



Oregon

Theodore R. Kulongoski, Governor

Department of Land Conservation and Development

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Salem, OR 97301-2540

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NOTICE OF ADOPTED AMENDMENT

02/19/2014

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Forest Grove Plan Amendment
DLCD File Number 013-13

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Wednesday, March 05, 2014

This amendment was submitted to DLCD for review prior to adoption pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE:** The Acknowledgment or Appeal Deadline is based upon the date the decision was mailed by local government. A decision may have been mailed to you on a different date than it was mailed to DLCD. As a result, your appeal deadline may be earlier than the above date specified. **NO LUBA Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.**

Cc: Dainel Riordan, City of Forest Grove
Gordon Howard, DLCD Urban Planning Specialist
Anne Debbaut, DLCD Regional Representative

<paa> YA



NOTICE OF ADOPTED CHANGE TO A COMPREHENSIVE PLAN OR LAND USE REGULATION

FOR DLCD USE

File No.: 013-13 (20083)
[17762]
Received: 2/12/2014

Local governments are required to send notice of an adopted change to a comprehensive plan or land use regulation **no more than 20 days after the adoption.** (See [OAR 660-018-0040](#)). The rules require that the notice include a completed copy of this form. **This notice form is not for submittal of a completed periodic review task or a plan amendment reviewed in the manner of periodic review.** Use [Form 4](#) for an adopted urban growth boundary including over 50 acres by a city with a population greater than 2,500 within the UGB or an urban growth boundary amendment over 100 acres adopted by a metropolitan service district. Use [Form 5](#) for an adopted urban reserve designation, or amendment to add over 50 acres, by a city with a population greater than 2,500 within the UGB. Use [Form 6](#) with submittal of an adopted periodic review task.

Jurisdiction: City of Forest Grove

Local file no.: **CPA-13-01369**

Date of adoption: 1/27/2014

Date sent: 2/12/2014

Was Notice of a Proposed Change (Form 1) submitted to DLCD?

Yes: Date (use the date of last revision if a revised Form 1 was submitted): 9/30 & 10/29/13

No

Is the adopted change different from what was described in the Notice of Proposed Change? Yes No

If yes, describe how the adoption differs from the proposal:

The adopted Comprehensive Plan designations for the area south of Pacific Avenue and east of Ritchey Road were modified based on public testimony received. The initial proposal showed a larger area for Multifamily Low density and single family residential. The high density area increased.

Local contact (name and title): Daniel Riordan

Phone: 503-992-3226

E-mail: driordan@forestgrove-or.gov

Street address: 1924 Council Street

City: Forest Grove

Zip: 97116-

PLEASE COMPLETE ALL OF THE FOLLOWING SECTIONS THAT APPLY

For a change to comprehensive plan text:

Identify the sections of the plan that were added or amended and which statewide planning goals those sections implement, if any:

Comprehensive Plan Background text; Citizen Involvement Chapter (Goal 1); Land Use Chapter (Goal 2); Natural Resources and Hazards (Goal 7).

For a change to a comprehensive plan map:

Identify the former and new map designations and the area affected:

Change from C-Low to Mixed Use 30.0 acres. A goal exception was required for this change.

Change from LI to Mixed Use 25.0 acres. A goal exception was required for this change.

Change from GI to INST 5.5 acres. A goal exception was required for this change.

Change from RML to A-Medium 13.0 acres. A goal exception was required for this change.

Location of affected property (T, R, Sec., TL and address): various, see map

The subject property is entirely within an urban growth boundary

The subject property is partially within an urban growth boundary

If the comprehensive plan map change is a UGB amendment including less than 50 acres and/or by a city with a population less than 2,500 in the urban area, indicate the number of acres of the former rural plan designation, by type, included in the boundary.

Exclusive Farm Use – Acres:	Non-resource – Acres:
Forest – Acres:	Marginal Lands – Acres:
Rural Residential – Acres:	Natural Resource/Coastal/Open Space – Acres:
Rural Commercial or Industrial – Acres:	Other: – Acres:

If the comprehensive plan map change is an urban reserve amendment including less than 50 acres, or establishment or amendment of an urban reserve by a city with a population less than 2,500 in the urban area, indicate the number of acres, by plan designation, included in the boundary.

Exclusive Farm Use – Acres:	Non-resource – Acres:
Forest – Acres:	Marginal Lands – Acres:
Rural Residential – Acres:	Natural Resource/Coastal/Open Space – Acres:
Rural Commercial or Industrial – Acres:	Other: – Acres:

For a change to the text of an ordinance or code:

Identify the sections of the ordinance or code that were added or amended by title and number:

For a change to a zoning map:

Identify the former and new base zone designations and the area affected:

Change from	to	Acres:
Change from	to	Acres:
Change from	to	Acres:
Change from	to	Acres:

Identify additions to or removal from an overlay zone designation and the area affected:

Overlay zone designation:	Acres added:	Acres removed:
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Location of affected property (T, R, Sec., TL and address):

List affected state or federal agencies, local governments and special districts:

Identify supplemental information that is included because it may be useful to inform DLCDC or members of the public of the effect of the actual change that has been submitted with this Notice of Adopted Change, if any. If the submittal, including supplementary materials, exceeds 100 pages, include a summary of the amendment briefly describing its purpose and requirements.

Environmental quality and physical environment are addressed as part of the Natural Resources and Hazards chapter. Energy is addressed as part of the Public Facilities Chapter.

Additional Comprehensive Plan map Changes: Multifamily High Density to Single Family B-Standard (6.5 acres); Multifamily High to Multifamily Low (5.6 acres); Institutional to Town Center Support (0.3 acres); Comm'l to Town Ctr (23 ac).

If a comprehensive plan map or zoning map is created or altered by the proposed change:

A map showing the area changed and applicable designations, and

Electronic files containing geospatial data showing the area changed, as specified in [OAR 660-018-0040\(5\)](#), if applicable

Any supplemental information that may be useful to inform DLCD or members of the public of the effect of the actual change

CD Contents

1. CD Contents
2. Form 2 – DLCDC Notice of Adoption
3. Citizen Involvement Element
4. List of Citizen Involvement Meetings
5. Community Sustainability Element
6. General Background Chapter
7. Land Use Element
8. Comprehensive Plan Changes (Map)
9. Natural Resources and Hazards
10. Ordinance 2014-02
11. Order 2014-03
12. School and Education Element
13. Public Facilities and Community Services Element (Energy Text)
14. Notice of Final Local Decision

\\w2k\cd\CD Dept\PERIODIC REVIEW\PHASE 2 - WORK PROGRAM\Submittals\February 11 2014\CD Contents.docx

ORDINANCE NO. 2014-02

ORDINANCE ADOPTING POST-ACKNOWLEDGMENT PLAN AMENDMENT WORK PRODUCTS RELATED TO THE UPDATE OF THE CITY OF FOREST GROVE COMPREHENSIVE PLAN. FILE NO. CPA-13-01369

WHEREAS, ORS Chapter 197 establishes procedures for post-acknowledgement plan amendments to adopted Comprehensive Plan; and

WHEREAS, the Post Acknowledgment Plan Amendment items address Citizen Involvement, Background Chapter; Land Use Chapter and Comprehensive Plan Land Use Map, Community Sustainability, Natural Resources and Natural Hazards including Environmental Quality and Physical Environment, and Schools and Education; and

WHEREAS, the City completed the Post-Acknowledgment Plan Amendment work products; and

WHEREAS, the City implemented a citizen participation program to facilitate public participation in the development of the Comprehensive Plan; and

WHEREAS, the citizen participation program included the following elements; and

WHEREAS, the Planning Commission held multiple work sessions on the Comprehensive Plan text and land use map; and

WHEREAS, notice was provided to the Oregon Department of Land Conservation and Development and Metro in advance of the public hearings as required by ORS and Metro Code; and

WHEREAS, the Planning Commission held public hearings on the Comprehensive Plan and Transportation System Plan work products on November 4, 2013, November 18, 2013, December 2, 2013, and December 16, 2013; and

WHEREAS, the Planning Commission considered public comments made during the public hearings and modified recommendations pertaining the Comprehensive Plan land use map and Transportation System Plan; and

WHEREAS, on December 16, 2013, the Planning Commission unanimously approved a motion to accept the Comprehensive Plan post-acknowledgment-plan-amendment work products and recommend City Council approval; and

WHEREAS, notice of the City Council public hearing on this matter was mailed to affected property owners and interested persons on December 26, 2013; and

WHEREAS, notice of the City Council Public Hearing was published in the *Forest Grove News-Times* on January 8, 2013 as required by the Forest Grove Development Code; and

WHEREAS, the City Council held a duly-noticed Public Hearing on January 13 and January 27, 2014.

NOW THEREFORE, THE CITY OF FOREST GROVE ORDAINS AS FOLLOWS:

Section 1. The City Council of the City of Forest Grove hereby adopts the Comprehensive Plan Post-Acknowledgement-Plan-Amendment work products shown on Exhibit A.

Section 2. The City Council hereby adopts and modifies the Comprehensive Plan Map as recommended by the Planning Commission and shown on Exhibit B.

Section 3. The City Council hereby adopts the Planning Commission staff reports dated November 4, 2013, November 18, 2013, December 2 2013, and December 16 2013.

Section 4. The City Council hereby adopts the findings of fact supporting the Comprehensive Plan attached as Exhibit C.

Section 5. This ordinance is effective 30 days following its enactment by the City Council.

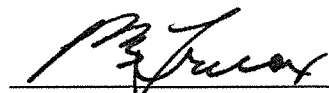
PRESENTED AND PASSED the first reading the 13th day of January, 2014.

PASSED the second reading the 27th day of January, 2014.



Anna D. Ruggles, City Recorder

APPROVED by the Mayor this 27th day of January, 2014.



Peter B. Truax, Mayor

**Forest Grove Comprehensive Plan
List of Post-Acknowledgement-Plan-Amendment Products**

- Task A: Citizen Involvement Chapter Text
1. Revised Comprehensive Plan Citizen Involvement Chapter
- Task B: Comprehensive Plan Background Chapter Text
1. Revised Comprehensive Plan Chapter I: Introduction
2. Revised Comprehensive Plan Chapter II: The Planning Process
a. Add new plan amendment process section
- Task C: Comprehensive Plan Land Use Chapter Text
1. Revised Land Use Chapter
a. Include Proposal for Mixed-Use Development Zone
b. Updated Comprehensive Plan Map
c. 2011 Land Use inventory
d. Revised Historic resources text and maps.
- Task D: Comprehensive Plan Community Sustainability Chapter Text
a. Add new chapter to Comprehensive Plan
- Task E: Natural Resources and Hazards
A. Urban/Wildland Interface
B. Earthquake Hazards
C. Other hazards
- Task F: Environmental Quality Chapter Text
A. Revised Environmental Quality Chapter for Comprehensive
- Task G: Energy Chapter of Comprehensive Plan
A. Revised Energy Chapter of Comprehensive Plan
- Task H: Physical Environment Text
A. Revised Physical Environment Chapter for Comp. Plan
- Task I: School Element Text
A. Coordination with Forest Grove School District
B. Draft School Chapter of Comprehensive Plan

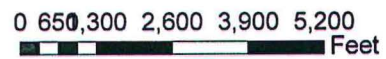
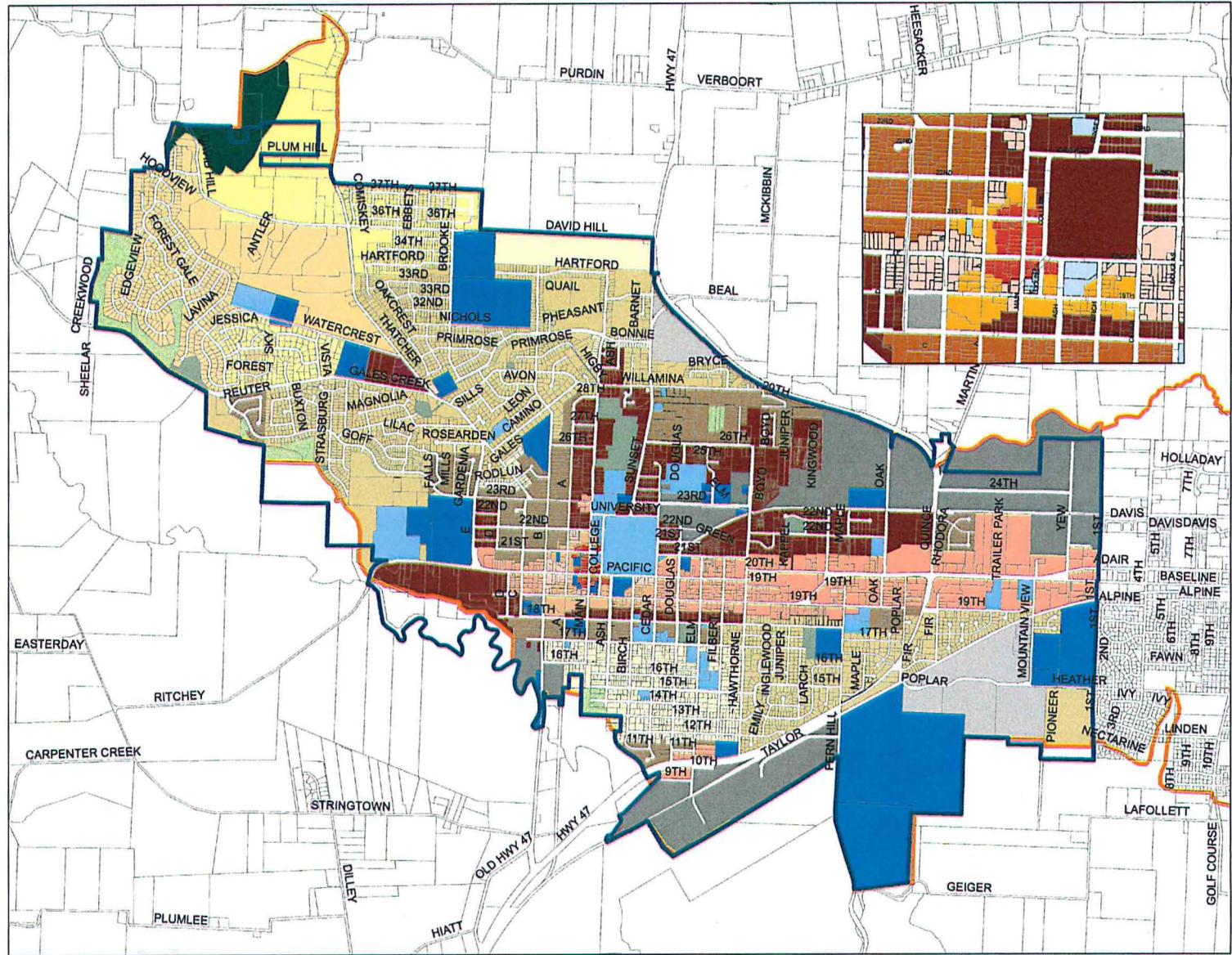


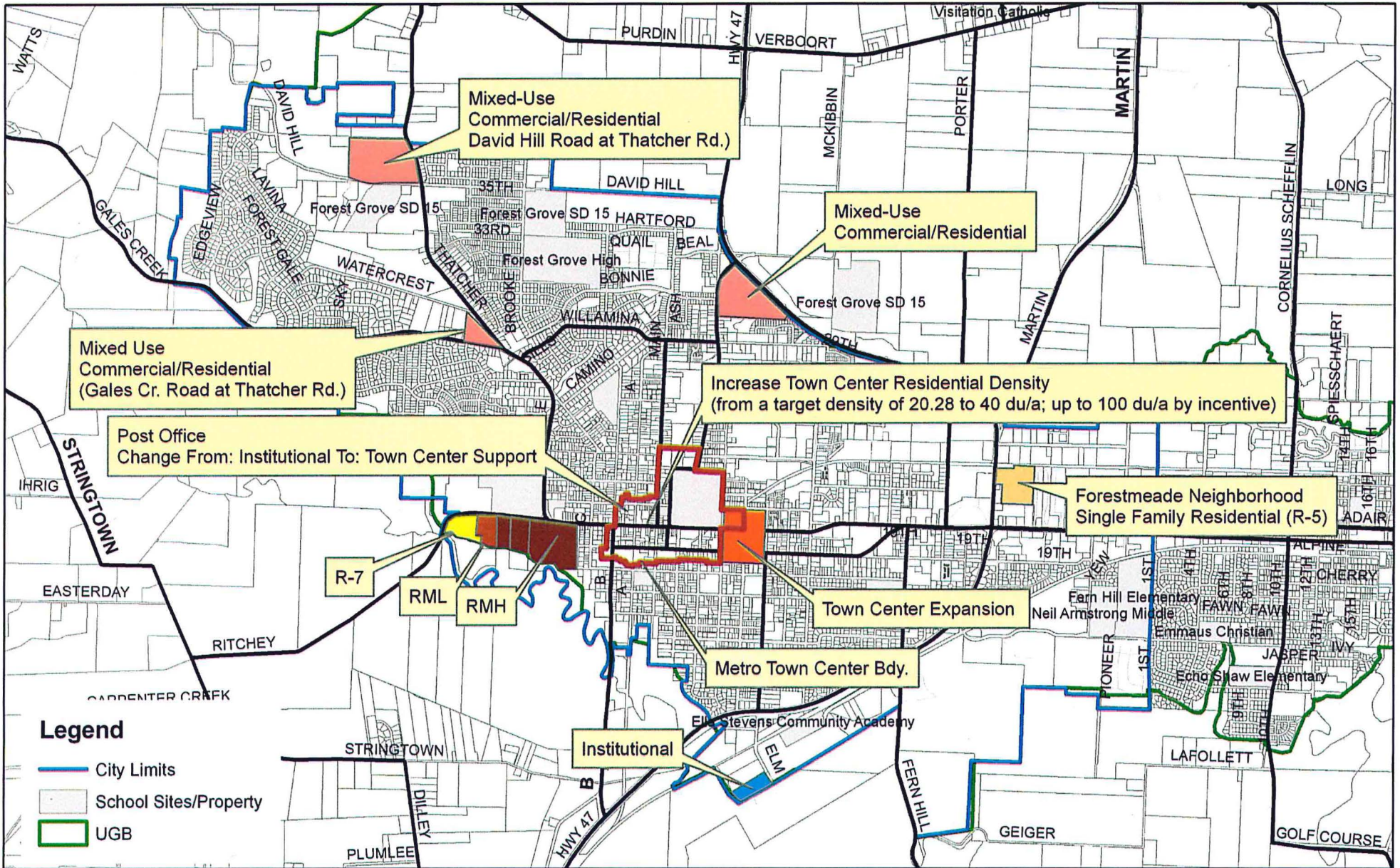
City of Forest Grove Comprehensive Plan Designations

Comprehensive Plan Designations

COMP_PLAN

- A-Medium
- B-C
- B-Standard
- C-Low
- Commercial Auto
- Commercial Neighborhood
- Commercial Planned Development
- D-Suburban
- Existing Park
- General Industrial
- High Density Residential
- Light Industrial
- Medium Density Residential
- Open Space
- Public
- Semi-Public
- TCC
- TCS
- TCT
- Urban Growth Boundary
- City Limits





PLANNING COMMISSION RECOMMENDATION

Comprehensive Plan

Land Use Concept



**Planning Commission Findings and Decision to Recommend Approval of
Comprehensive Plan Periodic Review and Post-Acknowledgment Plan
Amendment Work Products and Transportation System Plan Update**

WHEREAS, the Department of Land Conservation and Development issued Periodic Review Work Program Approval Order 001786 on April 15, 2010; and

WHEREAS, the Periodic Review Work Program directs the City to updated the Forest Grove Comprehensive Plan in the areas of citizen involvement, housing needs and buildable lands inventory, economic development, public facilities and urban services, transportation, evaluation of alternative development scenarios, concept plans and policies, urbanization, and future population projects; and

WHEREAS, the City desires to revise the entire Comprehensive Plan and add provisions pursuant with the Post-Acknowledgment Plan Amendment procedures described by Oregon Revised Statutes Chapter 197; and

WHEREAS, post acknowledgement plan amendments to the Comprehensive Plan affect the following areas of the Comprehensive Plan including Community Sustainability, Natural Resources and Natural Hazards, Schools and Education, Community Services, and Citizen Involvement; and

WHEREAS, to comply with the Periodic Review Approval Order 00186, the City updated the 2010 Transportation System Plan to reflect recommended changes to the Comprehensive Plan land use map; and

WHEREAS, the updated Transportation System Plan brings the Transportation System Plan into substantial conformance with the 2035 Metro Regional Transportation Plan and Regional Transportation Functional Plan; and

WHEREAS, notice of the proposed Comprehensive Plan amendments and Transportation System Plan update were provided to the Department of Land Conservation and Development on September 30, 2013 as required by state law (ORS Chapter 197.610 and OAR 660-018-0010); and

WHEREAS, the notice of the proposed Comprehensive Plan amendments and Transportation System Update was mailed to property owners and interested persons on October 15, 2013 in advance of the Planning Commissions public hearings; and

WHEREAS, notice of the Planning Commission public hearing on the proposed Comprehensive Plan amendments and Transportation System Plan Update was published in the *Forest Grove News Times* on October 30, 2013, November 13, 2013, November 27, 2013, and December 11, 2013 as required by Development Code Section 10.1.710; and

WHEREAS, the Planning Commission held four duly-noticed public hearings on the Comprehensive Plan amendments and Transportation System Plan Update on November 4, 2013, November 18, 2013, December 2, 2013 and December 16, 2013; and

After considering public testimony and holding deliberations on the Comprehensive Plan Amendments and 2035 Transportation System Plan Update, the City of Forest Grove Planning Commission does hereby recommend adoption of the Forest Grove Comprehensive Plan Periodic Review and Post-Acknowledgement-Plan-Amendment work products and 2035

Transportation System Plan Update making the following specific findings in support of this decision:

Approval Criteria and Findings

Under state law, amendments to a local *Comprehensive Plan* must be considered based on the following criteria:

1. Compliance with applicable state of Oregon Land Use Planning Goals,
2. Consistency with the Metro Regional Framework Plan, Metro Urban Growth Management Functional Plan, and
3. Compliance with relevant policies of the Comprehensive Plan.

The following section describes how the Comprehensive Plan amendments comply with applicable state of Oregon Land Use Planning Goals.

Oregon Statewide Land Use Planning Goals

Goal 1 (Citizen Involvement): The purpose of Goal 1 is to require a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Analysis: The City implemented a citizen involvement program employing a variety of techniques to ensure opportunity for involvement in all phases of the comprehensive plan update process.

Finding: The City of Forest Grove implemented a robust citizen involvement program for purposes of updating the Forest Grove Comprehensive Plan. The Citizen Involvement Strategy, dated July 2010, provided guidance for community outreach during the comprehensive plan update process.

