ECONorthwest.

Variable	Needed Mix
<b>Needed new dwelling units (2019–2039)</b>	<b>609</b>
Dwelling units by structure type	
Single-family detached	
Percent single-family detached DU	60%
<b>equals Total new single-family detached DU</b>	<b>365</b>
Single-family attached	
Percent single-family attached DU	15%
<b>equals Total new single-family attached DU</b>	<b>92</b>
Multifamily	
Percent multifamily	25%
<b>Total new multifamily</b>	<b>152</b>
<b>equals Total new dwelling units (2019–2039)</b>	<b>609</b>

This analysis accounts for units accommodated by accessory dwelling units (ADUs). Assumptions are documented here and presented in Exhibit 62 and Exhibit 63. For the purpose of this analysis, an accessory dwelling unit is a single-family detached housing type that is accommodated on developed parcels. Since the City of Klamath Falls modified its development code, the City received four ADUs since 2017. **For the 2019–2039 period, we assume a development trajectory of two ADU per year, resulting in 40 ADUs over the 20-year analysis period.**

Over the 20-year period, Klamath Falls will accommodate 40 needed units through the development of accessory dwelling units (ADU). This will result in approximately two ADUs per year.

**Exhibit 62. Forecast of Demand for ADUs, Klamath Falls UGB, 2019–2039**

Source: Calculations by ECONorthwest.

Variable	New Dwelling Units (2019-2039)
New accessory dwelling units	40
<b>Subset of total new dwelling units (2019-2039)</b>	<b>40</b>

Over the 20-year period, Klamath Falls will accommodate 40 needed new units through ADUs. This results in Klamath Falls having demand for 569 new dwellings units on vacant or partially vacant land.

**Exhibit 63. Forecast of Demand for New Dwelling Units on Vacant and Partially Vacant Lands, Klamath Falls UGB, 2019–2039**

Source: Calculations by ECONorthwest.

Variable	Needed Mix
<b>Dwelling Units Accomodated by ADU</b>	
Single-family detached	40
Single-family attached	
Multifamily	
<b>Total Units Accomodated</b>	<b>40</b>
<b>Dwelling Units Requiring Vacant or Partially Vacant Unconstrained Land</b>	
Single-family detached	325
Single-family attached	92
Multifamily	152
<b>Total Units Requiring Vacant or Partially Vacant Land</b>	<b>569</b>

To summarize Exhibit 61, Exhibit 62, and Exhibit 63, Klamath Falls will have demand for 609 new dwelling units over the 20-year period. Of these 609 dwelling units, 365 dwelling units will be single-family detached housing (see Exhibit 61). Of these, 40 units will be accessory dwelling units (Exhibit 62) located on existing lots or on lots with other newly built housing (not requiring a vacant parcel for the ADU). Accordingly, Klamath Falls will have demand for 325 single-family detached units on vacant or partially vacant land (Exhibit 63).

Exhibit 64 allocates needed housing to zoning designations. The allocation is based, in part, on the types of housing allowed in each zone within Klamath Falls. Exhibit 64 shows:

- **Single-Family Residential (SF)** land will accommodate new single-family detached housing, including manufactured homes.
- **Medium-Density Residential (MD)** land will accommodate new single-family detached housing (including manufactured houses), single-family attached housing (townhomes), and duplexes.
- **Apartment Residential (A)** land will accommodate new single-family detached housing (including manufactured houses), single-family attached housing (townhomes), duplexes, triplexes, quadplexes, and apartments.
- **Planned Unit Development (PUD)** land will accommodate multifamily housing with five or more units per structure.

**Exhibit 64. Allocation of Needed Housing by Housing Type and Plan Designation Klamath Falls City Limits, 2019–2039<sup>46</sup>**

Source: ECONorthwest. Note: SFD is single-family detached housing type, SFA is single-family attached housing type, and MF is multifamily housing type.

Housing Type	Zone Designations, Klamath Falls City Limits				Total
	Single-Family	Medium Density	Apartment Residential	PUD	
Dwelling Units (#)					
SFD	274	51	-	-	325
SFA	-	53	28	11	92
MF	-	27	68	57	152
Total	274	131	96	68	569
Dwelling Units (%)					
SFD	48%	9%	0%	0%	57%
SFA	0%	9%	5%	2%	16%
MF	0%	5%	12%	10%	27%
Total	48%	23%	17%	12%	100%

<sup>46</sup> The percent of units displayed in Exhibit 64 does not match the needed mix of new housing displayed in Exhibit 61 because the allocation analysis deducts new units accommodated by accessory dwelling units.

Exhibit 65 shows the following future densities in net and gross acres.<sup>47</sup> Exhibit 65 converts between net acres and gross acres to account for land needed for rights-of-way based on empirical analysis of existing rights-of-way by zone in Klamath Falls City Limits.

- **Single-family Residential (SF)** 27% of land is in rights-of-way. The densities in this zone are 4.6 dwelling units per net acre and 3.3 dwelling units per gross acre.
- **Medium Density Residential (MD)** 20% of land is in rights-of-way. The densities in this zone are 7.9 dwelling units per net acre and 6.3 dwelling units per gross acre.
- **Apartment Residential (A)** 17% of land is in rights-of-way. The densities in this zone are 8.8 dwelling units per net acre and 7.3 dwelling units per gross acre.
- **Planned Unit Development (PUD)** 22% of land is in rights-of-way. The densities by zone in this Plan Designation area are between 3.7 dwelling units per net acre and 2.9 dwelling units per net acre.

**Exhibit 65. Future Density for Housing Built in the Klamath Falls City Limits and Klamath County (area between City Limits and UGB), 2019–2039**

Source: ECONorthwest. Note: DU is dwelling unit.

Zoning Districts	Average Net Density (DU/net acre)	% for Rights-of-Way	Average Gross Density (DU/gross acre)
<b>Klamath Falls City Limits</b>			
Single-family Residential	4.6	27%	3.3
Medium Density Residential	7.9	20%	6.3
Apartment Residential	8.8	17%	7.3
Planned Unit Development	3.7	22%	2.9
<b>Total</b>	<b>5.0</b>	<b>22%</b>	<b>3.9</b>
<b>Klamath County - Area between City Limits and Urban Growth Boundary</b>			
Rural Residential	1.4	21%	1.1
Suburban Residential	1.4	21%	1.1
Low Density Residential	2.8	23%	2.1
Medium Density Residential	2.0	23%	1.5
High Density Residential	4.7	20%	3.8
<b>Total</b>	<b>2.0</b>	<b>22%</b>	<b>1.5</b>

<sup>47</sup> OAR 660-024-0010(6) uses the following definition of net buildable acre: "Net Buildable Acre" "...consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads." While the administrative rule does not include a definition of a gross buildable acre, using the definition above, a gross buildable acre will include areas used for rights-of-way for streets and roads. Areas used for rights-of-way are considered unbuildable.

## Needed Housing by Income Level

The next step in the housing needs analysis is to develop an estimate of need for housing by income and housing type. This analysis requires an estimate of the income distribution of current and future households in the community. Estimates presented in this section are based on (1) secondary data from the Census, and (2) analysis by ECONorthwest.

The analysis in Exhibit 66 is based on American Community Survey data about income levels in Klamath Falls. Income is categorized into market segments consistent with HUD income level categories, using Klamath County's 2018 Median Family Income (MFI) of \$52,700. The Exhibit is based on current household income distribution, assuming that approximately the same percentage of households will be in each market segment in the future.

**About 38% of Klamath Falls' future households will have income below 50% of Klamath County's median family income (less than \$26,350 in 2016 dollars).**

**About 26% will have incomes over 120% of the County's MFI (\$63,240).**

This trend shows a need for housing types across the affordability spectrum.

**Exhibit 66. Future (New) Households, by Median Family Income (MFI) for Klamath County (\$52,700), Klamath Falls, 2019–2039**

Source: U.S. Department of Housing and Urban Development, U.S. Census Bureau, 2012–2016 ACS Table 19001.



# Need for Government Assisted, Farmworker, and Manufactured Housing

ORS 197.303, 197.307, 197.312, and 197.314 requires cities to plan for government-assisted housing, farmworker housing, manufactured housing on lots, and manufactured housing in parks.

- **Government-subsidized housing.** Government subsidies can apply to all housing types (e.g., single family detached, apartments, etc.). Klamath Falls allows the development of government-assisted housing in all residential plan designations, with the same development standards for market-rate housing. This analysis assumes that Klamath Falls will continue to allow government housing in all of its residential plan designations. Because government-assisted housing is similar in character to other housing (with the exception being the subsidies), it is not necessary to develop separate forecasts for government-subsidized housing.
- **Farmworker housing.** Farmworker housing can also apply to all housing types and the City allows development of farmworker housing in all residential zones, with the same development standards as market-rate housing. This analysis assumes that Klamath Falls will continue to allow farmworker housing in all of its residential zones. Because it is similar in character to other housing (with the possible exception of government subsidies, if population restricted), it is not necessary to develop separate forecasts for farmworker housing.
- **Manufactured housing on lots.** Klamath Falls allows manufactured homes on lots in the SF, MD, A, and NC zones, which are the zones where single-family detached housing is allowed. Klamath Falls does not have special siting requirements for manufactured homes. Since manufactured homes are subject to the same siting requirements as site-built homes, it is not necessary to develop separate forecasts for manufactured housing on lots.
- **Manufactured housing in parks.** OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned, zoned, or generally used for commercial, industrial, or high-density residential development. According to the Oregon Housing and Community Services' Manufactured Dwelling Park Directory,<sup>48</sup> Klamath Falls has 31 manufactured home parks within the City, with 1,337 spaces.
- ORS 197.480(2) requires Klamath Falls to project need for mobile home or manufactured dwelling parks based on: (1) population projections, (2) household income levels, (3) housing market trends, and (4) an inventory of manufactured dwelling parks sited in areas planned, zoned, or generally used for commercial, industrial, or high-density residential.

---

<sup>48</sup> Oregon Housing and Community Services, Oregon Manufactured Dwelling Park Directory, <http://o.hcs.state.or.us/MDPCRParcs/ParkDirQuery.jsp>

- Klamath Falls will grow by 609 dwelling units over the 2019 to 2039 period.
- Analysis of housing affordability shows that about 28% of Klamath Falls' new households will be extremely low or very low income, earning 50% or less of the region's median family income. One type of housing affordable to these households is manufactured housing.
- Manufactured housing in parks accounts for about 14% (about 1,337 dwelling units) of Klamath Falls' current housing stock.
- National, state, and regional trends since 2000 showed that manufactured housing parks are closing, rather than being created. For example, between 2000 and 2015, Oregon had 68 manufactured parks close, with more than 2,700 spaces. Discussions with several stakeholders familiar with manufactured home park trends suggest that over the same period, few to no new manufactured home parks have opened in Oregon.
- The households most likely to live in manufactured homes in parks are those with incomes between \$26,350 and \$42,120 (30% to 50% of MFI), which include 15% of Klamath Falls' households. However, households in other income categories may live in manufactured homes in parks.