The citizen involvement program included many opportunities for citizen involvement including project newsletters, surveys, comment open houses, input via the project website and multiple Planning Commission work sessions on specific topics. The record includes documentation of the meetings held during the work program phase of the Comprehensive Plan update. The following opportunities for public involvement were provided:

Meeting	Topic	Date
PC Work Session	Public Facilities and Community Services	August 19, 2013
CC Work Session	TSP, Land Use, Comp. Plan Text	June 24, 2013
PC Hearing	Public Facilities, Schools, Natural Hazards and Resources,	December 2, 2013
PC Work Session	Public Facilities and Urbanization	July 18, 2011
PC Hearing	Land Use Inventory, BLI, Wetland Inventory, EOA	November 7, 2011
PC Work Session	Periodic Review Work Program Review	October 3, 2011
CC Work Session	Water Master Plan, EOA Resolution	August 23, 2010
CC Work Session	EOA Update	February 11, 2011
PC Work Session	Periodic Review Update – Results	September 20, 2010

	of Community Open House	
PC Work Session	Housing	October 18, 2010
PC Work Session	Economic Development	November 1, 2010
PC Work Session	Land Use Inventory Buildable Land Inventory	October 4, 2010
PC Work Session	Economic Development	January 3, 2011
PC Work Session	Economic Development	February 21, 2011
PC Work Session	TSP Update	April 1, 2013
CC Work Session	Comp. Plan Update TSP Update	June 24, 2013
CC Public Hearing	Adoption of EOA	August 23, 2010
PC Work Session	Downtown Planning Public Facilities Element	August 19, 2013
PC Work Session	TSP Update Comp. Plan Land Use Concept	May 20, 2013
PC Work Session	Land Use and Transportation Policy Framework and Evaluation Criteria	September 17, 2012
CC Public Hearing	Acceptance and Approval of Land Use Inventory, BLI and Development Capacity Estimates, Wetland Inventory Update and EOA	November 28, 2011
Economic Development Commission	Economic Development Element	March 3, 2011
PC Work Session	Community Sustainability	March 7, 2011
PC Work Session	Economic Development	February 7, 2011
	Newsletter	March 2009
Sustainability Committee	Community Sustainability	April 26, 2012
Committee for Citizen Involvement	Periodic Review Work Program	April 14, 2009
Committee for Citizen Involvement	Periodic Review Work Program	May 12, 2009
CC Work Session	EOA	January 12, 2009
Washington County Cities	EOA and Housing Needs	March 5, 2009
PC Work Session	Land Use Alternatives	March 5, 2012
PC Hearing	Comp Plan Land Use	November 4, 2013
PC Hearing	TSP	November 18, 2013
PC Hearing	Public Facilities	December 2, 2013
PC Hearing	Growth Projections	December 16, 2013
Newspaper Insert	Planning Assumptions	Summer 2010
Newspaper Insert	Land Use Alternatives	Summer 2012
Project Website		
Open Houses		

In addition to the meetings identified above opportunities for public involvement included meetings with the City's Advisory Boards and Commission, advertisements placed within the Forest Grove News Times and outreach at the Forest Grove Farmers Market.

Goal 2 (Land Use Planning): The purpose of Goal 2 is to establish a land use planning process and policy framework as a basis for all decision and actions related to the use of land and to assure an adequate factual base for such decisions and actions.

Analysis: Goal 2 outlines the basic procedures of Oregon's statewide planning program. Under Goal 2 local decisions and actions related to the land use planning program must be based on an adequate factual base. Under Goal 2 land use decisions must be made in accordance with a comprehensive plan, and suitable "implementation ordinances" to put the plan's policies into effect must be adopted.

Goal 2 requires that plans be based on factual information, that local plans and ordinances be coordinated with those of other jurisdictions and agencies; and that plans be reviewed periodically and amended as needed. The Comprehensive Plan is based on factual information including:

- Wetlands Inventory (1990s and 2011 review) – Meets requirements for inventory of natural resources, their capabilities and limitations.
- Buildable Lands Inventory
- Residential land study including review of subdivision activity for compliance with the Metropolitan Housing Rule.
- Land Use Inventory (2011) – Meets requirement for man-made structures and utilities, and their location.
- Economic Opportunity Analysis (2009)
- Water Master Plan
- Sewer Master Plan
- Storm Drainage Master Plan
- Transportation Plan Update (2010 and 2014)
- Clean Water Services

- Identification of "implementing ordinances"
 - Forest Grove Development Code
 -

- Identification of factual information
 - Buildable Land Inventory (2009 and 2010)
 - Residential Land Study (2009)
 - Building Permit Files
 - Economic Opportunity Analysis
 - Land Use Inventory (2011)
 - Metro Gamma Household and Employment Projections (2012)
 - Transportation System Plan 2013
 - Water Master Plan 2010
 - Substation Master
 - Sanitary Sewer Master Plan
 - Clean Water Services Master Plan
 - Metro Solid Waste Master Plan
 - Storm Drainage Master Plan
 - Portland State University Population Estimates
 - Wetland Inventory
 - Wetland Inventory Update
 - Historic Resource Inventory (City of Forest Grove Planning Division)

The Forest Grove Comprehensive Plan establishes a planning process and policy framework as the local basis for all decisions and actions related to the use of land within the Forest Grove planning area. The Forest Grove Comprehensive Plan Update establishes a planning program including an objective process for amending the Comprehensive Plan. The Comprehensive Plan also establishes specific goals and policies for citizen involvement, land use housing, economic development, transportation, urbanization, natural resources and hazards, public facilities and community services, community sustainability, and schools and education.

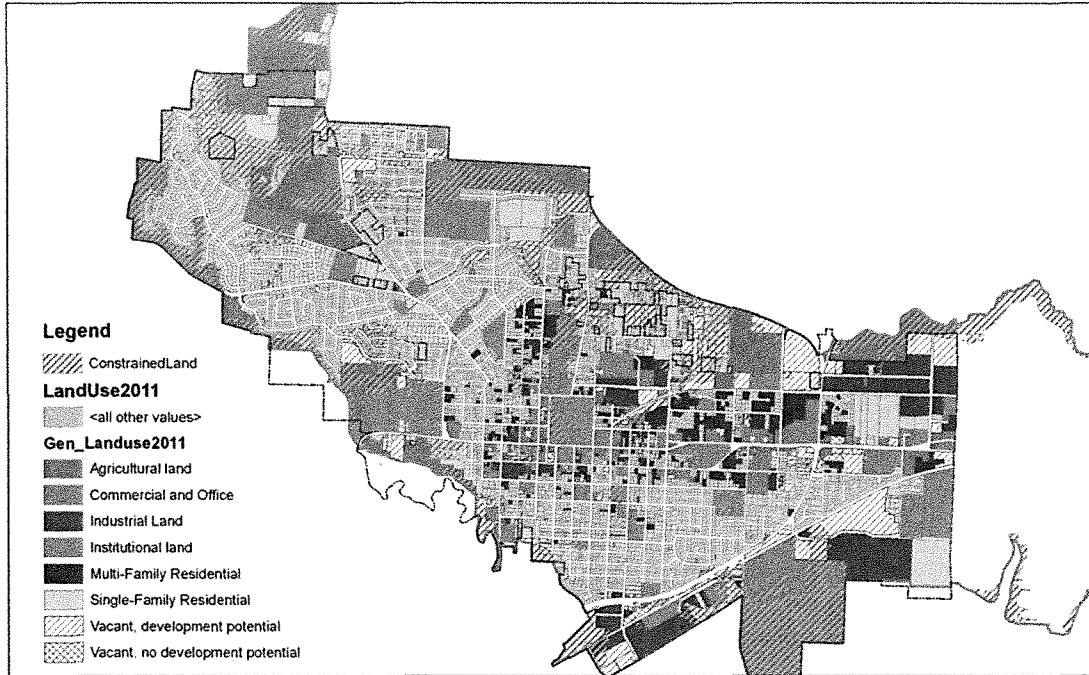
The land use chapter of the Comprehensive Plan establishes location criteria for the various land use designations assigned to property. The Comprehensive Plan also establishes density targets for each of the residential land use categories identified in the Comprehensive Plan. These residential density targets promote the efficient use of residential land within the urban growth boundary consistent with the Statewide Land Use Planning Goals, Metro Regional Framework Plan, Metro Urban Growth Management Functional Plan and urbanization chapter of the Forest Grove Comprehensive Plan.

The land use chapter of the Comprehensive Plan, including the Comprehensive Plan Map, ensures that there is a 20-year supply of vacant and redevelopable land within the urban growth boundary consistent with the statewide land use planning goals. Specific data related to land supply and land needs over the next twenty-years are contained in the 2009 Economic Opportunity Analysis.

The Forest Grove Comprehensive Plan is based on many resource documents incorporated by reference. The documents provide the factual basis for the policies contained in the various chapters of the Forest Grove Comprehensive Plan. These resource documents include:

1. City of Forest Grove Vision Statement (2007)
2. Economic Opportunity Analysis (2009)
3. Buildable Land Inventory (2008/2009)
4. Land Use Inventory (2011)
5. Wetland Inventory Update (2011)
6. City of Forest Grove Water Master Plan (2010)
7. City of Forest Grove Storm Drainage Master Plan (2007)
8. Park, Recreation and Open Space Master Plan (2002)
9. City of Forest Grove Wastewater System Master Plan (2007)
10. Clean Water Services Master Plan (2009)
11. City of Forest Grove Light and Power Master Plan (2013)
12. City of Forest Grove/Cornelius Hazard Mitigation Plan (2011)
13. Metro Regional Solid Waste Management Plan (2008-2018)
14. City of Forest Grove Capital Improvement Program
15. Metro Gamma Household and Employment Projections (September 2012)
16. City of Forest Grove Community Sustainability Strategy (2013)
17. City of Forest Grove Transportation System Plan Update (2014)
18. City of Forest Grove Historic Resources Inventory (2013)

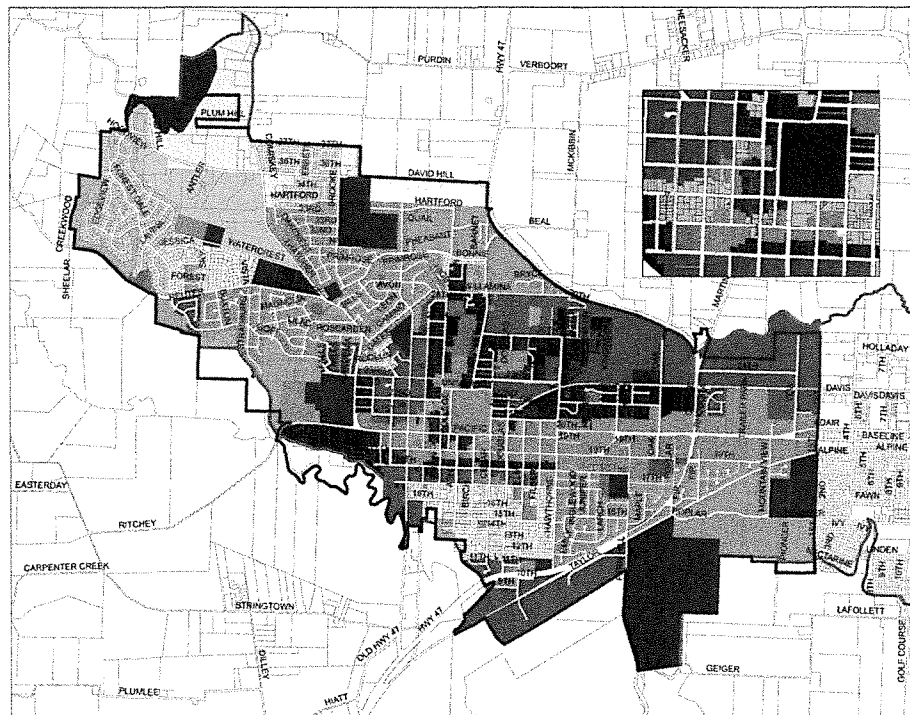
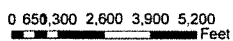
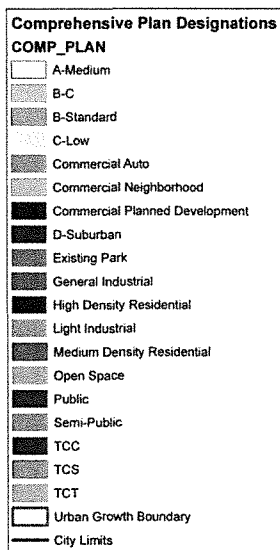
The map below shows the land use inventory that serves as the basis for the update to the Comprehensive Plan.



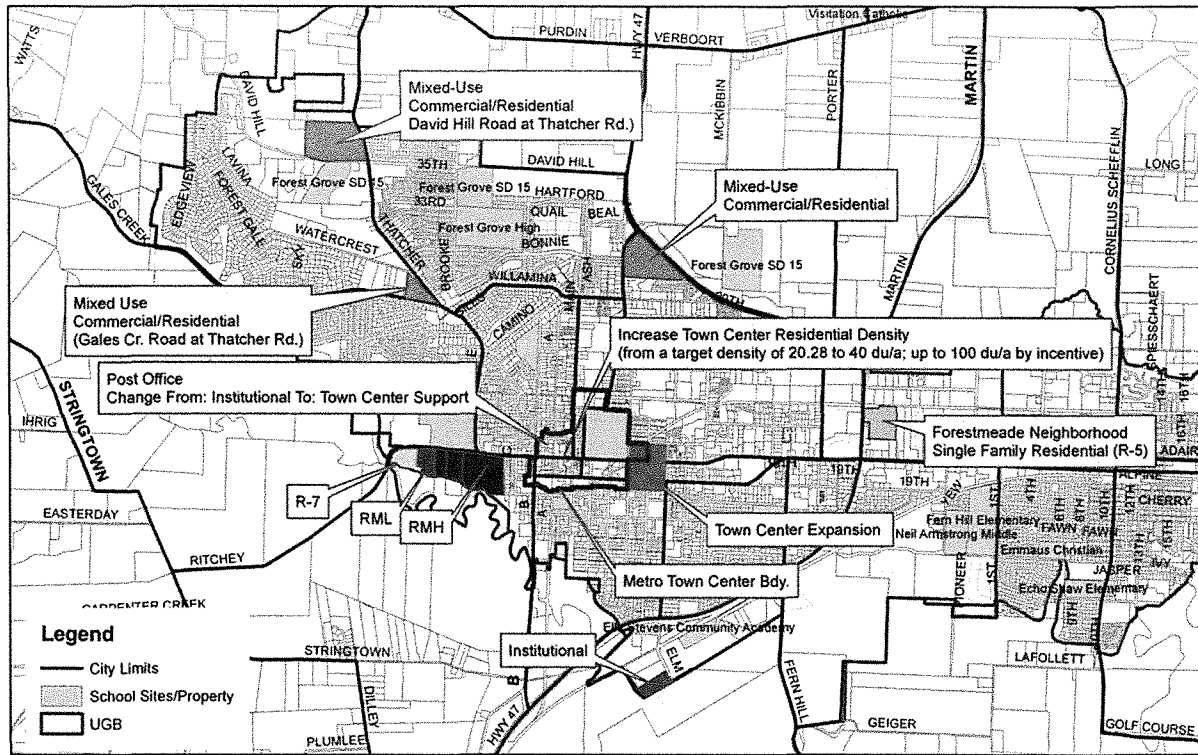
The map below shows the current comprehensive plan map.



City of Forest Grove Comprehensive Plan Designations



The map below shows the recommended changes to the Comprehensive Plan map.



city of
forest
grove

PLANNING COMMISSION RECOMMENDATION
Comprehensive Plan
Land Use Concept

The Comprehensive Land Use Chapter and land use concept is consistent with the Metro Regional Framework Plan since the land use plan reinforces the Forest Grove Town Center and promotes a compact development form consistent with Metro Regional Framework Plan Land Use Policy 1.1. Furthermore, the land use plan promotes housing choice and economic vitality consistent with Metro Regional Framework Plan Land Use Policies 1.3 and 1.5.

The land use plan is also consistent with the Metro Urban Growth Management Functional Plan. The land use plan supports housing choice through establishment of a variety of residential land use designations. The land use plan promotes land efficient development by establishing target development densities in the Land Use Chapter of the Comprehensive Plan. The land use plan also promotes a strong local economy by designating sufficient amounts of land for industry and employment consistent with the Economic Opportunity Analysis.

Finding: The update to the Comprehensive Plan is consistent with Goal 2 for the reasons stated above. Furthermore, the land use concept and Land Use Chapter of the Comprehensive Plan is consistent with the Metro Regional Framework Plan and Metro Urban Growth Management Functional Plan.

Goal 3 (Agricultural Lands): The purpose of Goal 3 is to preserve and maintain agricultural lands within the state.

Analysis: The Comprehensive Plan establishes a land use framework and growth management/urbanization program that serves to conserve agricultural lands by ensuring the efficient use of

land within the urban growth boundary. The efficient use of land within the urban growth boundary is achieved through the establishment of specific land use districts including location criteria and density parameters. For these reasons, the revised Forest Grove Comprehensive Plan is consistent with Goal 3.

Finding: The Comprehensive Plan is consistent with Goal 3 (Agricultural Lands)

Goal 4 (Forest Lands): The primary purpose of Goal 4 is to conserve forest lands by maintain the forest base and to protect the forest economy.

Analysis: The Comprehensive Plan establishes a land use framework and growth management/ urbanization program that serves to conserve forest lands by ensuring the efficient use of land within the urban growth boundary. The efficient use of land within the urban growth boundary is achieved through the establishment of specific land use districts including location criteria and density parameters. For these reasons, the revised Forest Grove Comprehensive Plan is consistent with Goal 4.

Finding: The Comprehensive Plan is consistent with Goal 4 (Forest Lands).

Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces): The primary purpose of Goal 5 is to protect natural resources and conserve scenic and historic areas, and open spaces.

Analysis: The Comprehensive Plan addresses natural resources in the Natural Resources and Natural Hazards chapter of the plan. Historic resources are addressed in the Public Facilities and Community Services Chapter of the Comprehensive Plan. Parks and open space are also addressed in the Public Facilities and Community Services Chapter of the Comprehensive Plan and in the Parks, Recreation and Open Space Master Plan which is a resource document to Comprehensive Plan. Natural resources were also addressed through the update of the City's local wetland inventory in 2011.

Finding: The Comprehensive Plan is consistent with Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces).

Goal 6 (Air, Water and Land Resource Quality): The primary purpose of Goal 6 is to maintain and improve the quality of the air, water, and land resources of the state.

Analysis: This goal is addressed in several chapters of the Comprehensive Plan. These chapters include the Land Use Chapter, Public Facilities and Community Services, and Natural Resources and Natural Hazards Chapter, and Transportation Chapter.

The Land Use Chapter of the Comprehensive Plan establishes a land use framework which promotes efficient use of land within the urban growth boundary and a compact development pattern consistent with the Metro Regional Framework Plan. The Land Use Chapter establishes target residential densities, location factors for land use activities to promote a multi-modal transportation system including transit. A land-efficient, compact residential land use pattern serves to improve air quality by reducing vehicle miles traveled and pollution generated by automobiles.

The Natural Resources and Natural Hazards Chapter of the Comprehensive Plan also addresses air and water quality. The Natural Resources and Natural Hazards Chapter of the Comprehensive Plan includes information regarding the air quality surveillance network near Forest Grove. Monitoring stations include Hillsboro, Beaverton, ad Sherwood. Water Quality is also addressed in the Natural Resources and Natural Hazards Chapter of the Comprehensive Plan. Water resources in Forest Grove include Clear Creek Watershed, Gales Creek, Scoggins

Reservoir/Henry Hagg Lake; Tualatin River, local wetlands, and groundwater. The local wetland inventory was updated in 2011 to ensure that no isolated wetlands were missed in previous inventories. The wetland inventory was reviewed using current Lidar imagery. The Natural Resources and Hazards Chapter of the Comprehensive Plan also recognizes the location of defined vegetative corridors and the importance of such corridors in improving water quality.

Finding: The Comprehensive Plan is consistent with the Goal 6 (Air, Water and Land Resource Quality).

Goal 7 (Areas Subject to Natural Hazards): The primary purpose of Goal 7 is to protect people and property from natural hazards.

Analysis: The Forest Grove Comprehensive Plan addresses Goal 7 specifically in the Natural Resources and Natural Hazards Chapter of the Comprehensive Plan. The Natural Resources and Natural Hazards Chapter identifies the locations within the community at risk for seismic activities including the location of known fault lines. The Natural Resources and Natural Hazards Chapter of the Comprehensive Plan also addresses flood and landslide risk. Furthermore, the Natural Resources and Natural Hazards Chapter addresses wildfire risk associated with the wildland/urban interface. Finally, the Natural Resources and Natural Hazards Chapter contains goals and policies to reduce potential risk associated with natural hazards.

Finding: The Comprehensive Plan is consistent with the purpose of Goal 7 (Areas Subject to Natural Hazards) and Metro Urban Growth Management Functional Plan for the reasons stated above.

Goal 8: (Recreational Resources) The primary purpose of Goal 8 is 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.

Analysis: The Forest Grove Comprehensive Plan addresses recreational needs in the Public Facilities and Community Services chapter of the Comprehensive Plan and on the Comprehensive Plan map. The Public Facilities and Community Services Chapter lists the park facilities in Forest Grove including parks owned and operated by the City of Forest Grove. In addition, the Public Facilities and Community Services Chapter includes recreational facilities available at school sites, and recreational amenities provided by state and county agencies. The Public Facilities and Community Services Chapter also identifies park need and facility criteria. Finally, the Comprehensive Plan incorporates by reference the Park, Recreation and Open Space Master Plan adopted by the City in 2002.

Finding: The Comprehensive Plan is consistent with Goal 8.

Goal 9: Economic Development The primary purpose of Goal 9 is to provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare and prosperity of Oregon's citizens.

Analysis: The Comprehensive Plan includes a chapter called Economic Development which addresses the requirements of Goal 9 and the implementing Oregon Administrative Rules. The Economic Development chapter is based on the data and findings contained in the City's 2009 Economic Opportunity Analysis. The Economic Development chapter includes the following sections:

1. Overview of state and regional policies affecting economic development efforts;

2. An economic profile for the City of Forest Grove and discussion of Forest Grove's role in the Portland region;
3. Findings related to economic development based on the 2009 Economic Opportunity Analysis; and
4. Goals and policies for local economic development.

Goal 9 calls for diversification and improvement of the economy. It asks communities to inventory commercial and industrial lands, project future needs for such lands, and plan and zone enough land to meet those needs. To meet this requirement the City prepared a Buildable Land Inventory in 2008 and Economic Opportunity Analysis in 2009. In addition, the City prepared an inventory of commercial and industrial lands in 2011 as part of a comprehensive land use inventory to supplement the BLI. The Economic Opportunity Analysis addresses future needs and identifies the amount of land needed for commercial and industrial purposes during the twenty-year planning period. The Planning Commission adopts the Buildable Land Inventory and capacity analysis completed by the City. Furthermore, the Planning Commission adopts the 2009 Economic Opportunity Analysis including the findings and conclusions contained therein.

Oregon Administrative Rules Chapter 660 Division 9 establishes requirements related to compliance with Goal 9.

OAR 660-009-015 (Economic Opportunity Analysis) identifies requirements for an Economic Opportunity Analysis. The requirements include:

- (1) Review of National, State, Regional, County and Local trends
 - This requirement is addressed on EOA pages 4 through 17
- (2) Identification of Required Site Types
 - This requirement is addressed on EOA pages 41 through 51
- (3) Inventory of Industrial and Other Employment Lands
 - This requirement is addressed on EOA pages 33 through 38
- (4) Assessment of Community Economic Development Potential
 - This requirement is addressed on EOA pages 17 through 20

OAR 660-009-0020 (Industrial and Other Economic Development Policies) states Comprehensive plans subject to this division must include policies stating the economic development objectives for the planning area. These policies must be based on the community economic opportunities analysis prepared pursuant to OAR 660-009-0015 and must provide Community Economic Development Objectives. The Economic Development Chapter includes stated community economic development objectives (Economic Development Chapter pages 28 through 31). Furthermore, OAR 660-009-0020 states comprehensive plans must include a Commitment to provide a competitive short term supply of employment land. To comply with this section cities and counties within a metropolitan planning organization must adopt a policy stating that a competitive short-term supply of land as a community economic development objective for the industrial and other employment uses selected through the economic opportunities analysis pursuant to OAR 660-009-0015. Local Economic Development Goal 9.4 addresses industrial activities and industrial land needs through Policy 9.4.6. OAR 660-009-0020 also states the comprehensive plan must include policies committing the city or county to designate an adequate number of sites of suitable sizes, types and locations. The Economic Opportunity Analysis identifies industrial land needs. The Economic Development Chapter of the Comprehensive Plan establishes goals and policies related to the amount of land that should be designated on the Comprehensive Plan map for industrial activities.

OAR 660-009-0025 (Designation of Lands for Industrial and Other Employment Uses) states cities and counties must adopt measures adequate to implement policies adopted pursuant to

OAR 660-009-0020. Appropriate implementing measures include amendments to plan and zone map designations, land use regulations, public facility plans, and transportation system plans. The Land Use Element of the Comprehensive Plan establishes land use designations and location criteria for General Industrial and Light Industrial land use classifications. The Comprehensive Plan map identifies the locations of these classifications.