Manufactured home park development is allowed as a conditional use in its medium density and apartment residential zones. The national and state trends of manufactured home park closures—along with the fifteen-year building drought of new manufactured home parks in Oregon—demonstrates that the development of new manufactured home parks in Klamath Falls is unlikely.

Our conclusion from this analysis is that development of new manufactured home parks in Klamath Falls over the planning period is unlikely over the 2019 to 2039 period. It is, however, likely that manufactured homes will continue to locate on individual lots in Klamath Falls. The forecast of housing assumes that no new manufactured home parks will be opened in Klamath Falls over the 2019 to 2039 period. The forecast includes new manufactured homes on lots in the category of single-family detached housing.

- Over the next 20 years (or longer) one or more manufactured home parks may close in Klamath Falls. This may be a result of manufactured home park landowners selling or redeveloping their land for uses with higher rates of return, rather than lack of demand for spaces in manufactured home parks. Manufactured home parks contribute to the supply of low-cost affordable housing options, especially for affordable homeownership.

While there is statewide regulation of the closure of manufactured home parks

designed to lessen the financial difficulties of this closure for park residents,<sup>49</sup> the City has a role to play in ensuring that there are opportunities for housing for the displaced residents. The City's primary roles are to ensure that there is sufficient land zoned for new multifamily housing and to reduce barriers to residential development to allow for development of new, relatively affordable housing. The City may use a range of policies to encourage development of relatively affordable housing, such as allowing a wider range of moderate-density housing single-family residential zone (e.g., duplexes) and medium-density residential zone density zones (e.g., single-family attached housing, triplexes, and quadplexes), designating more land for multifamily housing, removing barriers to multifamily housing development, using tax credits to support affordable housing production, or partnering with a developer of government-subsidized affordable housing.

---

<sup>49</sup> ORS 90.645 regulates rules about the closure of manufactured dwelling parks. It requires that the landlord must do the following for manufactured dwelling park tenants before closure of the park: they give at least one year's notice of park closure, they pay the tenant between \$5,000 and \$9,000 for each manufactured dwelling park space, and they do not charge tenants for demolition costs of abandoned manufactured homes.



## 6. Residential Land Sufficiency within Klamath Falls

---

This chapter presents an evaluation of the sufficiency of vacant residential land in Klamath Falls to accommodate expected residential growth over the 2019 to 2039 period. This chapter includes an estimate of residential development capacity (measured in new dwelling units) and an estimate of Klamath Falls' ability to accommodate needed new housing units for the 2019 to 2039 period, based on the analysis in the housing needs analysis. The chapter ends with a discussion of the conclusions and recommendations for the housing needs analysis.

### Capacity Analysis

The buildable lands inventory summarized in Chapter 2 (and presented in full in Appendix A) provides a *supply* analysis (buildable land by type), and Chapter 5 provided a *demand* analysis (population and growth leading to demand for more residential development). The comparison of supply and demand allows the determination of land sufficiency.

There are two ways to calculate estimates of supply and demand into common units of measurement to allow their comparison: (1) housing demand can be converted into acres, or (2) residential land supply can be converted into dwelling units. A complication of either approach is that not all land has the same characteristics. Factors such as zone, slope, parcel size, and shape can affect the ability of land to accommodate housing. Methods that recognize this fact are more robust and produce more realistic results. This analysis uses the second approach: it estimates the ability of vacant residential lands within the UGB to accommodate new housing. This analysis, sometimes called a "capacity analysis,"<sup>50</sup> can be used to evaluate different ways that vacant residential land may build out by applying different assumptions.

---

<sup>50</sup> There is ambiguity in the term *capacity analysis*. It would not be unreasonable for one to say that the "capacity" of vacant land is the maximum number of dwellings that could be built based on density limits defined legally by plan designation or zoning, and that development usually occurs—for physical and market reasons—at something less than full capacity. For that reason, we have used the longer phrase to describe our analysis: "estimating how many new dwelling units the vacant residential land in the UGB is likely to accommodate." That phrase is, however, cumbersome, and it is common in Oregon and elsewhere to refer to that type of analysis as "capacity analysis," so we use that shorthand occasionally in this memorandum.

## Klamath Falls Capacity Analysis Results

The capacity analysis estimates the development potential of vacant residential land to accommodate new housing based on the needed densities by the housing type categories shown in Exhibit 65.

Exhibit 67 shows that **Klamath Falls and Klamath County's vacant land has the capacity to accommodate approximately 14,945 new dwelling units** based on the following assumptions:

- **Buildable residential land.** The capacity estimates start with the number of buildable acres in residential Plan Designations and zones that allow residential, as shown in Chapter 2.
- **Future densities.** The capacity analysis assumes development will occur at historic densities. Those densities were derived from the needed densities shown in Exhibit 65.

**Exhibit 67. Estimate of Residential Capacity on Unconstrained Vacant and Partially Vacant Buildable Land, Klamath Falls City Limits and Klamath County (Area between City Limits and UGB), 2019–2039**

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note: DU is dwelling unit.