Additional Findings Related to Economic Development

Finding 1: Forest Grove has a substantially lower presence of persons receiving a higher education compared with Washington County

Analysis: An area's level of educational attainment is often used as a proxy for the skill level of the population base. From an Economic Development perspective, Washington County is at a slight competitive advantage regionally, with a higher distribution of higher educated persons—36.6% of local residents have a Bachelor's Degree or higher as compared to 34.7% at the Portland metro level. The City of Forest Grove has a 22.1% share of higher educated local residents according to the 2000 census. This is substantially less than the regional share and that of neighboring job centers, namely Hillsboro. This highlights concerns locally about the extent to which the local skill base matches the needs of high growth industry opportunities.

Finding 2: From 2002 to 2007, employment growth in Washington County remained strong

Analysis: Since 2002, total employment growth in Washington County remained strong, gaining 11.3%. The county's growth cycle, which began in late 2003, maintained momentum until early 2007. While the County is still demonstrating employment growth, it is measurably slower. Moreover, the slowing is expected to extend through early to mid-2009 and impact most industries.

Finding 3: Economic activity in Washington County diverges from overall activity at the regional and state levels.

Analysis: The largest sectors of the Washington County economy diverge somewhat from sector rankings of the State and metro area. For example, Manufacturing accounts for 19% of Washington County's economy whereas the share is nearly 12% at the State and metro area. On the other hand, Public Administration accounts for a correspondingly large share at the State (16.8%) and metro area (12.7%), but only an 8.5% share in Washington County. Portland metro and Washington County both have a relatively greater share of Professional & Business Services employment, 13.6% and 14.0%, respectively while the overall State share is 11.4%. However, in other sectors Washington County's employment share is roughly similar to State and metro levels.

Finding 4: Forest Grove's economic activity is characterized by manufacturing and the Education and Health Services sector.

Analysis: The City of Forest Grove generally adheres to Washington County's sector rankings, but is overwhelmingly driven by Manufacturing and Education & Health Services, which combine to account for over 60% employment in the City.

Finding 5: Overall job growth in Forest Grove grew modestly between 2002 and 2007.

Analysis: Between 2002 and 2007, the City of Forest Grove's employment grew roughly 4.3%. Over this five-year period, the City experienced its strongest job growth in Manufacturing (+143 jobs) and Education & Health Services (+80 jobs). Forest Grove lost roughly 140 jobs in Natural Resources, Information and Professional & Business Services combined.

Finding 6: Wage levels in Washington County exceed wage levels in the Portland region and the state.

Analysis: With the exception of Public Administration, Leisure & Hospitality Services, Professional & Business Services and Financial Activities, average wage levels by sector in Washington County are at or above wage levels in the Portland metro area. Across all industries, Washington County wages averaged \$50,036, again 11.0% above the Portland metro \$45,090 average and 31.5% above the \$38,057 Oregon average. Since 2002, wage levels in Washington County have averaged 2.9% annual growth, slightly below the 3.3% annual growth at the State level. Similarly, at 3.2%,

Finding 7: Wage levels in Forest Grove lag behind Washington County and Portland regional averages.

Analysis: Forest Grove has remained roughly consistent with State wage growth. However, in 2007, the average wage in Forest Grove was \$33,732, well below the Washington County and Portland area averages.

Finding 8: High-tech represents a significant part of the Forest Grove economy.

Analysis: According to the City's economic opportunity analysis, the concentration of employment in High-Tech in Forest Grove is better than 15 times the national average. While circuit board manufacturing is a significant part of the existing local economy, its share of growth is not likely to be high. High-tech growth in Forest Grove is likely to result from firms that are connected to the cluster of high-tech industries centered in Hillsboro. Given Forest Grove's proximity to Hillsboro, the City is in a good position for capturing economic growth in semiconductor and solar component manufacturing.

Finding 9: Forest Grove's proximity to high quality farmland is an economic asset.

Analysis: The proximity of Forest Grove to high quality farmland and the City's quality water supply has created opportunities for growth in food processing and specialty agriculture products. The city already has an existing economic base in food processing (J Lieb Foods), nursery & tree products (Hines Nursery), and specialty beverages (Sake One, McMenamins, wineries). A specialty agriculture products cluster could develop as growth opportunities exist in this area. Moreover, the nature of Forest Grove's specialty products—breweries, wineries, distilleries, etc. is closely related with leisure & tourism in the region.

Finding 10: Tourism is underdeveloped in Forest Grove

Analysis: The City of Forest Grove is currently undertaking efforts to "brand" the city, giving it a regional identity. The concept of Forest Grove as a "Gateway to Wine Country" is a popular option, facilitated both by Forest Grove's proximity to the metro area and by abundant outdoor recreation activities. Central to the development of Forest Grove's tourism industry is a proposed partnership between McMenamins Grand Lodge and the Washington County Visitors Association (WCVA). The partnership would see the development of the "North Willamette Valley Wine Center" on the Grand Lodge property in Forest Grove. The center would feature an expansion of additional and more amenitized hotel rooms, potential convention facilities, and tasting facilities for regional wine makers.

Finding 11: Pacific University is an economic asset to the community and anchor for the Forest Grove Town Center

Analysis: While employment in public education can be expected to grow commensurately with family households in the region, broader growth in the education sector will be born out of Pacific University. The school is currently in an expansionary phase. In 2005 the school complete an \$11 million LEED certified library, and new residence halls were completed in 2006 and 2008. In spring 2008, the University completed Berglund Hall, which now houses the School of Education. Employment at Pacific University (in Forest Grove) has grown by nearly 20% since 2002. The schools 2010 strategic plan outlines a goal to increase enrollment to 4,000 students, up from roughly 3,100 currently.

Finding 12: Health services is a major employment sector in Forest Grove

Analysis: Four of the City's top 25 employers are nursing care or elderly home facilities. Forest Grove's composition of employment in Nursing and Residential Care Facilities is nearly three times the national average.

Finding 13: The estimated 2008 total employment level in Forest Grove is approximately 9,092 employees.

Analysis: For the year 2007, ES-202 reports estimate employment in Forest Grove to total 7,425 employees. However, our source ES-202 data reports "covered employment" only—employer firms tracked through unemployment insurance. Because this data omits a significant portion of the workforce that are not covered (i.e. sole-proprietors, self-employed, commission workers) we must revise our estimates to reflect true employment. Estimates from the Bureau of Economic Analysis (BEA) indicate that covered employment accounts for approximately 85% of total employment in Washington County, with individual estimates reported by broad sector. Assuming that Forest Grove roughly tracks regional trends, we estimate the *total* employed level in 2007 to be in the area 9,296 employees.

The second step to creating our base year estimate is updating our 2007 total employment estimate to the current period. This process involves the evaluation of countywide economic trends between 2007 and 2008 in addition to current knowledge about the local economic activity in Forest Grove. Outlined in Figure 14, we assume that between 2007 and 2008 the Forest Grove economy contracted slightly, by a margin of -2.2% to 9,092 employees.

Finding 14: The baseline employment forecast projects an increase of 5,748 jobs in Forest Grove during the next twenty-years.

Analysis: The baseline employment forecast anticipates an increase of 5,748 jobs, reflecting an average annual growth rate of 2.5%. Significant employment gains are expected in existing employment sectors including Manufacturing and Education & Health Services. Currently, the Professional & Business Services sector is grossly underrepresented in the Forest Grove economy, with an employment density for the sector roughly 20% of the national average. These services, which include everything from law services and administration to waste remediation are likely being provided by regional firms outside of Forest Grove, namely Hillsboro and Portland. Over the course of the planning period, we expect the maturation of the Forest Grove economy and potential spillover effects from on-going economic growth regionally to produce noteworthy growth in professional services on the margin.

Finding 15: Forest Grove growth potential is estimated to create demand for between 56 and 71 acres of office commercial land.

Analysis: The City currently has approximately 2.3 acres of vacant buildable acres suitable for office commercial development. All of the acreage is in the small category and located in the Town Center.

Finding 16: Over the next twenty years, net new demand for commercial and industrial land is expected to range from 311 to 451 net buildable acres.

Analysis: The EOA projects that Forest Grove will need between 311 and 451 acres of net buildable land for commercial and industrial activities. In 2009, approximately 321 acres of net vacant land remains in the Forest Grove portion of the regional urban growth boundary.

Finding 17: Forest Grove growth potential is estimated to create demand for between 56 and 71 acres of office land. Although demand is not sufficient for a single typical, 50-acre Business Park site, Business Park development is estimated as the largest category of demand among the three office space classes. Given documented site demand and existing inventory, Forest Grove will require at least 53.5 acres and as many as 68.4 acres of office commercial land to meet economic need over the next twenty years.

Analysis: Currently, Forest Grove has no site availability suitable for larger office park development outside the Town Center.

Finding 18: Forest Grove economic growth is expected to generate demand for a minimum of 164 industrial acres to as many as 294 acres through 2028.

Analysis: Although the EOA shows individual site demand has the greatest count in the "Small Businesses" category, total acreage demand is highest in the "Large User or Mid Park" class. In general, there is sufficient industrial land capacity within the urban growth boundary to meet projected 20-year needs in all categories except Cluster Anchor. With a proactive economic development approach, however, demand for industrial land could exceed identified supply by approximately 48 acres over the twenty-year planning period.

Finding 19: Forest Grove demand for commercial acreage is estimated to range from 97 acres to 142 acres depending upon economic growth scenario.

Analysis: Medium sites, typically 10 acres in size, comprise the largest single share of acreage demand during the planning period. Given documented site demand and existing inventory, Forest Grove will require anywhere from 66 to 111 additional acres to meet the needs of anticipated population growth through 2028. Unmet commercial retail land need is most concentrated in Medium-sized retail demand, followed by large retail commercial types.

Finding 20: There appears to be an overall surplus of available industrial land and a deficiency of commercial land both for short-term and through the planning period.

Analysis: Industrial land for the planning period varies from an excess of 88.14 acres to a need of 24.56 acres, depending on the assumed growth scenario. By comparison, commercial land for the planning period is projected to have a need of 121.06 to 181.96 acres. The pattern is similar for the short term. Applying the short-term land need factor from the State Administrative Rule, there appears to be an oversupply of 94 acres and an undersupply of 26 acres for commercial use.

Part of the commercial need for office development could be met in the City's Light Industrial District, which allows for call centers, research and development and information type of uses. There exists about 70 acres of vacant lands (three sites) currently zoned and planned for Light Industrial designation. Thus, there may not be a need to convert industrial land to commercial lands due to the flexibility of the Light Industrial District and plan designation as it currently exists.

The Economic Development Chapter and Economic Opportunity Analysis are consistent with Title 4 of the Metro Urban Growth Management Functional Plan. The Economic Development Chapter promotes a strong local economy which supports a strong regional economy consistent with the Title 4.

Finding: For the reasons stated above the Forest Grove Comprehensive Plan complies with Statewide Land Use Planning Goal 9, Metro Regional Framework Plan and Metro Urban Growth Management Functional Plan.

Goal 10: Housing The primary objective of Goal 10 is to provide for the housing needs of the citizens of the state.

Analysis: Local housing needs are based on the household growth projects prepared by Metro. These projects are based on the buildable land inventory and capacity analysis provided by the City and refined by Metro. Based on these projections the 2030 population estimate for Forest Grove is 28,100 persons as shown below. The estimate was derived from the Metro Gamma (September 2012) household estimates for 2025 and 2035 and the average number of persons per household in Forest Grove for the Year 2010 as reported by the US Census Bureau of 2.71 persons per household. The population assumptions for the Forest Grove Comprehensive Plan are indicated below:

Population Assumptions

- Base-year population used to develop the plan was 20,068 persons from the 2010 Census.
- 2013 Population is 22,340¹
- 2030 Planning Year Horizon Population is 28,100²

Household Estimates

1. Based on the Metro household projections released in September 2012, the City of Forest Grove should expect and plan for an additional 2,963 housing units during the 20-year planning period from 2010 to 2030.
2. Based on the City of Forest Grove Buildable Land Inventory, Forest Grove Economic Opportunity Analysis, and Metro land capacity estimates the residential development capacity for the Forest Grove Planning Area (urban growth boundary) is 4,800 units. This number takes into account the amount of vacant buildable land and redevelopment capacity.
3. Based on the Metro household growth projections and estimated residential land capacity there is sufficient land within the urban growth boundary to accommodate housing needs during the 20-year planning period from 2010 to 2030.

Metropolitan Housing Rule (OAR Chapter 660 Division 7)

- Compliance with Metropolitan Planning Rule related to average density (provide opportunity to meet 8 units per acre. Finding: Under the Metropolitan Housing Rule

¹ Center for Population Research and Census, Portland State University, July 1, 2013

² This population estimate is based on the Metro Gamma household projections for 2025 and 2035 released in September 2012. The population estimate is based on extrapolating a 2030 household number from the Metro estimates and applying a factor of 2.71 persons per household to the unit estimate. 2.71 persons per household is the average persons per household from the 2010 US Census. This population estimate is conservative given recent trends in population growth in Forest Grove since 2010.

(OAR 660-007-0035(2) the City of Forest Grove must provide for an overall density of eight or more dwelling units per net buildable acres. The Forest Grove Comprehensive Plan establishes a minimum number of dwelling units for each Comprehensive Plan designation. In addition, the Comprehensive Plan contains policies to encourage higher density residential development within the Town Center. Combined the policies serve to provide for an overall density of 8 dwelling units per net acre within the planning area. Historical trends suggest the City is achieving the 8 dwellings per net acre requirement³.

Determination of Residential Land Need

The determination of 20-year residential land needs for an urban area must be consistent with the adopted 20-year coordinated population forecast for the urban area, and with the requirements for determining housing needs in Goal 10.

The residential land needs for the City of Forest Grove is based on the coordinated population forecast derived from the city level household estimates prepared by Metro in September 2012. Housing needs are based on the Metro households estimates and Goal 10 housing analysis prepared by Johnson-Reid as part of the City's adopted 2009 Economic Opportunity Analysis. The analysis from the EOA identifies the following housing needs:

COMPARISON OF CURRENT NEED TO CURRENT SUPPLY

Ownership				Rental			
Price Range	Estimated Current Need	Estimated Current Supply	Unmet (Need) or Surplus	Rent	Estimated Current Need	Estimated Current Supply	Unmet (Need) or Surplus
\$0 - 50k	211	416	205	\$0 - 250	469	40	(429)
\$50k - 70k	135	156	21	\$250 - 375	289	138	(151)
\$70k - 90k	137	156	18	\$375 - 500	240	163	(77)
\$90k - 120k	143	157	14	\$500 - 625	271	933	662
\$120k - 160k	432	390	(42)	\$625 - 875	396	1,163	767
\$160k - 230k	701	1,462	762	\$875 - 1,250	497	642	145
\$230k - 350k	1,085	1,027	(58)	\$1,250 - 1,875	601	330	(271)
\$350k - 460k	779	315	(464)	\$1,875 - 2,500	133	82	(51)
\$460k - 690k	656	147	(510)	\$2,500 - 3,750	48	0	(48)
\$690k +	195	52	(143)	\$3,750 +	0	0	0
Totals:	4,474	4,278	(196)	Totals:	2,945	3,490	546

Occupied Units:	7,419
All Housing Units:	7,768
Total Unit Surplus:	350

³ See Residential Land Study (2009)

FIGURE 39: FUTURE HOUSING PROFILE (2028)

	Baseline Growth Scenario	Medium Growth Scenario	High Growth Scenario
2008 Population*:	19,882	19,882	19,882
Annual Growth Rate:	2.0%	2.3%	2.6%
<i>Estimated 2028 Population*</i> :	29,394	31,504	32,916
<i>Estimated 2028 Households</i> :	10,968	11,755	12,282
<i>Total Housing Units</i> :	11,668	12,506	13,066
Occupied Housing Units:	10,968	11,755	12,282
Vacant Housing Units:	700	750	784
New Population ('08-'28):	9,512	11,622	13,034
New Households ('08-'28):	3,549	4,337	4,863
New Housing Units ('08-'28) ¹	3,900	4,737	5,298

* Does not include Group Quarters population.

¹ New Housing Units = Total housing units, occupied and vacant.

To be conservative in estimating deficiencies related to supply and demand, the City of Forest Grove chose the medium growth scenario which is slightly higher than historical growth trends.

The table below from the EOA shows the projected future needs for new housing units under the medium growth scenario.

PROJECTED FUTURE NEED FOR NEW HOUSING UNITS (2028 – MEDIUM GROWTH SCENARIO)

OWNERSHIP HOUSING									
Price Range	Single Family	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other	Total Units	% of Units	Cummulative %
\$0 - 50k	-52	10	8	6	0	0	-28	-0.7%	-0.7%
\$50k - 70k	39	6	5	3	0	0	53	1.4%	0.6%
\$70k - 90k	57	7	5	4	0	0	72	1.9%	2.5%
\$90k - 120k	65	7	5	4	0	0	82	2.1%	4.6%
\$120k - 160k	232	21	15	11	0	0	280	7.2%	11.9%
\$160k - 230k	-263	30	26	18	0	0	-190	-4.9%	7.0%
\$230k - 350k	591	55	40	30	0	0	715	18.5%	25.5%
\$350k - 460k	974	51	34	27	0	0	1,087	28.2%	53.7%
\$460k - 690k	1,199	56	37	29	0	0	1,321	34.2%	87.9%
\$690k +	425	20	13	10	0	0	468	12.1%	100.0%
Totals:	3,266	264	188	141	0	0	3,859	% All Units:	81.5%
Percentage:	84.6%	6.8%	4.9%	3.7%	0.0%	0.0%	100.0%		

RENTAL HOUSING									
Price Range	Single Family	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other	Total Units	% of Units	Cummulative %
\$0 - 250	248	57	88	263	0	0	656	74.7%	74.7%
\$250 - 375	110	21	31	90	0	0	252	28.7%	103.4%
\$375 - 500	93	16	23	65	0	0	198	22.5%	125.9%
\$500 - 625	-101	-54	-97	-320	0	0	-572	-65.1%	60.8%
\$625 - 875	-74	-55	-103	-342	0	0	-573	-65.3%	-4.5%
\$875 - 1,250	106	4	-3	-28	0	0	78	8.9%	4.4%
\$1,250 - 1,875	245	46	68	195	0	0	554	63.0%	67.5%
\$1,875 - 2,500	72	14	21	60	0	0	166	18.9%	86.4%
\$2,500 - 3,750	44	10	16	49	0	0	119	13.6%	100.0%
\$3,750 +	0	0	0	0	0	0	0	0.0%	100.0%
Totals:	743	60	43	32	0	0	878	% All Units:	18.5%
Percentage:	84.6%	6.8%	4.9%	3.7%	0.0%	0.0%	100.0%		

TOTAL HOUSING UNITS								
	Single Family	Duplex	3- or 4-plex	5+ Units MFR	Mobile home	Boat, RV, other	Total Units	% of Units
Totals:	4,010	324	231	173	0	0	4,737	100%
Percentage:	84.6%	6.8%	4.9%	3.7%	0.0%	0.0%	100.0%	

Sources: PSU Population Research Center, Claritas Inc., Census, Johnson Reid
 Values are in 2008 dollars.

PROJECTED NEW RESIDENTIAL LAND NEED, FOREST GROVE (2028)

BASELINE GROWTH SCENARIO (2% Annual Pop. Growth)						
ZONING DESIGNATION	Total Future Unit Need - Vacant Lands¹	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distribution	
SR Low Density Residential	0	1.0	0	0	NA	
R-10 Low Density Residential	-159	4.4	0	0	NA	
R-7 Low Density Residential	-447	6.2	0	0	NA	
R-5 Low Density Residential	-96	8.7	0	0	NA	
RML Medium Density Residential	-55	12.0	0	0	NA	
RMH High Density Residential	-43	20.3	0	0	NA	
TC Town Center designations (3)	NA*					
Totals/Averages:	-800	8.9	0	0	NA	

MEDIUM GROWTH SCENARIO (2.3% Annual Pop. Growth)						
ZONING DESIGNATION	Total Future Unit Need - Vacant Lands¹	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distribution	
SR Low Density Residential	0	1.0	0	0	0.0%	
R-10 Low Density Residential	7	4.4	2	2	28.9%	
R-7 Low Density Residential	21	6.2	3	4	57.1%	
R-5 Low Density Residential	4	8.7	1	1	8.7%	
RML Medium Density Residential	3	12.0	0	0	3.6%	
RMH High Density Residential	2	20.3	0	0	1.7%	
TC Town Center designations (3)	NA*					
Totals/Averages:	37	8.9	6	7	100%	

HIGH GROWTH SCENARIO (2.6% Annual Pop. Growth)						
ZONING DESIGNATION	Total Future Unit Need - Vacant Lands¹	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distribution	
SR Low Density Residential	0	1.0	0	0	0.0%	
R-10 Low Density Residential	119	4.4	27	34	28.9%	
R-7 Low Density Residential	334	6.2	54	67	57.1%	
R-5 Low Density Residential	72	8.7	8	10	8.7%	
RML Medium Density Residential	41	12.0	3	4	3.6%	
RMH High Density Residential	32	20.3	2	2	1.7%	
TC Town Center designations (3)	NA*					
Totals/Averages:	598	0.0	94	118	100%	

¹ Assumes that Town Center designation, which is currently surrounded by incorporated land, will not expand, therefore its capacity is included in the capacity of current vacant lands.

Land Inventory and Response to Deficiency

Under state law when evaluating or amending a UGB, a local government must inventory land inside the UGB to determine where there is adequate development capacity to accommodate 20-year needs determine in OAR 660-024-0040. For residential land, the buildable land inventory must include vacant and redevelopable land and be conducted in accordance with OAR 660-007-0045 or OAR 660-008-0010, whichever is applicable, and ORS 197.296 for local governments subject to that statute. For employment land, the inventory must include suitable vacant and developed land designated for industrial or other employment use and must be conducted in accordance with OAR 660-009-0015(3).

Under state law Metro is responsible for evaluating and amending a UGB. The City of Forest Grove inventoried the land inside the UGB within the City's planning area in 2011 to determine where there is adequate development capacity to accommodate 20-year land needs. A buildable land inventory was also completed to assess the amount of constrained lands with little or no development capacity. Based on this analysis there is no deficiency in 20-year supply of land based on land use inventory, buildable land inventory and 2009 Economic Opportunity Analysis.

Each city must plan for and accommodate needed housing types⁴, such as multifamily and manufactured housing. Goal 10 requires each city to inventory its buildable residential lands⁵, project future needs for such lands, and plan and rezone enough buildable land to meet those needs. It also prohibits local plans from discriminating against needed housing types. The Comprehensive Plan complies with the preceding requirements in the following ways:

- The City prepared a Buildable Land Inventory and vacant land capacity analysis. The Planning Commission adopts the buildable land inventory and capacity analysis Residential Land Study.
- Needed housing types are identified in the Economic Opportunity Analysis. The Planning Commission adopts the data, findings, conclusions and recommendations contained in the EOA.
- The Comprehensive Plan does not contain policies that discriminate against needed housing types including manufactured homes. Furthermore the Comprehensive Plan does not restrict housing tenure.

Analysis of Government Assisted Housing Units

According to Metro and the Regional Equity Atlas there are approximately 607 publicly-subsidized affordable housing units in Forest Grove. This represents approximately 8.7% of the total dwelling units in Forest Grove.

Project Name	Project Location	Number of Units
Harkson Court	2900 22 nd Avenue	20
Covey Run Apartments	1775 Covey Run Drive	45

⁴ Needed housing types are defined in ORS 197.303 and includes attached and detached single family dwellings, multiple family dwellings at particular price ranges and rent levels available to renters and owners, government assisted housing, and manufactured homes on individual lots and within manufactured home subdivisions. The Forest Grove Economic Opportunity Analysis (2009) identifies needed housing types during the planning period and is adopted by reference.

⁵ The City conducted a Buildable Land Inventory in 2008 and updated in 2011 as part of review of the Metro Buildable Land Inventory and completion of a comprehensive local land use inventory. The Planning Commission adopts the buildable land inventories and land use inventory.