Zoning Districts	Total Unconstrained Buildable Acres	Density Assumption (DU/Gross Acre)	Capacity (Dwelling Units)
<b>Klamath Falls City Limits</b>			
Single-family Residential	635	3.3	2,095
Medium Density Residential	194	6.3	1,223
Apartment Residential	72	7.3	526
Planned Unit Development	2,104	2.9	6,101
<b>Subtotal</b>	<b>3,005</b>	<b>3.9</b>	<b>9,945</b>
<b>Klamath County - Area between City Limits and Urban Growth Boundary</b>			
Rural Residential	2	1.1	2
Suburban Residential	1,534	1.1	1,687
Low Density Residential	982	2.1	2,061
Medium Density Residential	525	1.5	787
High Density Residential	122	3.8	463
<b>Subtotal</b>	<b>3,166</b>	<b>1.5</b>	<b>5,000</b>
<b>Total</b>	<b>6,171</b>	<b>2.4</b>	<b>14,945</b>

## Residential Land Sufficiency

The next step in the analysis of the sufficiency of residential land within Klamath Falls is to compare the demand for housing by zone (Exhibit 64) with the capacity of land by zone (Exhibit 67).

Exhibit 68 shows that Klamath Falls has sufficient land to accommodate development in all zones with a surplus of capacity for 14,376 dwelling units.

### Exhibit 68. Preliminary Comparison of Capacity of Existing Residential Land with Demand for New Dwelling Units and Land Surplus or Deficit, Klamath Falls UGB, 2019–2039

Source: Buildable Lands Inventory; Calculations by ECONorthwest. Note: DU is dwelling unit.

Zoning Districts	Capacity (Dwelling Units)	Demand (Dwelling Units)	Remaining Capacity (Dwelling Units)	Land Surplus or (Deficit) Gross Acres
<b>Klamath Falls City Limits</b>				
Single-family Residential	2,095	274	1,821	552
Medium Density Residential	1,223	131	1,092	173
Apartment Residential	526	96	430	59
Planned Unit Development	6,101	68	6,033	2,080
<b>Subtotal</b>	<b>9,945</b>	<b>569</b>	<b>9,376</b>	<b>2,864</b>
<b>Klamath County - Area between City Limits and Urban Growth Boundary</b>				
Rural Residential	2		2	2
Suburban Residential	1,687		1,687	1,534
Low Density Residential	2,061		2,061	981
Medium Density Residential	787		787	525
High Density Residential	463		463	122
<b>Subtotal</b>	<b>5,000</b>	<b>-</b>	<b>5,000</b>	<b>3,163</b>
<b>Total</b>	<b>14,945</b>	<b>569</b>	<b>14,376</b>	<b>6,028</b>

For the 2019–2039 planning period, 42 group quarters units were deducted from the housing forecast (see Exhibit 60). The analysis must account for their land need. At a density of about 9.3 dwelling units per gross acre,<sup>51</sup> group quarters will need approximately five gross acres of residential lands. For purposes of this analysis, new group quarters are assumed to occur on apartment residential lands. Exhibit 68 shows Klamath Falls' surplus of 59 gross acres of apartment residential lands. Exhibit 70 shows that, after deducting the five gross acres of land for group quarters, Klamath Falls has a surplus of apartment residential lands.

<sup>51</sup> Basis for density assumption is the historical net density for multifamily housing in Klamath Falls' (2007 through 2018), converted into gross acres using empirical evidence.

**Exhibit 69. Land Needed for Group Quarters, Klamath Falls UGB, 2019–2039**

Source: Calculations by ECONorthwest. \*Note: Group quarters assumes one person per dwelling unit.

<b>Variable</b>	<b>Assumption</b>
New Population in Group Quarters	42
Needed Dwelling Units for Group Quarters	42
Gross Density Assumption (multifamily)	9.3
Needed Gross Acres for Group Quarters (Apartment Res.)	(5)
Existing Gross Acres (Apartment Res.)	59
<b>Revised Land Sufficiency, gross acres, (Apartment Res.)</b>	<b>54</b>

For clarity, Exhibit 70 presents a revised version of Exhibit 68 to account for land needed for group quarters. In summary:

- Klamath Falls' surplus of single-family residential capacity (1,821 dwelling units) means that the City has an approximate surplus of 552 gross acres of single-family residential land (at 3.3 dwelling units per gross acre).
- Klamath Falls' surplus of medium-density residential capacity (1,092 dwelling units) means that the City has an approximate surplus of 173 gross acres of medium-density residential land (at 6.3 dwelling units per gross acre).
- Klamath Falls' surplus of apartment residential capacity (430 dwelling units) means that the City has an approximate surplus of 59 gross acres of apartment residential land (at 7.3 dwelling units per gross acre). After accounting for land needed for group quarters, the City has an approximate surplus of 54 gross acres of apartment residential land.
- Klamath Falls' surplus of Planned Unit Development capacity (6,033 dwelling units) means that the City has an approximate surplus of 2,080 gross acres of Planned Unit Development land (at 2.9 dwelling units per gross acre).
- In the areas between Klamath Falls' City Limits and the Urban Growth Boundary, Klamath Falls has a surplus of capacity (5,000 dwelling units), meaning the City has an approximate surplus of 3,163 gross acres.

**Exhibit 70. Final Comparison of Capacity of Existing Residential Land with Demand for New Dwelling Units and Land Surplus or Deficit, Klamath Falls UGB, 2019-2039**

Source: Calculations by ECONorthwest.