Jose Arciga Apartments	3231 22 nd Place	55
The Villager Apartments	1921 Fir Road	36
Vanrich Apartments	2016 B Street	17
Parkside Apartments	2715 Main Street	24
517 Ballard Way	517 Ballard Way	1
2731 Buxton Street	2731 Buxton Street	1
2738 Buxton Street	2738 Buxton Street	1
2736 Ballard Lane	2736 Ballard Lane	1
618 Ballard Lane	618 Ballard Lane	1
705 Willamina Avenue	705 Willamina Avenue	1
1770 Tamarack Way	1770 Tamarack Way	1
1816 Sequoia Court	1816 Sequoia Court	1
1721 Fir Road	1721 Fir Road	1
1755 Tamarack Way	1755 Tamarack Way	1
1626 Fir Court	1626 Fir Court	1
1704 Fir Court	1704 Fir Court	1
1525 Tara Court	1525 Tara Court	1
3506 18 th Place	3506 18 th Place	1
2221 23 rd Place	2221 23 rd Place	2
2225 23 rd Place	2225 23 rd Place	2
1804 Sequoia Court	1804 Sequoia Court	2
Forest Grove Beehive	2122 Hawthorne Street	44
Willow Park Apartments	2824 22 nd Avenue	46
Wynwood of Forest Grove	3110 19 th Avenue	82
Garden Grove Apartments	2727 22 nd Avenue	48
Forest Manor Apartments I	2141 Quince Street	19
Forest Manor Apartments II	2141 Quince Street	6
Forest Villa Apartments	2131 Quince Street	84
Elm Park I and II	2350 Elm Street	62

Source: Regional Equity Atlas

The current inventory of mobile home units is approximately 698 mobile home units. Manufactured dwelling parks in Forest Grove include; Quail Run, The Homestead, Rose Grove Mobile Home Park and Hampton Court (2829 Pacific Avenue).

The Housing Chapter of the Comprehensive Plan is consistent with Title 1 of the Metro Urban Growth Management Functional Plan. The Housing Chapter promotes housing choice based on identified needs contained in the Economic Opportunity Analysis.

Finding: The Forest Grove Comprehensive Plan substantially complies with Goal 10 housing and the applicable Oregon Administrative Rules and the Metro Urban Growth Management Functional Plan.

Goal 11: Public Facilities and Services The primary purpose of Goal 11 is 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.

Analysis: The Public Facilities and Community Services chapter of the Comprehensive Plan addresses the requirements of Goal 11. The Public Facilities and Community Services Chapter of the Comprehensive Plan along with the Land Use Chapter promotes an orderly and efficient arrangement of public facilities within the urban growth boundary based on available resources. The Public Facilities and Community Services Chapter of the Comprehensive Plan addresses the municipal water, sanitary sewer and storm sewer systems. The Transportation Chapter of the Comprehensive Plan addresses transportation system needs and constraints. The Public

Facilities and Community Services Chapter of the Comprehensive Plan incorporates by reference the adopted Water (August 2010), Clean Water Services Sewer Master Plan Update (2009) Storm Sewer Drainage Master Plan (November 2007), Sanitary Sewer (November 2007), and Park, Recreation and Open Spaces Master Plan (December 2001), and City of Forest Grove Light and Power Substation Master Plan (July 2013). In addition to the public services identified above, the Public Facilities and Community Services chapter addresses public safety, health services, energy, parks and cultural resources, solid waste and recycling, communication services, library and city administrative services.

OAR 660-011-0010(1) states that the public facility plan shall contain the following items:

- (a) An inventory and general assessment of the condition of all significant public facility systems which support the land uses designated in the acknowledged comprehensive plan;
- (b) A list of the significant public facility projects which are to support the land use designated in the acknowledged comprehensive plan. Public facility project descriptions or specifications of these projects as necessary;
- (c) Rough cost estimates of each public facility project;
- (d) a map or written description of each public facility project's general location or service area.
- (e) Policy statement(s) or urban growth management agreement identifying the provider of each public facility system.
- (f) an estimate of when each facility project will be needed; and
- (g) A discussion of the provider's existing funding mechanism and the ability of these and possible new mechanisms to fund the development of each public facility project or system.

The Public Facilities and Community Services Chapter of the Forest Grove Comprehensive Plan provides a general overview of the various municipal infrastructures systems including needs and deficiencies. The Public Facilities and Community Services Chapter also identifies infrastructure projects and associated costs. Additional information necessary for compliance with OAR 660-01100010(1) including an inventory of public facility systems and condition, significant projects necessary to support planned land uses, cost estimates, maps showing project locations, expected timing for construction and funding mechanisms can be found in the public facility master plans list above.

OAR 660-011-0010(2) states those public facilities to be addressed in the plan shall include, but need not be limited to those specified in OAR 660-011-0005(5). Facilities included in the public facility plan other than those included in OAR 660-011-0005(5) will not be reviewed for compliance with this rule. The facilities listed under OAR 660-011-005(5) include water, sewer, and transportation facilities. The Public Facilities and Community Services Chapter of the Comprehensive Plan address water and sewer systems. The Transportation Chapter of the Comprehensive Plan and Transportation System Plan Update complemented concurrently with Periodic Review addresses the transportation system.

OAR 660-011-0010(3) states it is not the purpose of this division to cause duplication of or to supplant existing applicable facility plans and programs. Where all or part of an acknowledged comprehensive plan, facility master plan either of the local jurisdiction or appropriate special district, capital improvement program, regional functional plan, similar plan or any combination of such plans meets all or some of the requirements of this division, those plans, or programs may be incorporated by reference into the public facility plan required by this division. Only those referenced portions of such documents shall be considered to be a part of the public facility plan and shall be subject to the administrative procedures of this division and ORS Chapter 197. The Public Facilities and Community Services Chapter of the Comprehensive

Plan incorporates by reference the master plans identified above including the findings, conclusions and recommendations.

OAR 660-011-0015(1) states the responsibility for the preparation, adoption and amendment of the public facility plan shall be specified within the urban growth management agreement. The Urban Planning Area Agreement (UPAA) between Washington County and Forest Grove, executed on October 25, 1988, outlines the roles and responsibilities for the provision of public services within the Forest Grove planning area (unincorporated area within the urban growth boundary). The UPAA specifies the City of Forest Grove is the appropriate governmental agency responsible for providing public services at such time property is annexed into the city. Provision of urban services is contingent upon annexation into the City of Forest Grove. The 1988 UPAA remains in effect.

OAR 660-011-0015(2) states the jurisdiction responsible for the preparation of the public facility plan shall provide for the coordination of such preparation with the city, county, special districts and, as necessary, state and federal agencies and private providers of public facilities.

Response:

OAR 660-011-0020(1) The public facility plan shall include an inventory of significant public facility systems. Where the acknowledged comprehensive plan, background document or one or more plans or programs listed in OAR 660-011-0010(3) contains such an inventory, that inventory may be incorporated by reference. The City's public facility master plans for water, sanitary sewer, storm drainage, and transportation are incorporated into the Comprehensive Plan by reference.

OAR 660-011-0025 states: (1) the public facilities plan shall include a general estimate of the timing for the planned public facility projects. The timing of projects may be related directly to population growth; service level; long term availability of funding and (2) projects should be identified as occurring either in the short term or long term. The Public Facilities and Community Services chapter of the Comprehensive Plan provides a summary of the required planned public facility projects needed to meet long term (20-year) development needs. Additional detail is provided in the water, sanitary sewer, storm drainage and Transportation System Plans incorporated herein by reference.

OAR 660-011-0030 states: the public facility plan shall identify the general location of the public facility project in specificity appropriate for the facility. OAR 660-011-0035 states the public facility plan shall include rough cost estimates for those sewer, water, and transportation public facility projects identified in the facility plan. The Public Facilities and Community Services chapter of the Comprehensive Plan provides a summary of the required planned public facility projects needed to meet long term (20-year) development needs. Additional detail is provided in the water, sanitary sewer, storm drainage and Transportation System Plans incorporated herein by reference.

OAR 660-011-0045 states (1) the governing body of the city or county responsible for development of the public facility plan shall adopt the plan as a supporting document to the jurisdiction's comprehensive plan and shall also adopt as part of the comprehensive plan (a) The list of public facility project titles, excluding (if the jurisdiction so chooses) the descriptions or specifications of those projects; (b) a map or written description of the public facility projects' locations or service area as specified in sections (2) and (3). (c) The policy(ies) or urban growth management agreement designating the provider of each public facility system. The Public Facilities and Community Services chapter to the Comprehensive Plan includes these provisions.

The Public Facilities and Community Services Chapter of the Comprehensive Plan is consistent with Metro Regional Framework Plan Chapter 3 (Nature in Neighborhoods). Chapter 3 promotes the provision of parks and open space. The Public Facilities and Community Services Chapter of the Comprehensive Plan provides an inventory of park facilities consistent Metro Regional Framework Policy 3.1 and Policy 3.5.

Finding: For the reasons stated above the Comprehensive Plan complies with Goal 11 and the Metro Regional Framework Plan.

Goal 12: Transportation The primary purpose of Goal 12 is to promote a balanced multimodal transportation system taking into account future development and land use.

Analysis: The Transportation Chapter of Comprehensive Plan summarizes the findings, goals and policies contained in the Transportation System Plan. Both the transportation chapter and the Transportation System Plan supports a balanced multi-modal transportation system.

The Planning Commission adopts Appendix K to the Transportation System Plan update including the findings and conclusion therein.

Finding: The Transportation Chapter of the Forest Grove Comprehensive Plan is consistent with Goal 12.

Goal 14: Urbanization The primary purpose of Goal 14 is 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.

Analysis: The Urbanization Chapter of the Comprehensive Plan establishes an urbanization and growth management program for the City. This program provides for an orderly and efficient transition from urban to rural land use; accommodates employment and population needs within the urban growth boundary. The local urbanization program is based on the Urban Area Planning Agreement (UPAA) executed between Washington County and Forest Grove in 1988. Among other things the UPAA identifies roles and responsibilities for the provision of urban services within the urban growth boundary. The Urbanization Chapter of the Comprehensive Plan describes the local annexation program.

With respect to the UGB, the boundary must be based on the adopted 20-year population forecast for the urban area described in OAR 660-024-0030, and must provide for needed housing, employment and other urban uses such as public facilities, streets and roads, schools, parks, and open space over the 20-year planning period consistent with the land need requirements of Goal 14 and this rule. The 20-year need determinations are estimates which, although based on the best available information and methodologies, should not be held to an unreasonably high level of precision. Under state law, Metro is responsible for managing the location of the urban growth boundary. In addition, Metro is responsible for ensuring the urban growth boundary provides for a 20-year supply of land for housing, employment and other urban uses. This is accomplished through the Urban Growth Report which is prepared every five years.

The Urbanization Chapter of the Comprehensive Plan establishes a growth management program consistent with the Metro Regional Framework Plan. The local urbanization program promotes an efficient arrangement of land uses and the orderly and efficient provision of public services. This is further reinforced in the Land Use Chapter of the Comprehensive Plan and the Public Facilities and Community Services Chapter of the plan.

Finding: The Urbanization Chapter of the Comprehensive Plan is consistent with Goal 14 and the Metro Regional Framework Plan.

Comprehensive Plan Map Amendments Findings

Property at End of Elm Street

Metro Urban Growth Management Functional Plan Title 4 Criteria

3.07.450 (Employment and Industrial Areas Map) Section C: A city or county may amend its comprehensive plan or zoning regulations to change its designation of land on the Employment and Industrial Areas Map in order to allow uses not allowed by Title 4 upon a demonstration that:

1. The property is not surrounded by land designated on the map as Industrial Area, Regionally Significant Industrial Area or a combination of the two.
2. The amendment will not reduce employment capacity of the city or county.
3. If the map designates the property as Regionally Significant Industrial Area, the subject property does not have access to specialized services, such as redundant electrical power or industrial gases, and is not proximate to freight loading and unloading facilities, such as transshipment facilities.
4. The amendment would not allow uses that would reduce off-peak performance on Main Roadway Routes and Roadway Connectors shown on the Regional Freight Network Map in the RTP below volume-to-capacity standards in the plan, unless mitigating action is taken that will restore performance to RTP standards within two years after approval of uses.
5. The amendment would not diminish the intended function of the Central City or Regional or Town Centers as the principal locations of retail, cultural, and civic services in their market areas; and
6. If the map designates the property as Regionally Significant Industrial Area, the property subject to amendment is ten acres or less; if designated Industrial Area, the property subject to the amendment is 20 acres or less, if designated Employment Area, the property subject to the amendment is 40 acres or less.

3.07.450(D). A city or county may also amend its comprehensive plan or zoning regulations to change its designation of land on the Employment and Industrial Areas Map in order to allow uses not allowed by this title upon a demonstration that:

1. The entire property is not buildable due to environmental constraints; or Finding: Property is buildable.
2. The property borders land that is not designated on the map as Industrial Area or Regionally Significant Industrial Area; and Finding: Davidson site does not border land that is designated as Industrial Area or Regionally Significant Industrial Area.
3. The assessed value of a building or buildings on the property, built prior to March 5, 2004, and historically occupied by uses not allowed by this title, exceeds the assessed value of the land by a ratio of 1.5 to 1. Finding: Buildings on the properties do not exceed the land value.

Sunset Drive Property

- Promote Housing, needed services and jobs

- Efficient use of land
- Local Commercial Land Use Goal 4: Encourage development of neighborhood convenience centers as needed in outlying areas of the City to serve existing and future residential development.

Finding: The subject property is generally located east of Sunset Drive and southwest of Highway 47. The property is designated General Industrial. A historic structure is present near the far southern portion of property. The site also contains two trees listed on the City's Register of Significant Trees. The north-eastern edge of the property is adjacent to the urban growth boundary. The south and eastern sides of the property are adjacent to property designated Single Family Residential R-7. The subject property is disconnected from the City's established industrial areas. The nearest established industrial area, at Quince Street and 24th Avenue, is located approximately 1.4 miles to the east via Sunset Drive and Highway 47. The subject property is adjacent to Oregon Highway 47, a principal arterial on the Transportation System Plan map and Sunset Drive, a designated collector street. The property is not adjacent nor served by rail transportation. The subject site is approximately 25 acres in land area. The site has been designated as light industrial planned development since 1980. The site remains vacant today. Since 1980 significant residential construction has occurred to the south and west of the property. The location of the property and size supports the development a mixed-use node with residential, office, and service uses. With sufficient density this node could become an anchor for transit service. Promoting retail and office uses in this area will complement existing residential areas and promote "complete" neighborhoods. This concept supports Local Commercial Land Use Goal4: Encourage development of neighborhood convenience centers as needed in outlying areas of the City to serve existing and future residential development.

Conclusion: Re-designation of the subject property is consistent with applicable Comprehensive Plan policies. Applicable policies include:

Local Urbanization Goal 1: Land shall be made available within the urban growth boundary to meet all urban land use needs.

Elm Street Property

Finding: The historic AT Smith House is located near the terminus of Elm Street at the periphery of the General Industrial area south of Highway 47. The AT Smith House is need of repair and is currently vacant. This structure is one of the first dwellings in the Forest Grove area and is a significant cultural resource. The current General Industrial designation is inconsistent with preservation of this resource. Re-designating the property as Institutional reflects the presence of a designated historic structure on the subject property owned by a non-profit organization (Friends of Historic Forest Grove). Applying the Institutional designation to the site and associated adjacent land will provide a higher level of protection for this historic resource since uses and activities are limited. All allowed uses within the Institutional designation, except basic utilities, some community recreation uses, and government offices require conditional use approval under the Forest Grove Development Code. The re-designation of the site will not negatively impact employment capacity within Forest Grove since a portion of the site is developed with an historic structure and the adjacent property also owned by the Friends of Historic Forest Grove will not be developed for industrial purposes. Re-designation of the site is consistent with Goal 1 and Goal 2 of the Historic Preservation and Scenic Areas section of the Comprehensive which states:

Goal 1: Preserve and enhance areas, sites and structures, of historic and cultural significance to the Forest Grove area

Goal 2: Promote the community's cultural institutions and traditions.

The Institutional designation also promotes preservation of the AT Smith house by providing the potential for adaptive reuse to general offices or a cultural institution. Cultural institutions are defined in the Forest Grove Development Code as museum-like preservation and exhibition of objects in such activities as the arts and sciences, gallery exhibition of works of art, or library collection of books, manuscripts, etc. for study and reading. Cultural institutions are not permitted in the General Industrial zone and office activities are limited.

Conclusion: Re-designation of the subject property is consistent with applicable Comprehensive Plan policies and promotes the preservation of an identified historic and cultural resource.

Post Office Property

Finding: The Forest Grove Post Office located within the Town Center is housed in a building that is privately owned. The land area of the subject property is approximately 0.34 acres. The current zoning designation is Institutional. Adjacent property is designated Town Center Support. As the City grows pressure will build for a larger post office facility serving a growing population with sufficient land area for needed parking and circulation. Re-designation of the subject property to Town Center Support consistent with adjacent property will expand options for the re-use of the building and site. This action supports a strong Town Center consistent with Comprehensive Plan policies. This action also promotes economic development potential by expanding opportunities for new businesses within the Forest Grove Town Center.

Conclusion: Re-designation of the subject property is consistent with the Forest Grove Comprehensive Plan for the reasons stated above.

South of Pacific Avenue Area (west of Town Center)

Finding: Area has been designated Multi-family high density since 1980. Reduction of density with greater distance from the Town Center better meets the Comprehensive Plan land use criteria for designation of land. Designation allows for development and preserves the residential character of the area along Ritchey Road. Conclusion: Re-designation of the area south of Pacific Avenue west of the Town Center is consistent with the applicable policies contained in the comprehensive plan. Applicable policies include:

Sunset Drive Title 4 Findings

3.07.450 (C) A city or county may amend its comprehensive plan or zoning regulations to change its designation of land on the Employment and Industrial Areas Map in order to allow uses not allowed by this title upon demonstration that:

1. The property is not surrounded by land designated on the map as Industrial Area, Regionally Significant Industrial Area or a combination of the two;
2. The amendment will not reduce the employment capacity of the city or county;
3. If the map designates the property as Regionally Significant Industrial Area, the subject property does not have access to specialized services, such as redundant electrical power or industrial gases, and is not proximate to freight loading and unloading facilities, such as trans-shipment facilities;
4. The amendment would not allow uses that would reduce off-peak performance on Main Roadway Routes and Roadway Connectors shown on the Regional Freight Network Map in the RTP below volume-to-capacity standards in the plan, unless

mitigating action is taken that will restore performance to RTP standards within two years after approval of uses;

5. The amendment would not diminish the intended function of the Central City or Regional or Town Centers as the principal locations of retail, cultural and civic services in their market areas;
6. If the map designates the property as Regionally Significant Industrial Area, the property subject to the amendment is ten acres or less; if designated Industrial Area, the property subject to the amendment is 20 acres or less; if designated Employment Area, the property subject to the amendment is 40 acres or less.

Finding 1: The subject property is disconnected from the City's developed industrial areas. The nearest industrial area is located along 23rd Avenue east of Sunset Drive approximately 2/3 mile distant. The site is adjacent to the urban growth boundary on one side and residential land on the other three sides. The site is not surrounded by land on the Title 4 map

Finding 2: The designation will increase the employment capacity of the city since office commercial yields an average jobs per net acre that is much higher than industrial uses (37.9 jobs per acre for commercial versus 16.9 jobs per acre for industrial uses).

Finding 3: Site is not designated as Regionally Significant Industrial Area. Therefore, this criterion is not applicable.

Finding 4: Highway 47 is designated as a Roadway Connector in the Regional Freight Plan. However, the site has no direct access onto Highway 47. Access is available from Sunset Drive. Sunset Drive is designated as a collector street in the Forest Grove Transportation System Plan. The intersection at Sunset Drive and Highway 47 is signalized. Although, the amendment will allow for a variety of activities including employment and residential uses it is unclear how development will impact off peak performance. Current v/c is 0.37. Projected 2035 v/c is 0.61. Necessary mitigation measures would be considered at time of development application based on type of use. Given existing and project LOS and the process for additional review at time of development this criterion is met.

Finding 5: The net developable acreage of the site is approximately 18.5 net acres. The intent of the designation is to promote complete neighborhoods with residential, commercial and employment in proximity. In addition, this designation promotes nodal development that could complement the Town Center. The Town Center would still function as the principal location for specialized retail (such as restaurants), cultural and civic activities within the Forest Grove market area.

Finding 6: This criterion is not clear to gross acres or net acres. Most zoning standards refer to net acreage. Metro buildable land inventory capacity assessment uses net acreage for analysis. Therefore, the City assumes net acreage is the standard. The site is 2.5 gross acres. The gross developable area of the site excluding the existing farm house and surrounding area is approximately 21.7 gross acres. The subject property has a net acreage that is less than twenty. Deducting land for streets and right-of-way equal to 15% of the gross area yields a net developable acreage of 18.5 acres. Therefore, this criterion is met.

Based on the above findings, the Planning Commission hereby recommends approval

TOM BECK, Chair

Date

ORDER NO. 2014-03

**ADOPTING FINAL FINDINGS SUPPORTING POST-ACKNOWLEDGMENT
PLAN AMENDMENTS TO THE CITY OF FOREST GROVE COMPREHENSIVE PLAN
PURSUANT TO THE ADOPTION OF ORDINANCE NO. 2014-02;
FILE NO. CPA-13-01369**

WHEREAS, City Council adopted Ordinance 2014-02 on January 27, 2014, related to post-acknowledgement-plan-amendments to the City of Forest Grove Comprehensive Plan; and

WHEREAS, the post-acknowledgement-plan-amendments are identified on Exhibit A; and

WHEREAS, City Council desires to adopt specific findings and facts supporting the plan amendments and demonstrating compliance and consistency with the Oregon Statewide Land Use Planning Goals, Metro Regional Framework Plan, and Metro Urban Growth Management Functional Plan; and

WHEREAS, City Council desires to adopt specific findings and facts responding to public testimony raised during the public hearing process as shown on Exhibit B.

NOW, THEREFORE, THE CITY OF FOREST GROVE ORDERS AS FOLLOWS

Section 1. The City of Forest Grove City Council hereby adopts the staff reports provided to the Planning Commission dated November 4, 2013, November 18, 2013, December 2, 2013, and December 16, 2013 and the facts and conclusions contained therein.

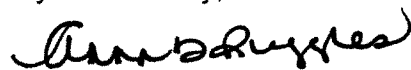
Section 2. The City of Forest Grove City Council hereby adopts by reference the Planning Commission findings and conclusions dated January 10, 2014.

Section 3. The City of Forest Grove City Council hereby adopts the findings and facts attached as Exhibit B demonstrating compliance and consistency with the Oregon Statewide Planning Goals, Metro Regional Framework Plan, and Metro Regional Urban Growth Management Functional Plan.

Section 4. The City of Forest Grove City Council hereby adopts the staff reports dated January 27, 2014, responding to public testimony presented during the public hearing process.

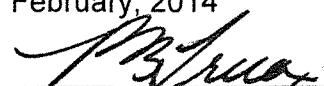
Section 5. This Order is effective immediately upon its enactment by the City Council.

PRESENTED AND PASSED on the 10th day of February, 2014



Anna D. Ruggles, City Recorder

APPROVED by the Mayor this 10th day of February, 2014



Peter B. Truax, Mayor

**Forest Grove Comprehensive Plan
List of Post-Acknowledgement-Plan-Amendment Products**

- Task A: Citizen Involvement Chapter Text
1. Revised Comprehensive Plan Citizen Involvement Chapter
- Task B: Comprehensive Plan Background Chapter Text
1. Revised Comprehensive Plan Chapter I: Introduction
2. Revised Comprehensive Plan Chapter II: The Planning Process
a. Add new plan amendment process section
- Task C: Comprehensive Plan Land Use Chapter Text
1. Revised Land Use Chapter
a. Include Proposal for Mixed-Use Development Zone
b. Updated Comprehensive Plan Map
c. 2011 Land Use inventory
d. Revised Historic resources text and maps.
- Task D: Comprehensive Plan Community Sustainability Chapter Text
a. Add new chapter to Comprehensive Plan
- Task E: Natural Resources and Hazards
A. Urban/Wildland Interface
B. Earthquake Hazards
C. Other hazards
- Task F: Environmental Quality Text
A. Revised Environmental Quality Chapter text for Comprehensive
- Task G: Energy Text
A. Revised Energy text of Comprehensive Plan
- Task H: Physical Environment Text
A. Revised Physical Environment text for Comp. Plan
- Task I: School Element Text
A. Coordination with Forest Grove School District
B. Draft School Chapter of Comprehensive Plan

**Metro Regional Framework Plan
Urban Growth Management Function Plan
Findings**

Regional Framework Plan

Chapter 1: Land Use

Fundamental 1: Encourage a strong local economy by providing an orderly and efficient use of land, balancing economic growth around the region and supporting high quality education. (Periodic Review Work Program Item).