<b>Zoning Districts</b>	<b>Capacity (Dwelling Units)</b>	<b>Demand (Dwelling Units)</b>	<b>Remaining Capacity (Dwelling Units)</b>	<b>Land Surplus or (Deficit) Gross Acres</b>
<b>Klamath Falls City Limits</b>				
Single-family Residential	2,095	274	1,821	552
Medium Density Residential	1,223	131	1,092	173
Apartment Residential	526	96	430	59
Group Quarters in Apartment Residential				(5)
Subtotal for Apartment Residential				54
Planned Unit Development	6,101	68	6,033	2,080
<b>Subtotal</b>	<b>9,945</b>	<b>569</b>	<b>9,376</b>	<b>2,860</b>
<b>Klamath County - Area between City Limits and Urban Growth Boundary</b>				
Single-family Residential	2	-	2	2
Suburban Residential	1,687	-	1,687	1,534
Low Density Residential	2,061	-	2,061	981
Medium Density Residential	787	-	787	525
High Density Residential	463	-	463	122
<b>Subtotal</b>	<b>5,000</b>	<b>-</b>	<b>5,000</b>	<b>3,163</b>
<b>Total</b>	<b>14,945</b>	<b>569</b>	<b>14,376</b>	<b>6,023</b>

Klamath Falls' surplus of capacity shows that the City has surplus lands in each zoning district. In addition, Klamath Falls has redevelopment potential (of about 127 acres). The City will need to evaluate and identify potential for redevelopment.

## Conclusions

The key findings of the Klamath Falls Housing Needs Analysis are that:

- **Klamath Falls' population is forecast to grow slower than the past.** Klamath Falls UGB is forecast to grow from 43,862 people in 2019 to 45,176 people in 2039, an increase of 1,314 people. This population growth will occur at an average annual growth rate of 0.15%.
- **Klamath Falls is planning for 609 new dwelling units.** The growth of 1,314 people will result in demand for 609 new dwelling units over the 20-year planning period, averaging 30 new dwelling units annually.
- **Klamath Falls will plan for more single-family attached and multifamily dwelling units in the future to meet the City's housing needs.** Historically, about 68% of Klamath Falls' housing was single-family detached. While 60% of new housing in Klamath Falls is forecast to be single-family detached, the City will need to provide opportunities for development of new single-family attached (15% of new housing) and new multifamily units (25% of new housing).
  - The factors driving the shift in types of housing needed in Klamath Falls include changes in demographics and decreases in housing affordability. The aging of Baby Boomers and the household formation of Millennials will drive demand for renter- and owner-occupied housing, such as small single-family detached housing, townhouses, duplexes, and apartments. Both groups may prefer housing in walkable neighborhoods, with access to services.
  - Klamath Falls' existing deficit of housing on the lower and higher end of the affordability spectrum indicates a need for a wider range of housing types, for homeowners and renters. About 40% of Klamath Falls' households are cost burdened (paying more than 30% of their income on housing costs), including a cost burden rate of 54% for renter households.
  - Without diversification of housing types, lack of affordability will continue to be a problem, possibly growing in the future if incomes continue to grow at a slower rate than housing costs. Under the current conditions, 227 households are forecast to have incomes of \$25,350 or less. These households cannot afford market-rate housing without government subsidy. More than 477 new households will have incomes between \$25,350 and \$63,240. These households will all need access to affordable and relatively affordable housing, such as the housing types described above.
- **Klamath Falls has a large surplus of capacity for all types of housing.** Klamath Falls has a surplus of capacity for about 9,400 dwelling units more than the 20-year need within the City Limits and an additional 5,000 dwelling units in the area between the City Limits and UGB. This estimate of capacity assumes development at historical densities with an average of nearly 4.0 dwelling units per gross acre within the City Limits and 1.5 dwelling units per gross acre in the area between the City Limits and

UGB. If the City and County take actions (such as those described in the Housing Strategy memorandum) to increase development densities, Klamath Falls surplus of land for housing will be larger.

- **Klamath Falls developed at relatively low densities.** Between 2007 and 2018, Klamath Falls developed at an average of nearly 4.0 dwelling units per gross acre (5.0 dwelling units per net acre) within the City Limits and 1.5 dwelling units per gross acre (2.0 dwelling units per net acre) in the area between the City Limits and UGB. Development densities in apartment residential zones within the City Limits (7.3 dwelling units per gross acre or 8.8 dwelling units per net acre) and high-density residential between the City Limits and UGB (3.8 dwelling units per gross acre or 4.7 dwelling units per net acre) were especially low. Typical densities for multifamily housing in high-density zones are between 15 and 24 dwelling units per net acre in smaller, rural cities, with most small, rural cities requiring densities of at least 10 or 12 dwelling units per net acre in high-density zones.
- **Klamath Falls has relatively little land for higher-density multifamily development.** Klamath Falls only has 72 acres of land in apartment residential zones within the City Limits. While this amount of land is sufficient to accommodate growth over the next 20-years, the City may want to evaluate whether apartment residential land is in places where there is market demand for multifamily development. The characteristics of apartment residential land (such as topography, access key transportation corridors, or other characteristics) may make these sites less likely to develop.
- **Klamath Falls has issues with housing conditions.** Nearly 36% of Klamath Falls' housing was built before 1950. Only 20% of Klamath Falls housing was built after 1990. While the age of housing does not necessarily indicate housing condition problems, the age of Klamath Falls' housing stock plays a role in the poor condition of housing. Discussions with stakeholders in Klamath Falls confirmed that poor housing conditions are a substantial problem in Klamath Falls. The poor conditions are found in all types of housing, but especially in mobile homes, manufactured housing, and stick-built single-family detached housing. Actions that address housing conditions will be key to addressing Klamath Falls' housing needs.
- **Klamath Falls has a deficit of housing affordable to extremely low and very low-income households.** About 38% of Klamath Falls' households have extremely low income or very low income, with household income below \$26,000. At most, these households can afford \$800 in monthly housing costs. Median gross rent in Klamath Falls was \$719 in the 2012-2016 period and has likely increased since. Home sales are very rarely affordable to households with these levels of income. Klamath Falls has a current deficit of about 3,400 units affordable to households in this income group. This is shown in the high rates of cost burden for renters, with 54% of renter households in Klamath Falls cost burdened and 33% severely cost burdened. Klamath Falls may have growth of about 230 households in this income category, as the City continues to grow over the next 20 years. Development of housing affordable to these households rarely occurs without government subsidy or other assistance. Meeting the housing needs of

extremely-low and very-low income households will be a significant challenge to Klamath Falls.

- **Klamath Falls has a deficit of housing affordable to low- and middle-income households.** About 36% of Klamath Falls' households have a low income or middle income, with household incomes between \$26,000 and \$63,000. These households can afford between \$800 and \$1,575 in monthly housing costs. Middle-income households may be able to afford owner-occupied housing at Klamath Falls' median home sales price of \$166,000. Some of the households in this group are likely a part of the 40% of all households that are cost burdened. Klamath Falls may have growth of about 220 households in this income category, as the City continues to grow over the next 20 years. Development of rental housing affordable to households in this income category, especially those at middle-income, can occur without government subsidy but the City's zoning code will need to provide opportunities for development of a wider range of housing types at high enough densities to accommodate more of this type of housing. Homeownership opportunities for households in this income category may include housing in poor condition, which may require rehabilitation.

The Housing Strategy memorandum provides recommendations for policies to these and other issues identified in the Housing Needs Analysis. Klamath Falls is embarking on updating its Comprehensive Plan. The Housing Strategy memorandum will provide a starting place for updating the City's Comprehensive Plan policies for housing.



# Appendix A – Residential Buildable Lands Inventory

---

The general structure of the buildable land (supply) analysis is based on the DLCD HB 2709 workbook *Planning for Residential Growth – A Workbook for Oregon’s Urban Areas*, which specifically addresses residential lands. The buildable lands inventory uses methods and definitions that are consistent with Goal 10/OAR 660-008. This appendix describes the methodology that ECONorthwest used for this report based on 2018 data. The results of the BLI are discussed in Chapter 2.

## Overview of the Methodology

Following are the statutes and administrative rules that provide guidance on residential BLIs:

**OAR 660-008-0005(2):**

*“Buildable Land” means residentially designated land within the Urban Growth Boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available, and necessary for residential uses. Publicly owned land is generally not considered available for residential uses. Land is generally considered “suitable and available” unless it:*

- (a) Is severely constrained by natural hazards as determined under Statewide Planning Goal 7;*
- (b) Is subject to natural resource protection measures determined under Statewide Planning Goals 5, 6, 15, 16, 17, or 18;*
- (c) Has slopes of 25 percent or greater;*
- (d) Is within the 100-year flood plain; or*
- (e) Cannot be provided with public facilities.*

## Inventory Steps

The BLI consists of several steps:

1. Generating UGB “land base”
2. Classifying land by development status
3. Identify constraints
4. Verify inventory results
5. Tabulate and map results

## Step 1: Generate “land base.”

Per Goal 10, this involves selecting all of the tax lots in the Klamath Falls UGB with residential and other nonemployment plan designations. Plan designations included in the residential inventory include:

### **Klamath Falls Zones**

- Apartment Residential
- Medium-Density Residential
- Single-Family Residential
- General Commercial
- Neighborhood Commercial
- Mixed Use
- Planned Unit Development

### **Klamath County Zones**























- Low-Density Residential
- Rural Residential
- Suburban Residential
- Medium-Density Residential
- High-Density Residential