Finding: An updated Land Use Element was adopted by the City Council on January 27, 2014 (Ordinance 2014-02) as part of the post-acknowledgement-plan-amendment process. The Land Use Element encourages a strong local economy by establishing industrial land use districts. Economy element encourages a strong local economy by identifying opportunities and establishing policies for local economic development.

The City of Forest Grove approved An Economic Opportunity Analysis (EOA) by resolution 2010-71. The adopted Economic Opportunity Analysis was subsequently re-adopted as part of Ordinance 2014-01 accepting and approving Periodic Review work program deliverables. The EOA complies with OAR 660-09-0015. The EOA includes an assessment of national, regional and local economic trends, 20-year employment forecast; 20-year employment needs analysis; 20-year employment land demand site qualities; 20-year housing need forecast; and 20-year housing land needs analysis. The EOA shows a baseline need/demand of approximately 164 acres of industrial land and vacant industrial land supply of 291 acres. The land use pattern shown on the adopted Comprehensive Plan Map includes approximately 260 acres of vacant industrial land which is sufficient to meet 20-year projected demand.

The adopted Comprehensive Plan School and Education element, prepared in coordination with the Forest Grove School District, supports Fundamental 1 by supporting high quality education. The School and Education element adopted as part of Ordinance 2014-02 identifies 20-year school district needs. The School and Education element identifies a need for one elementary school during the 20-year planning period. In addition to elementary and secondary schools the School Element recognizes the presence and importance of Pacific University in providing high quality education and educational opportunities at Portland Community College and local vocational schools. For the reasons stated above the Forest Grove Comprehensive Plan complies with Fundamental 1.

Fundamental 2: Encourage the efficient use of land within the UGB including buildable industrial and commercial land and focus development in 2040 mixed use centers and corridors. (Post-Acknowledgement-Plan-Amendment Item)

Finding: The updated Comprehensive Plan Map adopted as part of Ordinance 2014-02 identifies an efficient use of land within the UGB including buildable industrial and commercial land as explained below. The Land Use and Economy elements of the Comprehensive Plan also establish policies to encourage development in the Forest

Grove Town Center (a Region 2040 Town Center) and along the Pacific Avenue corridor.

The Comprehensive Plan map identifies approximately 260 acres of buildable industrial land; 31 acres of buildable commercial land along the Pacific Avenue commercial corridor, within the Forest Grove Town Center, and near the intersection of Elm Street and Highway 47. The largest buildable commercial area is located at the intersection of Hwy.47 and Hwy. 8 (18.4 acres) The Comprehensive Plan Map also identifies approximately 40 acres of newly designated mixed-use land outside of the Forest Grove Town Center providing retail opportunities. For the reasons stated above, the Forest Grove Comprehensive Plan update complies with Fundamental 2.

Policy 1.2.1(d): Coordinating public investment with local comprehensive and regional functional plans. (Periodic Review Work Program Item)

Finding: The Public and Community Services Element of the comprehensive plan provide a framework for coordinating public investment with the local comprehensive plan and subsequent development. The public facility master plans identify needed services to accommodate planned growth based on the Metro Gamma Household and Employment projections released in September 2012. Based on the Metro estimates the City of Forest Grove is planning for a year 2030 population of approximately 28,000 persons (Background Element p. 1). The public facility master plans are based on a population estimate of 28,127 persons¹.

Water Master Plan (2010): 33,400
Storm Sewer Master Plan (2007): 30,000
Wastewater System Master Plan (2007): 31,600
Transportation System Plan (2014): 30,240 (2035)
Parks Master Plan (2002): 22,800

Each of the master plans listed above identify specific projects to address identified needs and deficiencies. The plans have been incorporated by reference into the Comprehensive Plan by Ordinances 2014-01 and 2014-02.

Applicable Goals and Policies

Housing Policy 10.1.1 Establish the location and density of residential development based on the following factors: (C) Capacity of public services and facilities including but not limited to water, sanitary sewer, fire and police protection and transportation facilities.

Public Facilities and Community Services – Water Service Policy 1: A master plan including prioritized lists of capital improvement needs shall be adopted for provision of water service. The plan shall be based on future land use policies and needs.

¹ Population estimate includes incorporated and unincorporated areas within the urban growth boundary (Forest Grove planning area).

Public Facilities and Community Services – Water Service Policy 3: The sizing of municipal water facilities shall follow land use plan designations and concentrate development close to the City Center.

Public Facilities and Community Services – Storm Water (Drainage) System Policy 2: Design of storm water facilities shall support comprehensive plan land use designations.

Public Facilities and Community Services – Sanitary Sewer System Goal 1: Sewer facilities shall be designed and sized to serve the need of future land uses as shown on the Forest Grove Comprehensive Plan Map.

Transportation Goal 12.9: Develop a transportation system that is consistent with the City's Comprehensive Plan and adopted state and regional plans.

Community Sustainability Goal 3: Promote financial sustainability through a compact and land efficient development pattern intended to reduce long term costs for providing municipal services.

For the reasons stated above the Comprehensive Plan and Transportation System Plan both comply with Policy 1.2.1(d).

Policy 1.2.1(e): Creating a balanced transportation system, less dependent on the private automobile, supported by both the use of emerging technology and the location of jobs, housing, commercial activity, parks and open space. (Periodic Review Work Program Item).

Finding: In conjunction with the update to the Forest Grove Comprehensive Plan the City updated the Transportation System Plan. The updated Transportation System Plan was adopted on February 10, 2014 (Ordinance 2014-03). The updated Transportation System incorporates the performance measures required by the Regional Transportation Functional Plan. The TSP update addresses all modes of transportation including pedestrian, bicycle, freight, and automobile. The adopted financially constrained project list includes projects for all modes that create a balanced transportation system, less dependent on the private automobile. The Transportation System Plan update reflects the updated Comprehensive Plan map. As a result the Transportation System Plan recognizes the location of jobs, housing, commercial activity, parks and open space.

Applicable Comprehensive Plan Goals and Policies

Transportation Goal 12.1: Develop and maintain a balanced transportation system that provides travel choices and reduces the number of trips by single occupant vehicles.

Transportation Policy 12.1.3: Support travel options that allow individuals to reduce single-occupant vehicle trips.

Transportation Policy 12.1.5: Encourage local employment and commercial opportunities to reduce the number of locally generated regional work and shopping trips.

Transportation Policy 12.4 Action 12.4.1: Design streets and highways to respect the characteristics of the surrounding land uses, natural features and other community amenities.

For the reasons state above the Comprehensive Plan and Transportation System Plan complies with Policy 1.2.1(e).

Policy 1.3.1(a) Encourage affordable housing opportunities in the region by offering a diverse range of housing types, available within the region, and within cities and counties inside Metro’s Urban Growth Boundary. (b) being available to households of all income levels that live or have a member working in each jurisdiction and subregion. (Periodic Review Work Program Item)

Finding: The Land Use element and Housing element of the Comprehensive Plan provides opportunities for affordable housing and a diverse range of housing types. The Economic Opportunity Analysis, based on the City’s land use inventory, shows the following distribution of housing types:

Dwelling Type	Number of Units
Single Family	4,326
Duplex	343
3-plex or 4-plex	542
Multiple Family	1,743
Total	6,954

According to Metro and the Regional Equity Atlas there are approximately 607 publicly-subsidized affordable housing units in Forest Grove. This represents approximately 8.7% of the total dwelling units in Forest Grove. The Regional Equity Atlas identifies the following affordable housing locations in the community:

Project Name	Project Location	Number of Units
Harkson Court	2900 22 nd Avenue	20
Covey Run Apartments	1775 Covey Run Drive	45
Jose Arciga Apartments	3231 22 nd Place	55
The Villager Apartments	1921 Fir Road	36
Vanrich Apartments	2016 B Street	17
Parkside Apartments	2715 Main Street	24
517 Ballad Way	517 Ballad Way	1
2731 Buxton Street	2731 Buxton Street	1
2738 Buxton Street	2738 Buxton Street	1
2736 Ballad Lane	2736 Ballad Lane	1
618 Ballad Lane	618 Ballad Lane	1
705 Willamina Avenue	705 Willamina Avenue	1
1770 Tamarack Way	1770 Tamarack Way	1
1816 Sequoia Court	1816 Sequoia Court	1
1721 Fir Road	1721 Fir Road	1
1755 Tamarack Way	1755 Tamarack Way	1
1626 Fir Court	1626 Fir Court	1
1704 Fir Court	1704 Fir Court	1
1525 Tara Court	1525 Tara Court	1
3506 18 th Place	3506 18 th Place	1

2221 23 rd Place	2221 23 rd Place	2
2225 23 rd Place	2225 23 rd Place	2
1804 Sequoia Court	1804 Sequoia Court	2
Forest Grove Beehive	2122 Hawthorne Street	44
Willow Park Apartments	2824 22 nd Avenue	46
Wynwood of Forest Grove	3110 19 th Avenue	82
Garden Grove Apartments	2727 22 nd Avenue	48
Forest Manor Apartments I	2141 Quince Street	19
Forest Manor Apartments II	2141 Quince Street	6
Forest Villa Apartments	2131 Quince Street	84
Elm Park I and II	2350 Elm Street	62

Applicable Housing Goals and Policies from the Comprehensive Plan

Housing Goal 10.1 Ensure an adequate supply of developable land to support needed housing types and a complete community.

Housing Policy 10.1.1(B) Establish the location and density of residential development based on the following factors: (A) the type and distribution of housing units required to meet projected population needs.

Community Sustainability Goal 4: Reduce barriers to affordable housing by advocating for an inventory of a minimum 20-year supply of land for needed housing types when Metro considers urban growth boundary expansions.

Community Sustainability Goal 9. Foster the preservation, construction and maintenance of an adequate supply of healthful, affordable, resource-efficient and inclusive housing.

Community Sustainability Policy 11: Ensure that needed housing for all segments of the population in the community is met through land use policy.

Conclusion: For the reasons stated above the Comprehensive Plan complies with Metro Regional Framework Plan Policy 1.3.1(a).

Summary of Compliance with 2040 Growth Concept (Post-Acknowledgement-Plan-Amendment Item).

Finding: Downtown Forest Grove is designated as a Town Center in the Region 2040 Growth Concept. The Pacific Avenue/Tualatin Valley Highway (Oregon 8) is designated as a corridor in the Region 2040 Growth Concept. The Land Use element of the Comprehensive Plan identifies various Town Center Comprehensive Plan map land use designations including Town Center Core, Town Center Transition, and Town Center Support. These land use designations are intended to implement the Region 2040 Growth Concept. The Land Use Element also establishes the Community Commercial designation applicable primarily to areas adjacent to Pacific Avenue/19th Avenue or Oregon Highway 8. This Comprehensive Plan land use designation is intended to implement the Region 2040 corridor concept.

Conclusion: For the reasons stated above the Forest Grove Comprehensive Plan complies with the Region 2040 Growth Concept.

Chapter 2: Transportation (Periodic Review)

Fundamental 4: Provide a balanced transportation system including safe, attractive facilities for bicycling, walking and transit as well as for motor vehicles and freight.

Finding: The Transportation Element and Transportation System Plan addressed Fundamental 4 by encouraging a balanced transportation system including safe, attractive facilities for bicycling, walking and transit as well as for motor vehicles. Applicable local goals and policies are identified below. In addition, Metro determined on February 3, 2014 that the Forest Grove Transportation Plan substantially complies with the Regional Transportation Functional Plan.

Applicable Comprehensive Plan Goals and Policies

TSP Appendix K adopted as part of Ordinance 2013-03 addresses compliance with the Statewide Land Use Planning Goals, including the Transportation Planning Rule, Metro Regional Transportation Functional Plan and local Comprehensive Plan policies.

Chapter 3: Nature in Neighborhoods (Post-Acknowledgement-Plan-Amendments)

Applicable Goals and Policies

Community Sustainability Goal 14: Promote opportunities for community gardens within neighborhoods.

Community Sustainability Goal 16: Increase the amount of urban forest tree canopy while planting species adapted to this area.

Community Sustainability Goal 18: Increase the amount of park land and natural areas serving the community.

Community Sustainability Goal 19: Support the restoration of natural areas such as Fern Hill Wetland and Thatcher Woods.

Community Sustainability Policy: 7: Support the urban forest management program through land use regulations intended to retain and expand the urban forest canopy.

Conclusion: For the reasons stated above the Forest Grove Comprehensive Plan complies with the Chapter 3 of the Metro Regional Framework Plan (Nature in Neighborhoods).

Chapter 4: Watershed Health and Water Quality (Post-Acknowledgement Plan Amendment)

Finding: Water Quality is addressed in the Natural Resources and Natural Hazards element of the Comprehensive Plan (pages 12 and 13). The Water Quality sections recognizes the lead role of Washington County Clean Water Services in preserving and enhancing water quality and watershed health within the County.

Applicable Comprehensive Plan Goals and Policies

Natural Resources and Natural Hazards Goal 4: The area's water quality shall be protected, maintained and improved wherever possible to ensure livability.

Natural Resources and Natural Hazards Policy 4: Permanent structural improvements will not be permitted in areas delineated as being located within the floodway of the 100 year flood plan as indicated from flood plan surface elevations provided by the U.S. Army Corps of Engineers.

Natural Resources and Natural Hazards Policy 15: Land use controls and project reviews will be used to determine and regulate the impact of development on water quality.

Conclusion: For the reasons stated above the Forest Grove Comprehensive Plan complies with Chapter 4 of the Metro Regional Framework Plan (Watershed Health and Water Quality).

Chapter 5: Regional Natural Hazards (Post-Acknowledgement-Plan-Amendment)

Finding: The Natural Resources and Natural Hazards element of the Comprehensive Plan addresses regional natural hazards. This element of the Comprehensive Plan addresses seismic activity, floods, slope, soils characteristics, and wildfire.

Applicable Comprehensive Plan Goals and Policies:

Natural Resources and Natural Hazards Goal 1: All development shall consider, take into account and demonstrate suitability relative to the natural hazard limitations of the Forest Grove area.

Natural Resources and Natural Hazards Policy 1: Areas with known geologic hazards, or soils which the Soil Conservation Service has rated as severe hazard soils including shrink-swell potential, weak foundation support (shear strength), and erosion hazard shall permit construction and densities only when adhering to recommendations made through engineering analysis, review and ordinances.

Natural Resources and Natural Hazards Policy 2: Those involved in development will be required to address hazard conditions by the inclusion of basic environmental data (i.e. soil type, elevation of the flood plain, geological limitations, etc.) and related designs for engineering solutions in the submittal requirements for development.

Natural Resources and Natural Hazards Policy 3: Adopt as a provision in both the zoning and subdivision ordinances that an environmental report be prepared and certified by a qualified engineer for all development proposals in areas having natural

physical hazards and/or limitations. As part of the environmental report, the engineer shall identify the intensity of urban development to be permitted based on the carrying capacity of the land. Open space may be required within the development in order to protect the public health and safety.

Natural Resources and Natural Hazards Policy 8: Establish landslide mitigation measures including logging regulations on steep slopes, landscape requirements, drainage controls, and pre-development technical studies.

Natural Resources and Natural Hazards Policy 10: Collaborate with local agencies to evaluate the local risk of wildland-urban interface fires.

Natural Resources and Natural Hazards Policy 13: Amend development standards in areas with potential landslide hazard to minimize potential landslides while allowing appropriate development.

Natural Resources and Natural Hazards Policy 14: Evaluate the need for seismic retrofit improvements to existing buildings in the Town Center to minimize potential damage where feasible.

Data Sources:

Relative Earthquake Hazard Map (Oregon Department of Geology and Mineral Industries)
Soil Survey
1980 Comprehensive Plan
City of Forest Grove Hazard Mitigation Plan

Conclusion: For the reasons stated above, the Forest Grove Comprehensive Plan substantially complies with Chapter 5 of the Metro Regional Framework Plan

Urban Growth Management Functional Plan

Title 1: Housing Capacity

Areas for residential development are shown on the adopted Comprehensive Plan Map. The 2012 Gamma Housing Unit estimate for Forest Grove for the year 2010 is 7,492. The 2030 estimate extrapolated from the Metro 2025 and 2035 household estimate is 10,096 households. The difference between 2010 and 2035 is 2,604 households. Based on the City's capacity analysis prepared to support the Economic Opportunity Analysis and the latest Urban Growth Report is 4,850 housing units. Therefore, there is sufficient residential housing capacity to meet household demand over the twenty-year planning period.

A residential capacity analysis showing potential impact from adopted changes to the Comprehensive Plan map is shown below.

Residential Capacity Analysis Findings

Location	Current Designation	Proposed Designation	Acreage Gross/Net
South of Pacific	RMH	RMH/RML/R-7	39.7/33.7
Town Center	TC	TC	71/61 ²
Thatcher Rd./David Hill Road	C-Low (R-10)	MU	30.6/14.2
Sunset Drive/Willamina	IL	MU	23.5/19.9
Gales Creek Road/Thatcher Road	CPD	MU	6.4/5.4
Forestmeade Neighborhood	RML	R-5	13.3/11.4

Location	Current Residential Capacity	Planned Residential Capacity	Estimated Change
South of Pacific ³	541	430	-111
Town Center ⁴	1,237 ⁵	2,474 ⁶	+1,237
Thatcher/David Hill Road	41	178	+137
Sunset Drive/Willamina	0	180	+180
Gales Creek Road/Thatcher Road	0	101	+101
Forestmeade Neighborhood	136	99	-37
TOTAL			+1,507

Note: The City of Forest Grove commits to adopting the necessary Zoning Map and Development Code text to achieve the stated planned residential capacities identified above within one-year from Oregon Department of Land Conservation and Development approval of the Forest Grove Comprehensive Plan Update.

Zoning Map Classifications

- R-5 (Single Family Residential – 8.71 dwellings per net acre)
- R-7 (Single Family Residential – 6.22 dwellings per net acre)
- R-10 (Single Family Residential – 4.35 dwellings per net acre)
- RML (Multifamily Residential Low – 12.0 dwellings per net acre)
- RMH (Multifamily Residential High – 20.28 dwellings per net acre)
- TC (Town Center – 20.28 dwellings per net acre)
- CPD (Commercial Planned Development)
- IL (Light Industrial)
- MU (Proposed Mixed-Use Development Zone – 20.28 dwellings per net acre)

² Not including Pacific University campus.

³ Estimate represents analysis contained in the December 16, 2013, written staff report to the Planning Commission.

⁴ Estimated current number of dwelling units = 460 units. Source; City of Forest Grove Planning Division and Metro State of the Centers Report (May 2011).

⁵ Figure does not include Pacific University.

⁶ Estimated based on increasing outright permitted target density from 20.28 units/acre to 40 units/acre.

The City Council adopted Resolution 2014-19 on January 27, 2014 acknowledging that it is necessary to adopt amendments to the Official Zoning Map and Forest Grove Development Code to comply with Metro Urban Growth Management Functional Plan Title 1 (Requirements for Housing and Employment Accommodation) within one-year after the Oregon Department of Land Conservation and Development approves the Comprehensive Plan update.

Conclusion: For the reasons stated above, the Forest Grove Comprehensive Plan substantially complies with Title 1(Housing Capacity).

Title 3: Water Quality and Flood Management

Finding: Water Quality is addressed in the Natural Resources and Natural Hazards element of the Comprehensive Plan (pages 12 and 13). The Water Quality section recognizes the lead role of Washington County Clean Water Services in preserving and enhancing water quality and watershed health within the County.

Applicable Comprehensive Plan Goals and Policies

Natural Resources and Natural Hazards Goal 4: The area's water quality shall be protected, maintained and improved wherever possible to ensure livability.

Natural Resources and Natural Hazards Policy 4: Permanent structural improvements will not be permitted in areas delineated as being located within the floodway of the 100 year flood plan as indicated from flood plan surface elevations provided by the U.S. Army Corps of Engineers.

Natural Resources and Natural Hazards Policy 15: Land use controls and project reviews will be used to determine and regulate the impact of development on water quality.

Conclusion: For the reasons stated above, the Forest Grove Comprehensive Plan substantially complies with Title 3.

Title 4: Industrial and Other Employment Areas

Finding: The adopted Economic Opportunity Analysis (EOA) addresses industrial and employment needs during the 20-year planning period. The EOA meets the requirements of OAR 660-09-0015 and addresses the following topics:

- National, State, Regional and Local Economic Trends;
- Economic Opportunity Analysis Stakeholder Outreach;
- 20-Year Employment Land Needs Analysis; and
- 20-Year Employment Land Demand Site Qualities

The EOA identifies that the City of Forest Grove has a vacant industrial land supply of approximately 291 acres (EOA Figure 27, page 52). The EOA identifies a baseline demand of 164 acres during the 20-year planning time horizon of the Comprehensive

Plan update. Therefore, the City of Forest Grove has sufficient vacant industrial land to meet projected demand during the 20-year planning time horizon.

The Economic Development element of the Comprehensive Plan summarizes the findings and conclusions contained in the EOA and establishes goals and policies related to the local economy and economic development. Along with the EOA, The Economic Development element provides a factual basis for the goals and policies contained in the Economic Development element. The Economic Development element summarizes local socio-economic indicators and identifies the comparative advantage of the employment sector.

The Economic Development element establishes goals and policies to promote industrial activities and preserve large industrial sites. Applicable goals and policies supportive of industrial activities are identified below:

Goal 9.1: Strengthen Forest Grove's Economy:

Policy 9.1.2: To preserve large lot industrial land establish a large lot industrial district to control the division of large industrial sites while allowing for market flexibility.

Policy 9.1.4: Seek certification of large industrial sites through the State of Oregon Industrial Site Certification program.

Goal 9.4 Promote Industrial Activities

Policy 9.4.1: Designate a total between 160 and 300 acres of land on the Comprehensive Plan Map to meet projected industrial demand over the next twenty-years. [Approximately 230 acres of land is identified on the Comprehensive Plan Map to meet projected demand over the next 20-years].

Policy 9.4.2: Establish a large lot industrial district on the Comprehensive Plan map and Zoning map to meet the needs of businesses requiring large parcels.

Policy 9.4.3: Implement development standards to control the division of large industrial sites.

Policy 9.4.4: Promote greater efficiency in the use of industrial land through the use of financial incentives for infill and redevelopment.

Policy 9.4.5: Implement a brownfield redevelopment program to increase the productive re-use of contaminated sites.

Conclusion: Based on the findings presented above and the information contained in the Economic Opportunity Analysis and Economy element contained in the Comprehensive Plan update the Forest Grove Comprehensive Plan substantially complies with Title 4.

Title 6: Centers, Corridors, Station Communities and Main Street

Finding: Downtown Forest Grove is designated as a Town Center in the Region 2040 Growth Concept. The Pacific Avenue/Tualatin Valley Highway (Oregon 8) is designated as a corridor in the Region 2040 Growth Concept. The Land Use element of the Comprehensive Plan identifies various Town Center Comprehensive Plan map land use designations including Town Center Core, Town Center Transition, and Town Center Support. These land use designations are intended to implement the Region 2040 Growth Concept. The Land Use Element also establishes the Community Commercial designation applicable primarily to areas adjacent to Pacific Avenue/19th Avenue or Oregon Highway 8. This Comprehensive Plan land use designation is intended to implement the Region 2040 corridor concept.