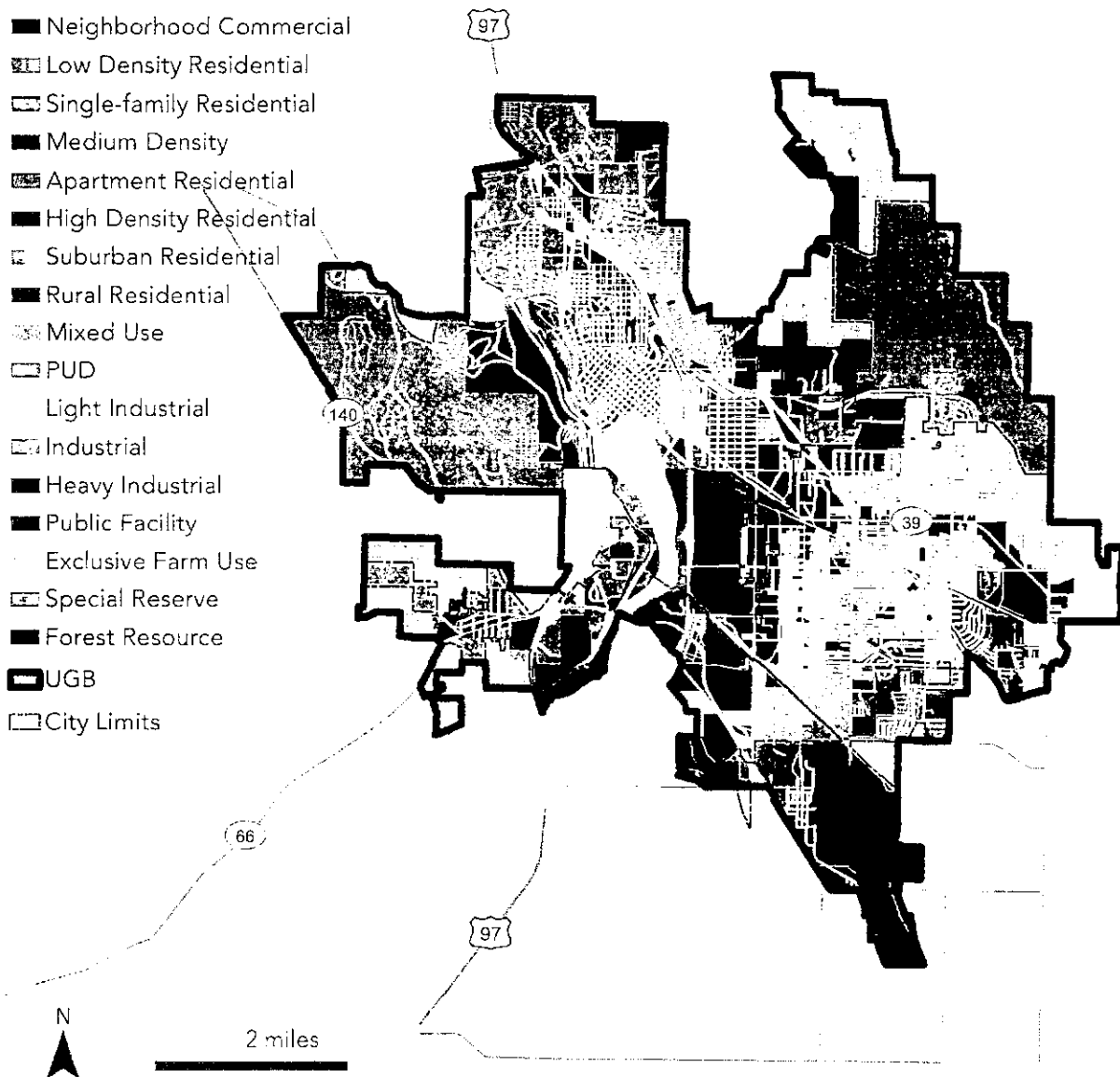
Exhibit 71 shows the residential plan designations included in the BLI.

# Klamath Falls Buildable Lands Inventory

## Zoning Designations

### Zoning

-  Commercial Transportation
-  General Commercial
-  Recreation Commercial
-  Neighborhood Commercial
-  Low Density Residential
-  Single-family Residential
-  Medium Density
-  Apartment Residential
-  High Density Residential
-  Suburban Residential
-  Rural Residential
-  Mixed Use
-  PUD
-  Light Industrial
-  Industrial
-  Heavy Industrial
-  Public Facility
-  Exclusive Farm Use
-  Special Reserve
-  Forest Resource
-  UGB
-  City Limits



As of date: February 5, 2018

Source: ECONorthwest; Klamath County

## Step 2: Classify lands.

In this step, ECONorthwest classified each tax lot with a plan designation that allow residential uses into one of five mutually exclusive categories based on development status:

- Developed land
- Vacant land
- Partially vacant land
- Undevelopable land
- Public or exempt land

ECONorthwest initially identified buildable land and classified development status using a rule-based methodology consistent with the DLCD Residential Lands *Workbook* and applicable administrative rules. The rules are described below in Exhibit 72.

**Exhibit 72. Rules for Development Status Classification**

Development Status	Definition	Statutory Authority
Vacant Land	Tax lots that have no structures or have buildings with very little improvement value. For the purpose of this inventory, lands with improvement values of less than \$10,000 were considered vacant (not including lands that are identified as having mobile homes).	OAR 660-008-0006(2) (2) "Buildable Land" means residentially designated land within the Urban Growth Boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available, and necessary for residential uses. Publicly owned land is generally not considered available for residential uses.
Partially Vacant Land	Partially vacant tax lots can use safe harbor established in State statute:  <i>The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling, assuming that the remainder is buildable land.</i>	OAR 660-024-0050 (2)(a)
Undevelopable Land	Vacant tax lots less than 5,000 square feet in size were considered undevelopable.	No statutory definition
Public or Exempt Land	Lands in public or semipublic ownership are considered unavailable for residential development. This includes lands in Federal, State, County, or City ownership as well as lands owned by churches and other semipublic organizations and properties with conservation easements. Public lands were identified using the Assessor's property tax exemption codes.	OAR 660-008-0005(2) - Publicly owned land is generally not considered available for residential uses.

Development Status	Definition	Statutory Authority
Developed Land	Land that is developed at densities consistent with zoning and improvements that make it unlikely to redevelop during the analysis period. Lands not classified as vacant, partially vacant, undevelopable, public, or exempt are considered developed.	No statutory definition

### Step 3: Identify constraints

As shown in Exhibit 73, the BLI included development constraints consistent with OAR 660-008-0005(2) guidance on residential buildable lands inventories, ECO deducted certain lands with development constraints from the BLI.