Conclusion: For the reasons stated above the Forest Grove Comprehensive Plan complies with the Region 2040 Growth Concept.

Title 7: Housing Choice

Finding: The Economic Opportunity Analysis, Housing element of the Comprehensive Plan and the Land Use element and Comprehensive Plan Map serve to promote housing choice. Title 7 deals primarily with affordable housing.

The Economic Opportunity Analysis identifies 20-year housing needs and 20-year housing land needs. In addition, the Metro Gamma household forecast released in September 2012 identifies long range housing needs.

The Forest Grove Comprehensive Plan update includes strategies to ensure a diverse range of housing types. Goal 10.1 states: "Ensure an adequate supply of developable land to support needed housing types and a complete community." Goal 10.4 states "Provide and maintain an adequate supply of affordable housing opportunities.

The Comprehensive Plan update establishes policies to maintain the existing supply of affordable housing as well as increasing opportunities for new dispersed affordable housing. The table below shows the existing supply of affordable housing. The source of the data is the Regional Equity Atlas.

Project Name	Project Location	Number of Units
Harkson Court	2900 22 nd Avenue	20
Covey Run Apartments	1775 Covey Run Drive	45
Jose Arciga Apartments	3231 22 nd Place	55
The Villager Apartments	1921 Fir Road	36
Vanrich Apartments	2016 B Street	17
Parkside Apartments	2715 Main Street	24
517 Ballard Way	517 Ballard Way	1
2731 Buxton Street	2731 Buxton Street	1
2738 Buxton Street	2738 Buxton Street	1
2736 Ballard Lane	2736 Ballard Lane	1
618 Ballard Lane	618 Ballard Lane	1
705 Willamina Avenue	705 Willamina Avenue	1
1770 Tamarack Way	1770 Tamarack Way	1
1816 Sequoia Court	1816 Sequoia Court	1

1721 Fir Road	1721 Fir Road	1
1755 Tamarack Way	1755 Tamarack Way	1
1626 Fir Court	1626 Fir Court	1
1704 Fir Court	1704 Fir Court	1
1525 Tara Court	1525 Tara Court	1
3506 18 th Place	3506 18 th Place	1
2221 23 rd Place	2221 23 rd Place	2
2225 23 rd Place	2225 23 rd Place	2
1804 Sequoia Court	1804 Sequoia Court	2
Forest Grove Beehive	2122 Hawthorne Street	44
Willow Park Apartments	2824 22 nd Avenue	46
Wynwood of Forest Grove	3110 19 th Avenue	82
Garden Grove Apartments	2727 22 nd Avenue	48
Forest Manor Apartments I	2141 Quince Street	19
Forest Manor Apartments II	2141 Quince Street	6
Forest Villa Apartments	2131 Quince Street	84
Elm Park I and II	2350 Elm Street	62

The Comprehensive Plan includes policies to increase opportunities for households of all income levels to live within their individual jurisdictions. Table 14 of the Housing element identifies the estimated need for housing by price range.

The following figure from the EOA identifies residential land need to accommodate all types of housing within the community. The Comprehensive Plan includes sufficient developable land to accommodate the project need.

BASELINE GROWTH SCENARIO (2% Annual Pop. Growth)					
ZONING DESIGNATION	Total Future Unit Need - Vacant Lands¹	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distribution
SR Low Density Residential	0	1.0	0	0	NA
R-10 Low Density Residential	-159	4.4	0	0	NA
R-7 Low Density Residential	-447	6.2	0	0	NA
R-5 Low Density Residential	-96	8.7	0	0	NA
RML Medium Density Residential	-55	12.0	0	0	NA
RMH High Density Residential	-43	20.3	0	0	NA
TC Town Center designations (3)	NA*				
Totals/Averages:	-800	8.9	0	0	NA

MEDIUM GROWTH SCENARIO (2.3% Annual Pop. Growth)					
ZONING DESIGNATION	Total Future Unit Need - Vacant Lands¹	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distribution
SR Low Density Residential	0	1.0	0	0	0.0%
R-10 Low Density Residential	7	4.4	2	2	28.9%
R-7 Low Density Residential	21	6.2	3	4	57.1%
R-5 Low Density Residential	4	8.7	1	1	8.7%
RML Medium Density Residential	3	12.0	0	0	3.6%
RMH High Density Residential	2	20.3	0	0	1.7%
TC Town Center designations (3)	NA*				
Totals/Averages:	37	8.9	6	7	100%

HIGH GROWTH SCENARIO (2.6% Annual Pop. Growth)					
ZONING DESIGNATION	Total Future Unit Need - Vacant Lands¹	Units Per Net Acre	Net Acreage Needed	Gross Acreage Needed	Distribution
SR Low Density Residential	0	1.0	0	0	0.0%
R-10 Low Density Residential	119	4.4	27	34	28.9%
R-7 Low Density Residential	334	6.2	54	67	57.1%
R-5 Low Density Residential	72	8.7	8	10	8.7%
RML Medium Density Residential	41	12.0	3	4	3.6%
RMH High Density Residential	32	20.3	2	2	1.7%
TC Town Center designations (3)	NA*				
Totals/Averages:	598	0.0	94	118	100%

¹ Assumes that Town Center designation, which is currently surrounded by incorporated land, will not expand, therefore its capacity is included in the capacity of current vacant lands.

Sources: City of Forest Grove, Metro RLIS, Johnson Reid LLC

Conclusion: For the reasons stated above the Forest Grove Comprehensive Plan is consistent with Title 7.

Title 13: Nature in Neighborhoods

The purpose of Title 13 is to conserve, protect and restore streams, rivers and floodplains, control and prevent water pollution, and improve water quality throughout the region. The update of the Comprehensive Plan contains goals and policies identified below consistent with the intent of Title 13.

Finding: Applicable Goals and Policies

Community Sustainability Goal 14: Promote opportunities for community gardens within neighborhoods.

Community Sustainability Goal 16: Increase the amount of urban forest tree canopy while planting species adapted to this area.

Community Sustainability Goal 18: Increase the amount of park land and natural areas serving the community.

Community Sustainability Goal 19: Support the restoration of natural areas such as Fern Hill Wetland and Thatcher Woods.

Community Sustainability Policy: 7: Support the urban forest management program through land use regulations intended to retain and expand the urban forest canopy.

Conclusion: For the reasons stated above the Forest Grove Comprehensive Plan complies with the Chapter 3 of the Metro Regional Framework Plan (Nature in Neighborhoods).

Title 14: Urban Growth Boundary

Finding: Metro oversees and manages the urban growth boundary. The urbanization element of the Comprehensive Plan addresses the conversion of agricultural land for urban uses. The urbanization element also establishes a framework for the efficient accommodation of identified land needs; orderly and economic provision of public facilities and services; and compatibility of the urban uses with nearby agricultural and forest activities. In addition, the urbanization element references the Urban Planning Area Agreement with Washington County and the annexation process. The Urbanization element also addresses the urban reserves designated near Forest Grove.

Applicable Comprehensive Plan Goals and Policies.

Urbanization Goal 1: Establish policies to ensure an orderly and efficient transition from rural to urban land use.

Urbanization Policy 1: The City's long term land needs shall be evaluated periodically, and the adequacy of land within the Forest Grove portion of the Portland Regional Urban Growth Boundary to meet those needs shall be evaluated. If necessary, amendments to the Urban Growth Boundary shall be recommended to Metro as part of Metro's urban growth boundary evaluation process.

Urbanization Policy 2: All lands within the urban growth boundary shall be assigned priorities for urban development. Priorities shall be based on the City's ability to provide urban services and the orderly and efficient timing of service extension. These priorities shall be the basis for making decisions on all development proposals and requests for annexation.

Urbanization Policy 6: Participate with Metro in the ongoing review of the Portland regional urban growth boundary and the periodic update of the Metro Urban Growth Report.

Urbanization Policy 8: The City of Forest Grove will advocate for adding urban reserve lands into the urban growth boundary to meet the City's long term urban development needs.

Conclusion: The Urbanization element of the Forest Grove Comprehensive Plan including the goals and policies identified above are consistent with the intent of Title 14. Therefore, the Forest Grove Comprehensive Plan complies with Title 14.

Attachment A
Planning Commission Recommended
TSP Changes

Legend

-  Future Study Area
-  Water
-  City Limits
-  Urban Growth Boundary
-  Proposed Roadway *
-  Proposed Intersection Improvement
-  Proposed Road Improvement

* Road alignments are conceptual. Further study required.

Note: Projects proposed on State facilities will require ODOT approval.

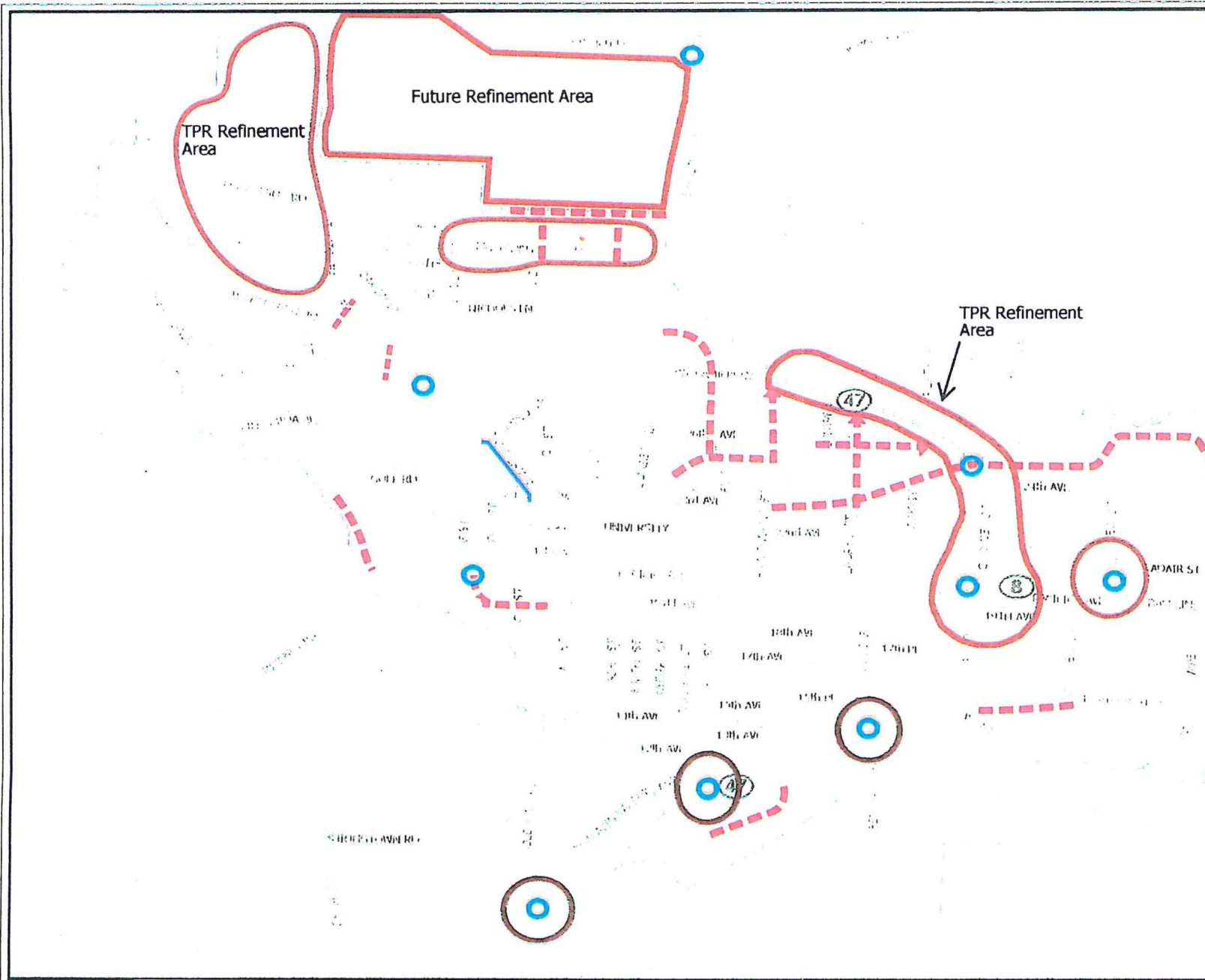
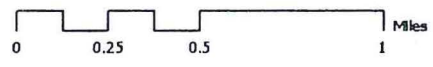


FIGURE
8-7

PREFERRED ROADWAY NETWORK PLAN



Transportation System Plan

2013

Legend

- Proposed Services**
- Local Deviated Route
 - Conceptual Stop or Timepoint
 - 1/4 mile buffer around route (not including selected ampl. area trips)
- Existing Transit Services**
- TriMet Bus Route 57
 - TriMet LIFT Service Area (3/4 mile Radius of Fixed Route Service)
 - 1/4 mile Walking Buffers around Route 57 Stops
 - Yamhill County Transit Line 33
 - Ride Connection Wash. County Bus
- | | |
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| | |
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| | |
| | |
- Forest Grove City Boundary

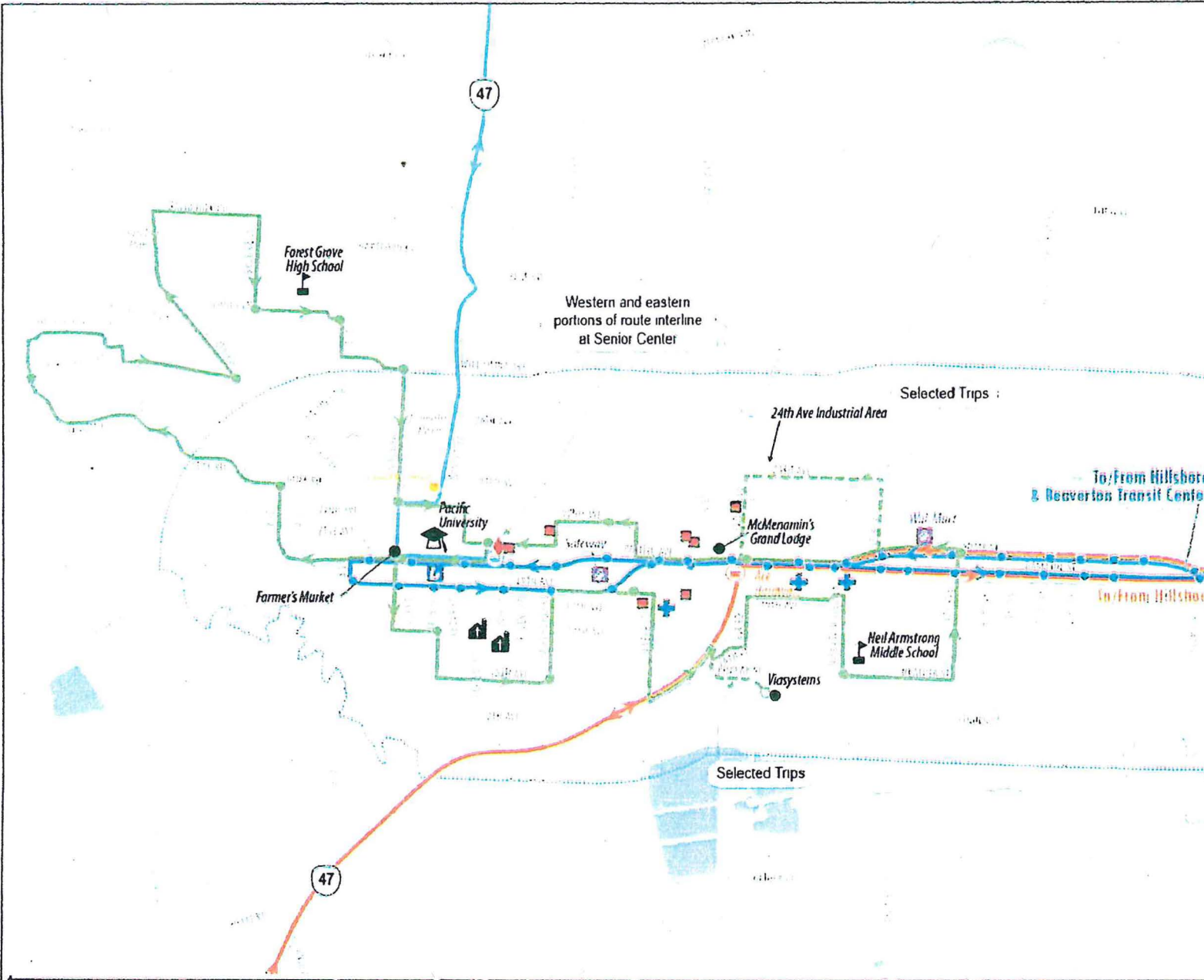
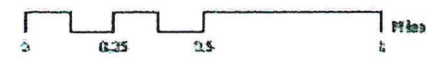


FIGURE 3-4

TRANSIT ROUTES






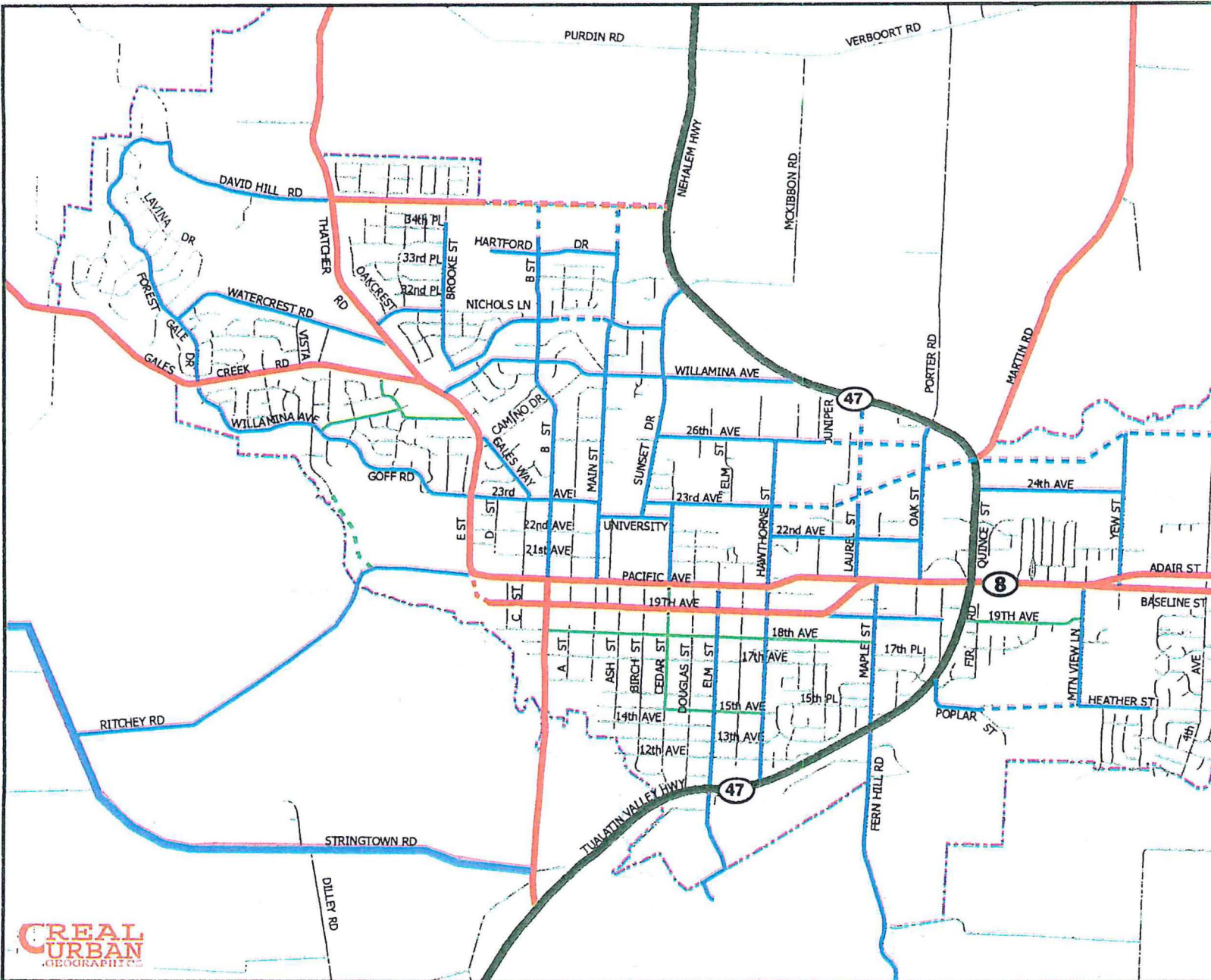
Transportation System Plan

2013

Legend

Functional Classification

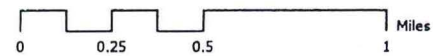
-  Principal Arterial
-  Arterial
-  Collector
-  Neighborhood Route
-  Proposed Arterial
-  Proposed Collector
-  Water
-  City Limits
-  Urban Growth Boundary



CREAL
URBAN
GEOGRAPHICS

**FIGURE
8-1**

**UPDATED STREET FUNCTIONAL
CLASSIFICATION SYSTEM**



SCJ ALLIANCE
COMMUNITY DEVELOPMENT


Parametrix
PLANNING • DESIGN • ENVIRONMENTAL SERVICES

Transportation System Plan

2013

Legend

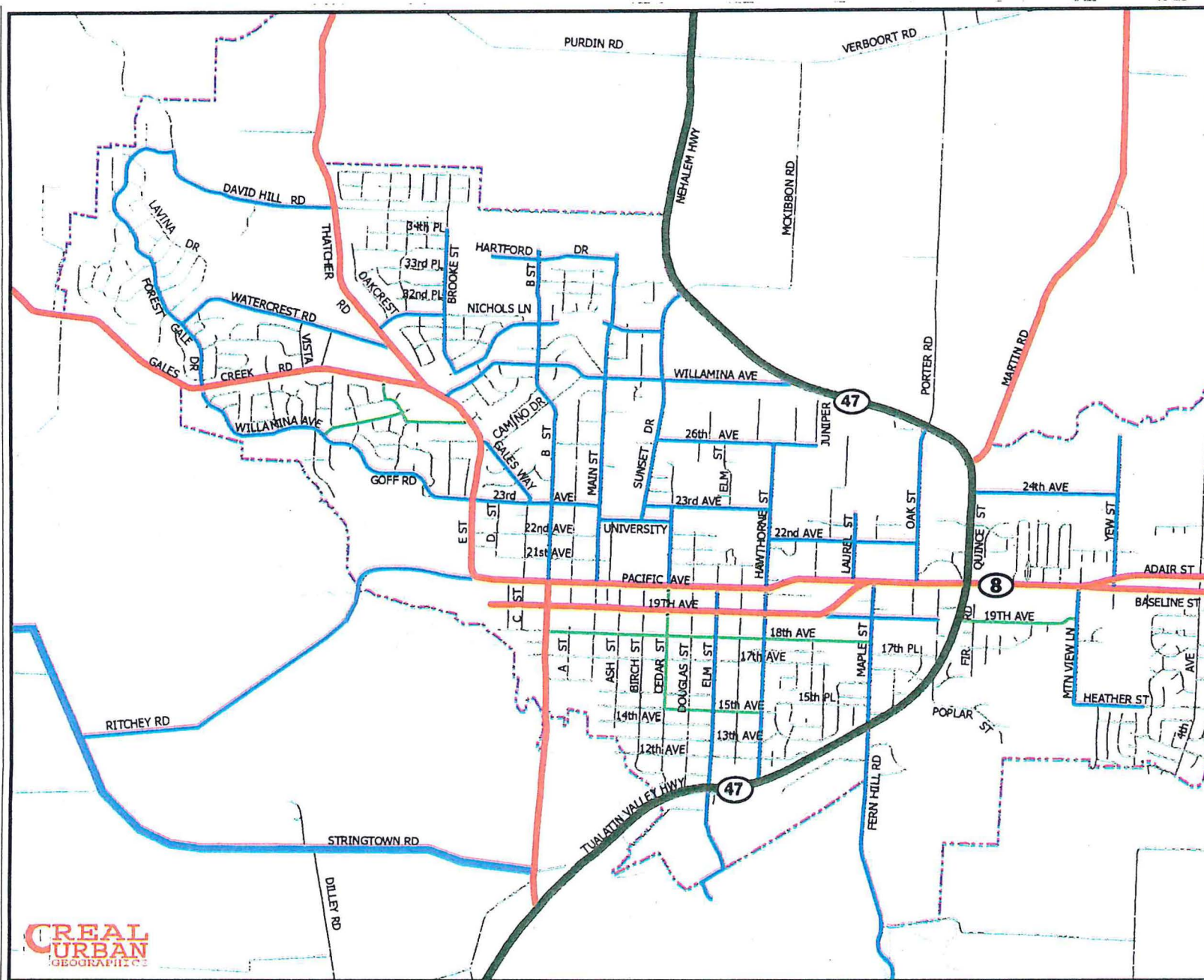
Functional Classification

-  Principal Arterial
-  Arterial
-  Collector
-  Neighborhood Route

Water

City Limits

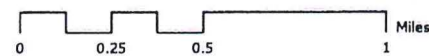
-  Urban Growth Boundary



CREAL
URBAN
GEOGRAPHICS

**FIGURE
3-5**

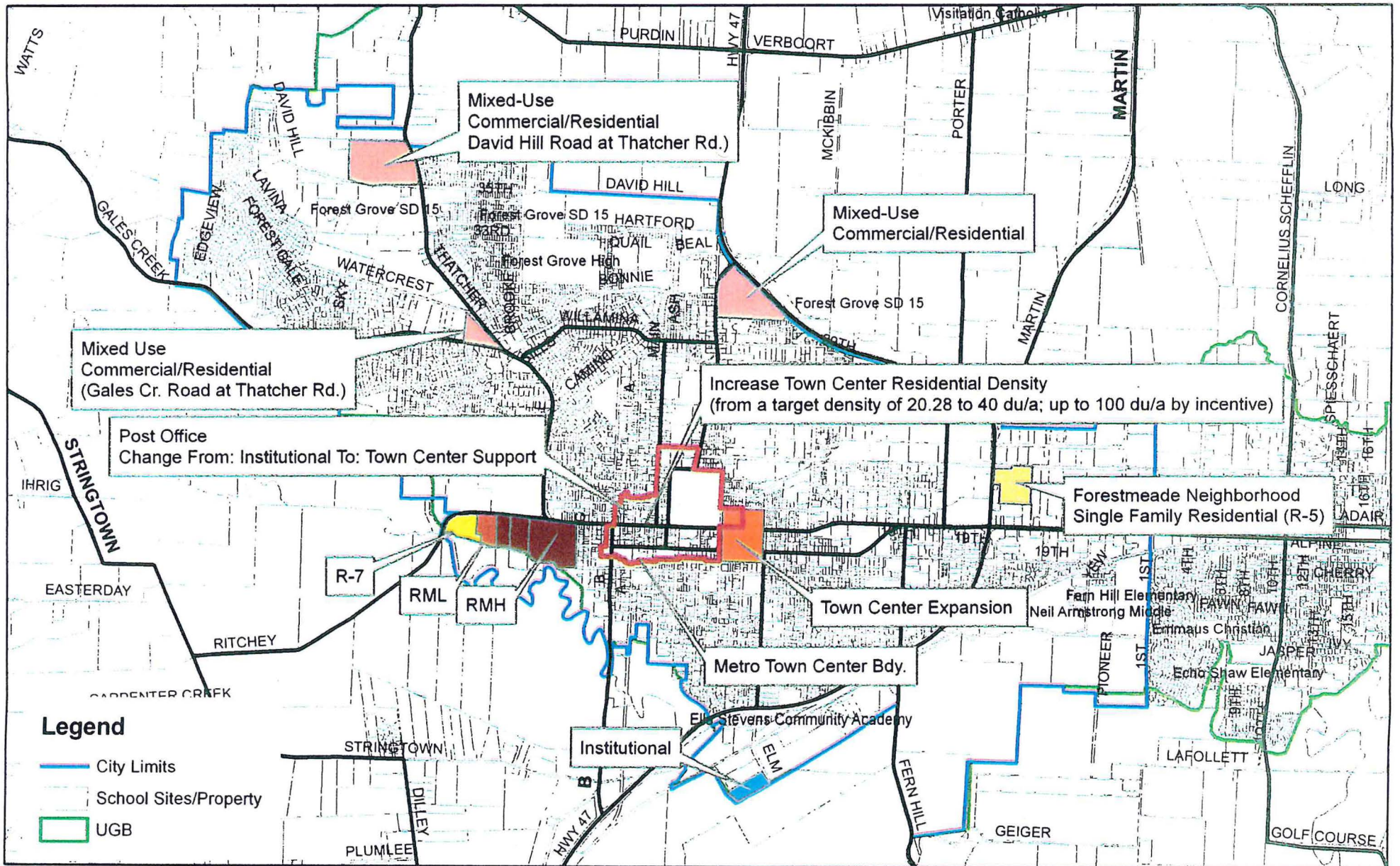
STREET FUNCTIONAL CLASSIFICATION



SCJ ALLIANCE
SOUTH COASTAL JUDICIAL DISTRICT

Parametrix
ENGINEERING PLANNING ENVIRONMENTAL SCIENCE

Attachment B
Planning Commission
Recommended Comprehensive Plan Map Changes



PLANNING COMMISSION RECOMMENDATION

Comprehensive Plan

Land Use Concept



Edits to Draft Comprehensive Plan Map

- Remove Mixed-Use Commercial Designation along Hwy. 47 between Hartford Drive and David Hill Road.
- Retain Mixed-Use Commercial Designation at Sunset Drive and Hwy. 47
- Retain Mixed-Use Commercial Designation at David Hill Road and Thatcher Road
- Retain Mixed-Use Commercial Designation at Gales Creek Road and Thatcher Road ("CPD Area")
- Designate area west of E Street and South of Pacific Avenue to RML or retain RMH designation
- Designate Post Office site from Institutional to Town Center Support
- Designate Friends of Historic Forest Grove property in Taylor Way area to Institutional from General Industrial.

Edits to Draft Transportation System Plan

- Correct notation on TSP maps referring to Gales Creek as Tualatin River
- Designate Pacific Avenue west of E Street to Collector consistent with Washington County TSP.
- Project list and funding amounts (consistent with update RTP costs)
- Edit Functional Classification Map
- Add reference to GroveLink system and ridership in Transit Chapter
- Add reference to Scenic Bikeway route through Forest Grove in Transit Chapter
- Include ODOT edits (refer to PowerPoint presentation) to Table 10-3, remove references to traffic signals, remove references to preferred land use alternative and create separate background document.
- Update cost estimates to reflect RTP funding changes
- Revise conceptual roadway near Fern Hill wetlands
- Revise map to include South Hwy. 47 Special Study Area
- Revise text to include South Hwy. 47 Special Study Area
- Change Table 10-3 to say Possible Funding Source instead of funder

Edits to School Element

- Update Pacific University Projections
- Revise Pacific University Map for legibility – Add Lincoln Park
- Add the percentage of Population below 15 and % above 65 to General Population Characteristics Table.

Edits to Natural Hazards and Natural Resources Element

- No changes

Edits to Public Facilities and Community Services Element

- Include Boards and Commission in Administrative Services section
- Add reference to need for new police station in public facilities element

Edits to Land Use Element

- Distinguish between Community Neighborhood zone and proposed Mixed-Use zone
- Add location criteria for Mixed-Use Zone
- Ensure references to Mixed-Use Zone are updated and correct

Edits to Urbanization Element

- No changes

Edits to Community Sustainability Element

- No changes

Edits to Housing Element

- No changes to Housing Element

Edits to Economic Development Element

- Revisions to improve readability and update data

Edits to Citizen Involvement Element

- No changes to Citizen Involvement Element

Edits to Background Document

- Add wording to recognize that growth projections should be monitored and updated as needed.
- Add wording describing Forest Grove's location on the edge of the Portland Regional urban growth boundary, proximity to agricultural lands and distance from the Portland core area.

Residential Capacity Analysis Findings

January 16, 2014

Location	Current Designation	Proposed Designation	Acreage Gross/Net
South of Pacific	RMH	RMH/RML/R-7	39.7/33.7
Town Center	TC	TC	71/61 ¹
Thatcher Rd./David Hill Road	C-Low (R-10)	MU	30.6/14.2
Sunset Drive/Willamina	IL	MU	23.5/19.9
Gales Creek Road/Thatcher Road	CPD	MU	6.4/5.4
Forestmeade Neighborhood	RML	R-5	13.3/11.4

Location	Current Residential Capacity	Planned Residential Capacity	Estimated Change
South of Pacific ²	541	430	-111
Town Center ³	1,237 ⁴	2,474 ⁵	+1,237
Thatcher/David Hill Road	41	178	+137
Sunset Drive/Willamina	0	180	+180
Gales Creek Road/Thatcher Road	0	101	+101
Forestmeade Neighborhood	136	99	-37
TOTAL			+1,507

Note: The City of Forest Grove commits to adopting the necessary Zoning Map and Development Code text to achieve the stated planned residential capacities identified above within one-year from Oregon Department of Land Conservation and Development approval of the Forest Grove Comprehensive Plan Update.

Zoning Map Classifications

- R-5 (Single Family Residential – 8.71 dwellings per net acre)
- R-7 (Single Family Residential – 6.22 dwellings per net acre)
- R-10 (Single Family Residential – 4.35 dwellings per net acre)
- RML (Multifamily Residential Low – 12.0 dwellings per net acre)
- RMH (Multifamily Residential High – 20.28 dwellings per net acre)
- TC (Town Center – 20.28 dwellings per net acre)
- CPD (Commercial Planned Development)
- IL(Light Industrial)
- MU (Proposed Mixed-Use Development Zone)

¹ Not including Pacific University campus.

² Estimate represents analysis contained in the December 16, 2013, written staff report to the Planning Commission.

³ Estimated current number of dwelling units = 460 units. Source; City of Forest Grove Planning Division and Metro State of the Centers Report (May 2011).

⁴ Figure does not include Pacific University.

⁵ Estimated based on increasing outright permitted target density from 20.28 units/acre to 40 units/acre.

South of Pacific Avenue Area (west of Town Center)
Findings and Conclusions

Finding: Area has been designated Multi-family high density since 1980. Reduction of density with greater distance from the Town Center better meets the Comprehensive Plan land use criteria for designation of land. Designation allows for development and preserves the residential character of the area along Ritchey Road. Conclusion: Re-designation of the area south of Pacific Avenue west of the Town Center is consistent with the applicable policies contained in the comprehensive plan. Applicable policies include:

Land Use

Local Land Use Goals

1. Residential areas shall be developed in a safe, aesthetically pleasing, and efficient manner.

Finding: The proposed land use concept for the area south of Pacific Avenue west of the Town Center to Ritchey Road includes a graduated density pattern with the highest density (RMH) nearest to the Town Center and the lowest (Single Family Residential B-Standard/R-7) furthest from the Town Center near Ritchey Road. This concept provides for a variety of housing and flexibility for an aesthetically pleasing development pattern and efficient arrangement of housing types. The proposed land use concept promotes a variety of housing options including multiple family attached, multiple family detached, single family attached and single family detached units. For the reasons stated above the proposed land use concept recommended by the Planning Commission meets the intent of Local Land Use Goal #1.

Local Land Use Policy 1:

1. Multi-family developments shall be near the commercial core of major arterials.

Finding: The proposed zoning for the subject area includes the highest density land use designation (High Density Residential/RMH) near the commercial core and adjacent to Pacific Avenue where it is designated as an arterial street on the Transportation System Plan map. Therefore, the proposed land use designations recommended by the Planning Commission are consistent with this policy.

The proposed land use concept meets the intent of the land use location criteria identified below. The high density residential development is located on land with generally 10% slope or less. In addition, the high density residential land is located proximate to Pacific Avenue where it is designated as an arterial street. Furthermore, the high density residential land is located about ¼ mile from mass transit and community-serving commercial uses. As a rule of thumb, locations within ¼ mile are considered to be within convenient walking distance. The area is served by urban services such as streets, police and fire protection and municipal water.

The areas identified for medium density and low density residential development are not penetrated by major arterial roads or railroads. Furthermore, the medium and low density areas are located within convenient driving distance to schools and neighborhood commercial areas. The area is served by urban services such as streets, police and fire protection and municipal water.

Land Use	Description	Criteria for Allocation
HIGH DENSITY RESIDENTIAL DEVELOPMENT	<i>Up to 20.28 units / Net residential acre (apartments, town houses, and condominiums)</i>	<ul style="list-style-type: none"> ▪ Hazard free location suitable for heavy building ▪ 10% of less slope ▪ Location near major arterials with buffer strips ▪ Convenient walking distance to open space, mass transit, and community-serving commercial area ▪ Availability of full urban services
MEDIUM DENSITY RESIDENTIAL DEVELOPMENT	<i>Up to 12 units a net residential acre (duplexes, townhouses, and condominiums)</i>	<ul style="list-style-type: none"> ▪ Hazard free location suitable for homesites ▪ 10% or less slope ▪ Location bounded but not penetrated by major arterials or railroads ▪ Convenient driving distance to schools and neighborhood commercial ▪ Availability of full urban services
LOW DENSITY RESIDENTIAL DEVELOPMENT	<i>4.35 to 8.71 units a net residential acre (single-family)</i>	<ul style="list-style-type: none"> ▪ Hazard free location suitable for homesites ▪ Consideration of density related to building limitation (slope, soil, geology) ▪ 20% or less slope ▪ Location bounded but not penetrated by arterials or railroads ▪ Convenient driving distance to schools and neighborhood commercial ▪ Availability of full urban services

The land use concept arranges lower density development, single-family, on the edges of the urban area. Nearer the city center, higher density residential development, multi-family and duplex, are concentrated. This is consistent with the Land Use Chapter of the Forest Grove Comprehensive Plan. Another important factor determining the distribution of residential land use on the Plan Map are the goals and policies in the Land Use element as previously stated. The land use concept is consistent with the policy calling for multi-family units to be near major arterials.

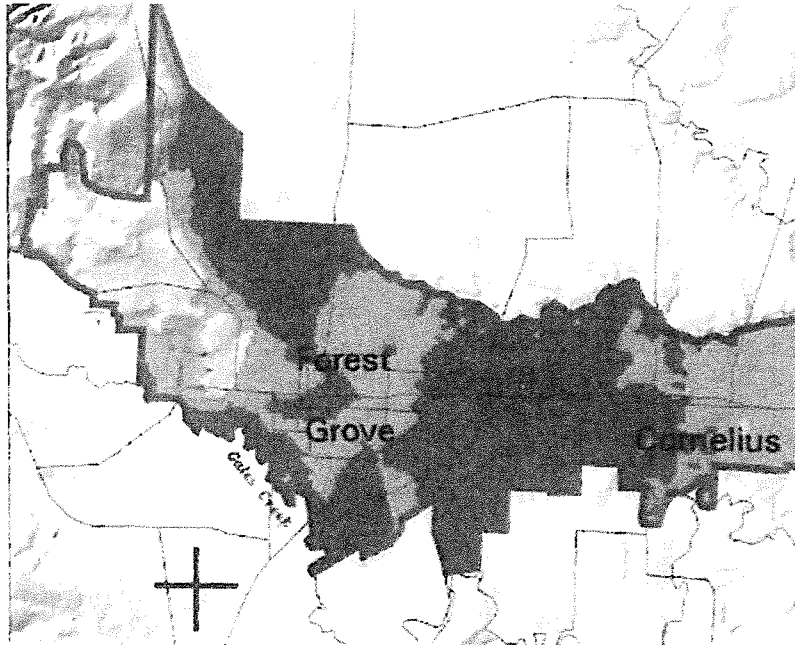
The criteria regarding hazard free location is addressed below.

Earthquake Hazards The public testimony provided on January 13th indicated the subject area is located within an earthquake hazard zone. The Oregon Department of Geology and Mineral Industries (DOGAMI) published a series of maps for the region showing relative earthquake hazards. The degree of earthquake hazard is based on three factors. These factors include:

- Ground motion amplification;
- Liquefaction; and
- Slope instability.

Liquefaction is a term used to describe areas of water-saturated sand creating areas of soft soils when shaken. Given these factors the entire Forest Grove Planning area is susceptible to some level of earthquake risk. Additional engineering may be necessary to reduce damage to infrastructure and buildings from earthquake hazards. This will be assessed during the development review process. It should be noted that risk can be mitigated through design and engineering but not entirely eliminated.

The area nearest the floodplain and urban growth boundary is identified as having the highest relative risk to earthquake hazards. This area is located within Relative Earthquake Hazard Zone A (red area on map). The area west of B Street, south of Pacific Avenue and generally north of 19th Avenue is identified as being within Relative Earthquake Hazard B (orange area on map). Earthquake hazard Zones A and B affect all of Forest Grove except for the area north of Gales Creek Road and west of Thatcher Road.



The Natural Resources and Natural Hazards Chapter of the Comprehensive Plan recognizes the earthquake risk in the Planning area. The City's Emergency Operations Plan establishes procedures for responding to a seismic event to minimize the risk to life and property.

Floodplain and Wetlands the subject area is located adjacent to the urban growth boundary. In this area of the region the urban growth boundary generally follows the 100-year flood plain for Gales Creek. There is some uncertainty with respect to the developable area near the floodplain boundary. Based on prior analysis conducted in 2005/2006 the developable area is generally above the 180 foot elevation contour line. This is due the presence of a levy providing some protection from flood waters.

In general, development is restricted within the floodway and floodplain by Washington County and the Forest Grove Development Code. In addition, development is restricted near wetlands and within vegetative corridors established by Clean Water Services. Development potentially impacting vegetative corridors requires review by Clean Water Services and issuance of a Service Provider Letter before development permits are issued by the City. There are no identified wetland areas in the subject area based on the review of the local wetland inventory review completed in 2011.

Local Housing Goals

The proposed land use concept is consistent with the housing goals contained in the Housing chapter of the Comprehensive plan including:

1. *Encourage the provision of affordable good quality housing in adequate numbers to all segments of Forest Grove's population including but not limited to people of all races,*

age, sex, religion, national origin, mental and physical handicaps, marital status or family size.

Finding: The proposed land use concept identifies a variety of land use residential land use designations including Multifamily High Density, Multifamily Low Density, and Single Family Residential (B-Standard/R-7). This encourages the provision of affordable good quality housing in adequate numbers to accommodate all segments of Forest Grove's population. For this reason, the proposed land use concept meets the intent and is consistent with Local Housing Goal #1.

2. Provide for an adequate supply of new housing to meet demand, thus avoiding shortages and adverse impacts on price, rents, and choice of housing.

Finding: The proposed land use concept provides for a supply of land suitable for new housing needed to partially meet expected housing demand. The table below shows the residential capacity findings for the current and proposed land use designations. These estimates are based on the net acreages for each land use category identified in the subject area.

South of Pacific Avenue Capacity Analysis

<i>Current Capacity (Dwellings)</i>	<i>Planned Residential Capacity (Dwellings)</i>	<i>Estimated Change (Dwellings)</i>
541	430	-111

Finding: For the reasons stated above, the proposed land use concept and changes to the Forest Grove Comprehensive Plan Map recommended by the Forest Grove Planning Commission are consistent with intent of the Forest Grove Comprehensive Plan.

Statewide Land Use Planning Goals Compliance

Goal 2: Land Use Planning – Goal 2 establishes a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions. The proposed land use concept establishes a framework of the how land may be developed within the subject area. The land use concept recommends the designation of specific land use categories on the Comprehensive Plan map based on the housing needs identified in the City's 2009 Economic Opportunity Analysis (pages 66 through 80) and Housing Chapter of the Comprehensive plan.

Goal 10: Housing- To provide for the housing needs of citizens of the state. Land use concept provides for a variety of housing units including multiple family attached, single family attached, and multiple family detached. Therefore, the proposed land use concept is consistent with Goal 10.

Metropolitan Housing Rule – The Metropolitan Housing Rule (OAR 660-007-035(2)) establishes minimum residential density requirements for new construction. Under this provision, the City of Forest Grove must provide for an overall density of eight or more dwelling units per net buildable acre. Based on the planned residential development capacity shown above the subject property could accommodate 430 dwellings based on the proposed land use designations. Since the subject area is approximately 33.7 net acres the resulting density is 12.76 dwellings per net acre. This exceeds the Metropolitan Housing Rule requirement of at least 8 units per net acre. Therefore, the proposed land use concept complies with the Metropolitan Housing Rule.

Metro Urban Growth Management Functional Plan Compliance

Chapter 1: Land Use

Fundamental 1: Encourage a strong local economy by providing an orderly and efficient use of land, balancing economic growth around the region and supporting high quality education. Finding: The proposed land use South of Pacific Avenue promotes an orderly and efficient land use pattern accommodating a variety of housing types.

Fundamental 2: Encourage the efficient use of land within the UGB including buildable industrial and commercial land and focus development in 2040 mixed use centers and corridors. Finding: The proposed land use pattern for the area south of Pacific Avenue represents an efficient use of land by encouraging a range of densities near the Forest Grove Town Center.

Policy 1.3.1(a) Encourage affordable housing opportunities in the region by offering a diverse range of housing types, available within the region, and within cities and counties inside Metro's Urban Growth Boundary. (b) being available to households of all income levels that live or have a member working in each jurisdiction and subregion. Finding: The proposed land use pattern for the area south of Pacific Avenue encourage a diverse range of housing types from multiple family attached units to single family detached units. Housing units will be available to a diverse range of households representing a variety of income levels.

Urban Growth Management Functional Plan

Title 7: Housing Choice

Under Title 7 of the Metro Urban Growth Management Functional Plan cities and counties within the Metro region shall ensure that their comprehensive plans and implementing ordinances:

- A. Include strategies to ensure a diverse range of housing types within their jurisdictional boundaries;
- B. Include in their plans actions and implementation measures designed to maintain the existing supply of affordable housing as well as increase the opportunities for new dispersed affordable housing within their boundaries; and
- C. Include plan policies, actions, and implementation measures aimed at increasing opportunities for households of all income levels to live within their jurisdictions in affordable housing.

Finding: The proposed land use concept is consistent with Metro Urban Growth Management Functional Plan Title 7 for the following reasons:

1. The recommended comprehensive plan map promotes a range of housing types within the area south of Pacific Avenue and within the jurisdictional boundaries of Forest Grove;
2. The proposed land use designations increase opportunities for new dispersed affordable housing whether multiple family attached, single family attached or single family detached; and
3. The proposed land use designations increases opportunities for households of all income levels to live within their jurisdictions in affordable housing.

City Council Findings
Comprehensive Plan Land Use Concept for the South of Pacific Avenue Area
Response to Testimony Provided by Ms. Kathy Corey on January 27, 2014

Background: Testimony was provided by Ms. Kathy Corey at the January 27, 2014, City Council meeting regarding the proposed Comprehensive Plan designations for the area south of Pacific Avenue, between D Street and Ritchey Road. The proposal is to retain the Multifamily High Density designation in the area generally between D Street and E Street. A transition zone of Multifamily Low Density is identified between the Multifamily High Density area and a Single Family B-Standard (R-7) area east of Ritchey Road (Attachment A).

Ms. Corey presented an alternative land use concept to the City Council on January 27, 2014 that is included in the record (Attachment B). The alternative concept includes changing the Multifamily High Density designation adjacent to D Street Single Family Residential B-Standard. The concept also includes changing the current Multifamily High Density residential designation, near the southwest corner of D Street and Pacific Avenue, to Multifamily Low Density. The Multifamily High designation would be retained along Pacific Avenue from E Street to the area recommended by the Planning Commission as B-Standard west of Ritchey Road.

This document responds the alternative land use concept proposed by Ms. Corey on January 27, 2014 and provides findings and conclusions.

Issue: Multiple High Density Designation

The subject area has been designated on the Comprehensive Plan Map as Multifamily High Density (RMH) since 1980. The RMH designation was designated in 1980 to partially meet housing needs including a need for 216 acres of land identified for multiple family housing types. The RMH designation also helps meet the Metropolitan Housing Rule (Oregon Administrative Rules Chapter 660, Division 7) requirements that Forest Grove provide opportunity for an average of 8 dwellings units per net acre. RMH designation allows for a variety of housing types including:

- Single Family Detached units on existing lots of record smaller than 5,000 square feet;
- Single Family Attached (townhouses);
- Duplexes;
- Manufactured Homes;
- Manufactured Home Parks as a conditional use
- Multifamily Units.