**Exhibit 73. Constraints to Be Included in BLI**

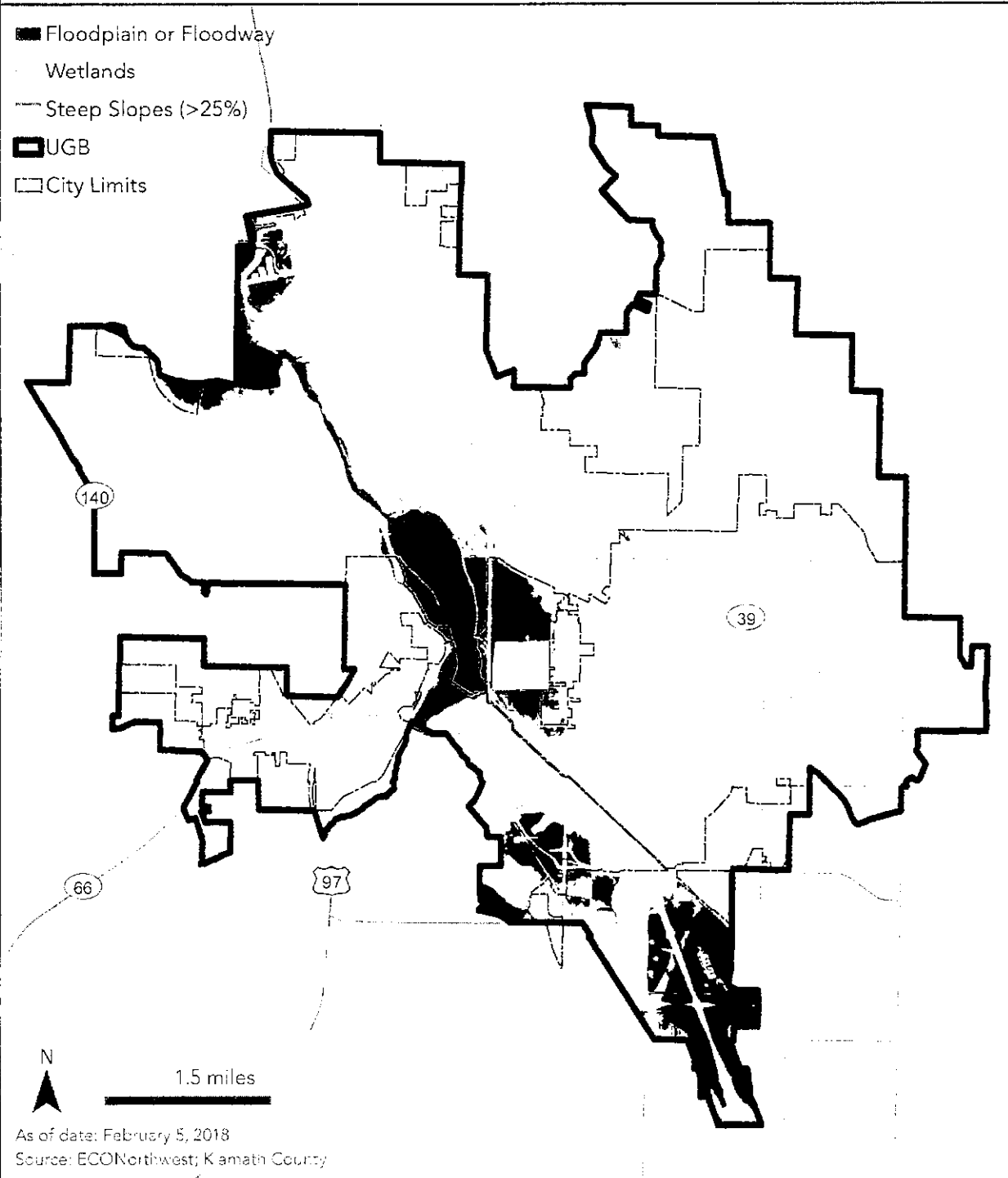
Constraint	Statutory Authority	Threshold	File name
<b>Goal 5 Natural Resource Constraints</b>			
Regulated Wetlands	OAR 660-008-0005(2)	Wetlands with zero foot buffer	Wetland.shp
Riparian Corridors	OAR 660-015-0000(5)	Zero foot buffer	Rivers.shp and Streams.shp
<b>Natural Hazard Constraints</b>			
Floodways	OAR 660-008-0005(2)	Lands within FEMA FIRM identified floodway	FEMA_100_Year_Flood_Plain.shp
100-Year Floodplain	OAR 660-008-0005(2)	Lands within FEMA FIRM 100-year floodplain	FEMA_100_Year_Flood_Plain.shp
Steep Slopes	OAR 660-008-0005(2)	Slopes greater than 25%	Slope_greater_than_25%.shp

We treated these areas as prohibitive constraints (unbuildable) as shown in Exhibit 74. All constraints were merged into a single constraint file, which was then used to identify the area of each tax lot that is constrained. These areas were deducted from lands that are identified as vacant or partially vacant.

Lack of access to water, sewer, power, road, or other key infrastructure cannot be considered a prohibitive constraint unless it is an extreme condition. This is because tax lots that are currently unserved could potentially become serviced over the 20-year planning period.

# Klamath Falls Buildable Lands Inventory

## Residential Constraints



## Step 4: Verification

ECONorthwest used a multistep verification process. The first verification step involved a “rapid visual assessment” of land classifications using GIS and recent aerial photos. The rapid visual assessment involves reviewing classifications overlaid on recent aerial photographs to verify uses on the ground. ECO reviewed all tax lots included in the inventory using the rapid visual assessment methodology. The second round of verification involved City staff verifying the rapid visual assessment output. ECO amended the BLI based on City staff review and a discussion of the City’s comments.

## Step 5: Tabulation and mapping

The results are presented in tabular and map format. We included a zone designation map, the land base constraints, lands by development status with constraints showing, and vacant and partially vacant lands by plan designation with constraints showing.