The description for High Density Residential below is from the 1980 Land Use Chapter Comprehensive Plan Text.

High Density Residential

High density residential areas are intended to provide for the greatest concentrations of population in the planning area (20.28 units/net acres) and, as with other urban densities, all should have full community services available before development. Most

of these areas are located close to the center of the city and/or along existing or planned arterial and collector streets. This location affords residents of high density developments direct access to major streets, public transportation, work and shopping areas, and affords maximum cost effective use of existing and planned public/private utility distribution and/or collection systems. Many of the high density residential areas are presently occupied by high density residential uses or commercial or other uses where a change from the existing land use is desirable. Within the framework of the Zoning Ordinance, high density residential uses, as well as single-family and duplex residential uses, would be permitted as an outright use under this map designation.

Findings and Conclusions: Based on the description above the area closest to the Town Center, including the area adjacent to D Street, should be retained as Multifamily High Density. This area has full community services available including municipal water, sanitary sewer, storm sewer as documented on maps maintained by the City Engineering Division. The area is also served by municipal police and fire protection. The area adjacent to D Street is also located within one-block of the arterial street system including Pacific Avenue and 19th Avenue. In addition, the D Street area is within ¼ mile of the terminus of the TriMet Line 57 located at B Street and 19th Avenue. Retaining the Multifamily High Density residential designation along D Street is consistent with the concept of maximizing cost-effective use of existing and planned public/private utility and distribution systems as stated above since these systems are in place. Finally, based on the text contained in the Comprehensive Plan existing single family residences would be considered as an outright use under the High Density Residential designation. Therefore, City Council finds retaining the Multifamily High Density residential Comprehensive Plan designation is consistent with the description of High Density Residential areas as described above and contained in the Comprehensive Plan and will not impact the ability to continue single family uses in the area along D Street.

Issue: Location of Multiple Family Low Designation

Ms Corey proposed re-designating the area near the southwest corner of D Street and Pacific and an area south of Pacific Avenue as Multifamily Low Density. The Comprehensive describes the purpose of the Medium Density Residential designation as follows:

Medium Density Residential

Medium density residential areas are intended to provide areas for duplex developments (12 units/net acre) with all areas having community services available prior to development. This designation was created to provide a buffer zone between high and low density residential development, and to be used in areas where single-family developments would not be desirable, either physically or economically. Single-family residential uses would also be permitted as an outright use. These medium density residential areas have been distributed in several parts of the city with all locations being readily accessible to major streets and public transportation, adjacent to public or quasi-public open space and near commercial services.

Findings and Conclusions: The area identified by Ms. Corey for Medium Density Residential development may be appropriate based on the intent of the Medium Density Residential designation as described above and the general location criteria contained in the Comprehensive Plan. Although the locations may be appropriate additional analysis is

necessary to determine potential to housing capacity and perspective of the affected property owners. These issues are discussed below.

Issue: Single Family Designation

The B-Standard/R-7 zone allows for:

- Single Family Detached
- Single Family Attached (within subdivisions of 20 or more units up to 8% of lots may be developed as duplexes and single family attached lots)
- Duplexes with same restrictions as Single Family Attached
- Manufactured Homes as a conditional use
- Manufactured Home Parks as a conditional use
- Multifamily units prohibited

Single-Family (Standard)

Single-family standard density residential areas are intended to provide for the most common urban residential density anticipated within the Forest Grove Urban Growth Boundary. Areas assigned with this map designation are either undeveloped areas with compatible site characteristics for this type of single-family development, areas which could be economically serviced with public water and sewer, areas of existing single-family residences with predominately 7,000 square foot lots, or areas recommended for redevelopment based on the nature and condition of existing uses in conjunction with the parcelization characteristics. In the northwest portion of the city, certain areas have been given the map designation of either Single-Family Standard, or Single-Family Low as a result of known building limitations of the area. The precise lot size will be determined at the time of development based on engineering data which will be supplied by the developer. A 7,000 square foot lot would be the minimum lot size allowed in this map designation and not preclude larger lot developments.

Findings and Conclusions: The City Council finds that changing the existing Multifamily High Density zoning designation near D Street to Single Family is not consistent with the site characteristics for Single-Family Standard as described above. The subject area along D Street is not undeveloped.

Issue: Designation Property Based on Lot Size

Findings and Conclusions: The testimony presented on January 27, 2014 requested zoning changes to the Gails (sic) Creek D Street Area to properly zone the area according to existing residential lot sizes. The City Council finds that existing residential lot size is not a criterion for designating land use on the Comprehensive Plan as shown on the table below taken from the Land Use Chapter of the 1980 Comprehensive Plan.

Land Use	Description	Criteria for Allocation
HIGH DENSITY RESIDENTIAL DEVELOPMENT	Up to 20.28 units / Net residential acre (apartments, town houses, and condominiums)	<ul style="list-style-type: none"> ▪ Hazard free location suitable for heavy building ▪ 10% of less slope ▪ Location near major arterials with buffer strips

		<ul style="list-style-type: none"> ▪ Convenient walking distance to open space, mass transit, and community-serving commercial area ▪ Availability of full urban services
MEDIUM DENSITY RESIDENTIAL DEVELOPMENT	Up to 12 units a net residential acre (duplexes, townhouses, and condominiums)	<ul style="list-style-type: none"> ▪ Hazard free location suitable for homesites ▪ 10% or less slope ▪ Location bounded but not penetrated by major arterials or railroads ▪ Convenient driving distance to schools and neighborhood commercial ▪ Availability of full urban services
LOW DENSITY RESIDENTIAL DEVELOPMENT	4.35 to 8.71 units a net residential acre (single-family)	<ul style="list-style-type: none"> ▪ Hazard free location suitable for homesites ▪ Consideration of density related to building limitation (slope, soil, geology) ▪ 20% or less slope ▪ Location bounded but not penetrated by arterials or railroads ▪ Convenient driving distance to schools and neighborhood commercial ▪ Availability of full urban services

Issue: Planning Commission consideration of public testimony and final recommendation.

Findings and Conclusions: Re-designation of the area south of Pacific Avenue from Multifamily High Density residential to Multifamily Low Density as proposed by Ms. Corey is inconsistent with the desires and testimony received from property owners within the affected area as provided during the Planning Commission public hearing process and reflected in the record. The Planning Commission considered the testimony provided by affected property owners prior to making a recommendation on December 16, 2014. For this reason the City Council finds that the proposed downzoning presented by Ms. Corey is inappropriate.

Issue: Title 1 of the Metro Urban Growth Management Functional Plan establishes requirements for maintaining housing capacity within the City. The City of Forest Grove is obligated to ensure the Forest Grove Comprehensive Plan is consistent with Title 1 of the Metro Urban Growth Management Functional Plan.

Ms. Corey did not provide testimony demonstrating how potential reductions to housing capacity under the alternative land use concept would be offset by increasing densities elsewhere. A staff analysis of potential impact to housing capacity is shown below.

Analysis of Development Capacity Yield Related to Proposal

Area	Proposed Zoning	Target Density	Net Acreage	Capacity Yield
West End	R-7	6.22	5.5	34
West/South RML	RML	12.0	11.0	132
Pacific Ave RMH	RMH	20.28	9.3	188

East RML	RML	12	1.2	14
East R-7	R-7	6.22	9,5	44
TOTAL Proposed				412
Current Capacity				541

Findings and Conclusions: City Council finds the proposed land use concept as presented on January 27, 2014, would reduce housing capacity from an estimated 541 dwelling units to 412 dwelling units. The City Council also finds housing capacity must be increased elsewhere in the City as required by Metro Title 1: Housing Capacity. Metro Title 1 Section 3.07.120(C) states:

A city or county may reduce its minimum zoned capacity by one of the following actions if it increases minimum zoned capacity by an equal or greater amount in other places where the increase is reasonably likely to be realized within the 20-year planning period of Metro's last capacity analysis under ORS 197.299:

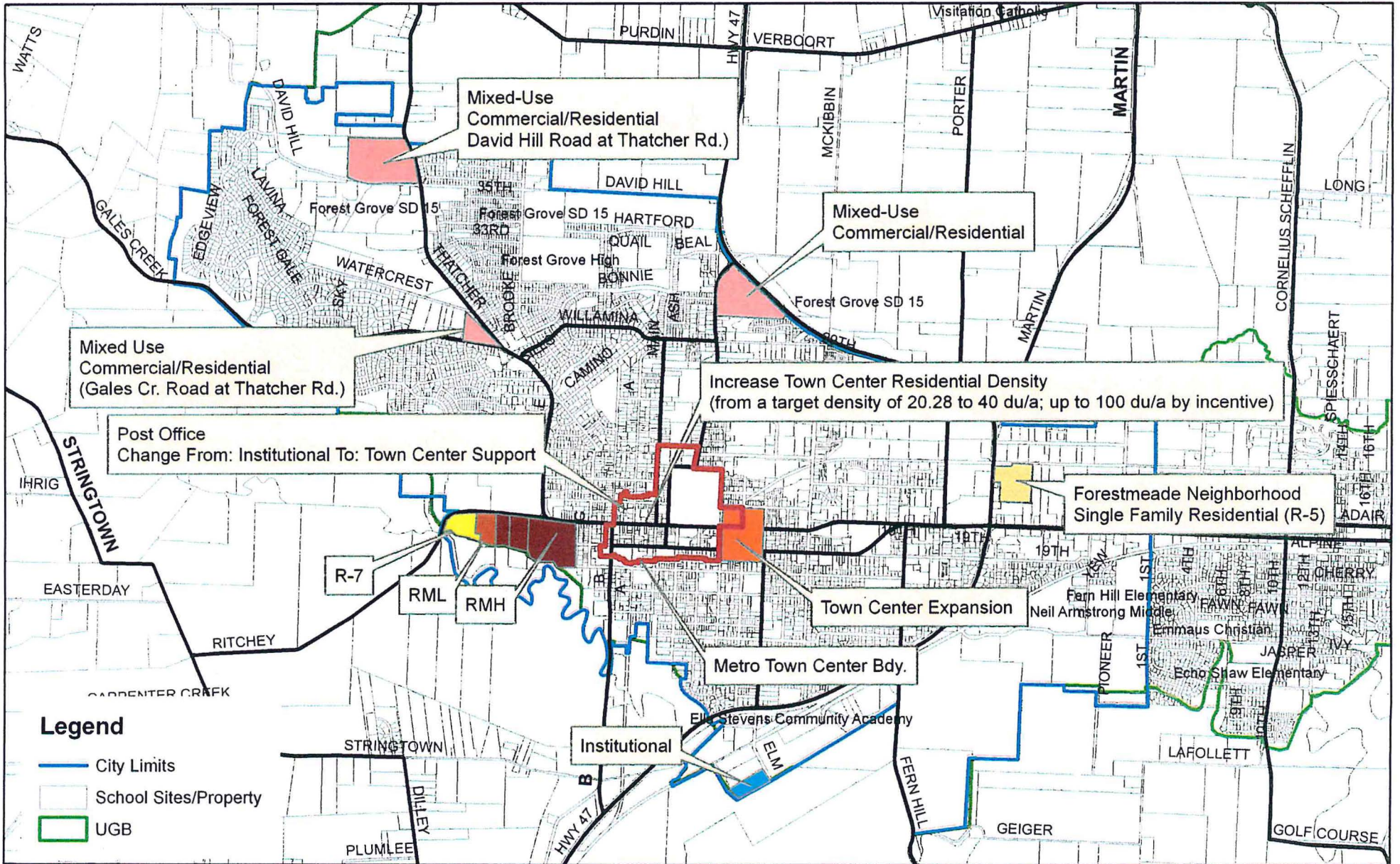
1. Reduce the minimum dwelling unit density, described in subsection B, for one or more zones;
2. Revise the development criteria or standards for one or more zones; or
3. Change its zoning map such that the city's or county's minimum zoned capacity would be reduced.

Issue: The issue of natural hazards in the subject area was included the public record on January 27, 2014. The following Comprehensive Plan goal addresses natural hazards:

All Development Shall Consider, take into account and demonstrate suitability relative to the natural hazard limitations of the area

Findings and conclusions regarding natural hazards are provided below:

Findings and Conclusions: Those involved in development will be required to address hazard conditions by the inclusion of basic environmental data (i.e. soil type, elevation of the flood plain, geologic limitations, etc.) and related designs and for engineering solutions in the submittal requirements for the development. An analysis of the natural hazards limitations within the area is provided in the January 27, 2014 written staff report to the City Council included in the record and supports the Comprehensive Plan Map land use concept approved by the City Council on January 27, 2014 (Ordinance 2014-02).



PLANNING COMMISSION RECOMMENDATION

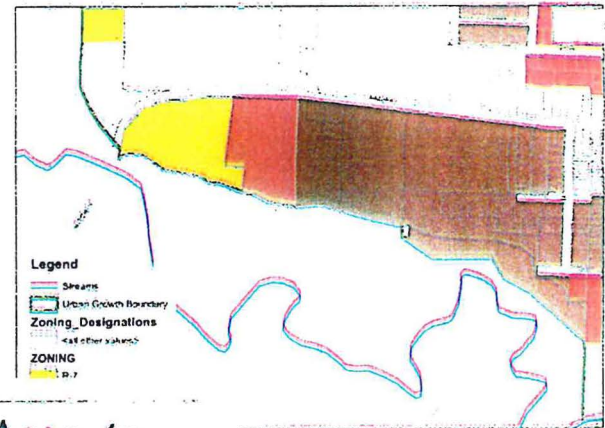
Comprehensive Plan

Land Use Concept

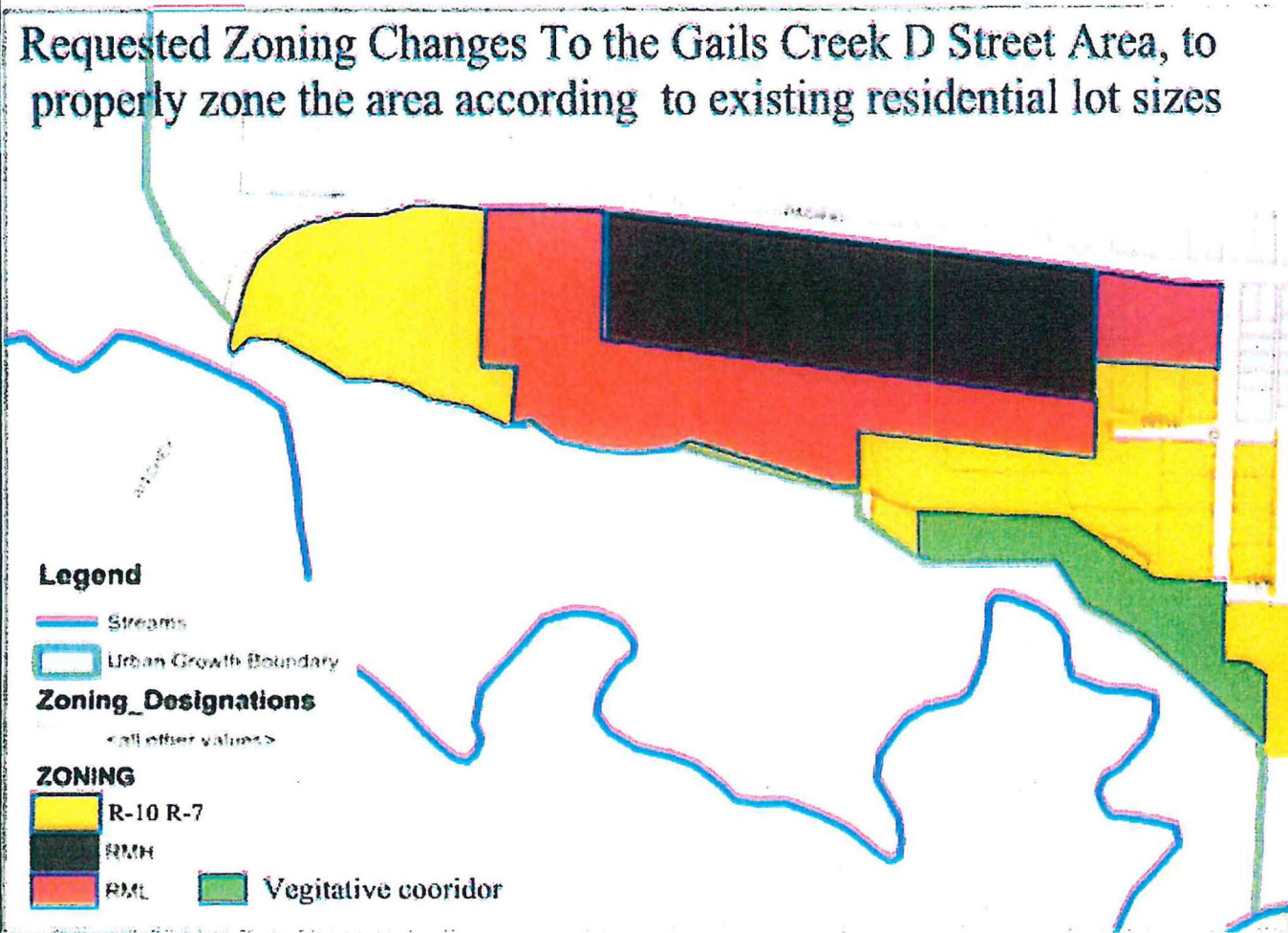


Zone Comparison

Alternative 3 - Modified PC Recommendation



Requested Zoning Changes To the Gails Creek D Street Area, to properly zone the area according to existing residential lot sizes



Citizen Involvement

This element of the Forest Grove Comprehensive Plan promotes the principles contained in the City's Vision Statement and Oregon Statewide Planning Goal 1: Citizen Involvement.

The City's Vision Statement was written to reflect the best of what exists now, and what we aspire to become as a community. The full text of the Vision Statement is attached at the end of the Citizen Involvement Element. Citizen participation is a key element of the Vision Statement. The City's Vision Statement encourages a community by design through:

Participation of an engaged public and accessible, responsive government.

This element of the Forest Grove Comprehensive Plan supports and promotes this key component of the Vision Statement.

To comply with Goal 1 a city must implement a local citizen involvement program that ensures the opportunity for citizen involvement in all phases of the planning process. In addition, Goal 1 encourages the coordination of planning efforts among federal, state, and regional agencies and special purpose districts.

By its very nature comprehensive planning is broad based and delves into a variety of subjects. These subjects are included in this comprehensive plan. Subjects include land use planning, transportation, local economy, parks and recreation, and natural resources. A broad-based citizen involvement program is necessary to provide opportunities for effective and meaningful citizen participation in developing plans and making planning decisions in many topical areas. The following section of the comprehensive plans shows how the City of Forest Grove complies with requirements of Goal 1.

Statewide Land Use Planning Goal 1 requires that local citizen involvement programs incorporate the following components:

- ✓ *Provide for widespread citizen involvement;*
- ✓ *Assure effective two way communication with citizens;*
- ✓ *Provide the opportunity for citizens to be involved in all phases of the planning process;*
- ✓ *Assure that technical information is available in an understandable form;*
- ✓ *Assure that citizens will receive a response from policy-makers; and*
- ✓ *Insure funding for the citizen involvement program*

Each of these components are described further below:

Provide for Widespread Citizen Involvement

The City of Forest Grove provides for widespread citizen involvement in a variety of ways. Citizen involvement is possible through the various city boards and commissions and ad-hoc citizen involvement committees. Several boards and commissions have direct input into subjects covered by the comprehensive plan. These boards and commissions include:

- Planning Commission;
- Economic Development Commission;
- Community Forestry Commission;
- Historic Landmarks Board; and
- Parks and Recreation Board

The Forest Grove Committee for Citizen Involvement (CCI) provides another opportunity for citizen involvement into matters important to the community. The CCI fulfills the Goal 1 requirement for an officially recognized committee for citizen involvement that is broadly representative of geographic areas and interests related to land use and land use decisions. The Forest Grove CCI advises the City Council on ways to include residents in Planning Forest Grove's future with an emphasis on communication and land use. Significant responsibilities of the CCI include:

- Encourage and facilitate citizen involvement, access and opportunity to be involved in the land use process;
- Achieve two-way communications between citizens and policy makers; and
- Conduct the Annual Town Meeting

To Assure Effective Two Way Communication

The Forest Grove CCI strives to assure effective two-way communication between city residents, business and property owners and city policy makers. The primary tool used by the CCI is the Annual Town Meeting and participation on community events such as the Forest Grove Farmers Market. E-mail communication and social media are other methods used to promote two-way communication.

Provide for the Opportunity for Citizens to be Involved in all phases of the planning process

State Land Use Planning Goal 1 promotes opportunities for involvement in all phases of the planning process. This includes preparation of plans and implementation measures, plan content, plan adoption, minor changes and major revisions in the plan and implementation measures.

In addition to formal and ad-hoc boards and commissions, the City publishes newspaper articles and inserts to highlight major planning initiatives and initiate a community dialogue.

Assure that technical information is available in an understandable form

Technical information is prepared to support the ongoing operations of the City. Technical information is routinely prepared by the Planning Division, Engineering Division and to support the annual budgeting process. The City of Forest Grove provides technical information prepared for these efforts in an understandable form using a variety of methods. City staff writes and submits guest opinion articles for publication in local newspapers. City staff also prepares newspaper inserts for major planning initiatives highlighting alternatives and policy recommendations. Draft plans and studies are also placed in the Forest Grove Community Library for community review. In addition, the Annual Town Meeting conducted by the Committee for Citizen Involvement provides another opportunity to present technical information in an understandable way for community discussion.

Assure that citizens will receive a response from policy-makers

Programs are in place to assure that citizens receive a response from policy makers. The City uses social media to encourage a two-way dialogue between city staff, elected officials, residents, business owners and property owners. In addition, the City solicits comments regarding City business through the City of Forest Grove website. As part of the City's communications strategy, the City's Legislative and Executive Department ensures that questions submitted are answered in a timely manner.

Insure funding for the citizen involvement program

The City's annual budget reinforces the importance of citizen involvement in Forest Grove. It is a stated goal of the City's Legislative and Executive Department to solicit citizen input through frequent, clear communication efforts. Public information is a specific line item in the various City departmental budgets.

City Boards and Commissions

To encourage broad-based citizen participation the City Council has established several advisory boards and commissions. These boards and commission address specific policy areas relevant to the Forest Grove Comprehensive Plan. These boards and commission include:

- Planning Commission (Land Use and Transportation Planning)
- Economic Development Commission (Local Economy)
- Parks and Recreation Commission (Parks and Recreation Master Plan)
- Community Forestry Commission (Urban Forest/Natural Resources)

Council Coordination

The Forest Grove City Council supports inter-agency coordination by serving as liaisons to various local and regional organizations. These organizations include:

- Forest Grove Chamber of Commerce
- Washington County Community Development Block Grant Program

- Economic Development Partnership
- Fernhill Wetlands Council
- Forest Grove Senior and Community Center
- Forest Grove Rural Fire Protection Board
- Joint Water Commission
- Metro Policy Advisory Committee
- Washington County Public Safety Coordinating Committee
- Regional Water Providers Consortium
- Ride Connection
- Washington County Coordinating Committee

City Service Clubs and Organizations

The City is home to many organizations that provide opportunities for citizen involvement. These service clubs and organizations include:

- Adelante Mujeres
- Dairy Creek Food Web
- Forest Grove Daybreak Rotary Club
- Forest Grove Noon Rotary Club
- Friends of Historic Forest Grove
- Forest Grove Elks
- Friends of Fernhill Wetlands
- Friends of Forest Grove Library
- Kiwanis Club of Forest Grove
- Lions Club of Forest Grove
- Masonic Holbrook Lodge #30

Other clubs and organizations providing opportunities for community interaction are listed on the City of Forest Grove website.

Goals and Policies

Goal 1.1 *City Vision Statement*

Ensure the ongoing relevance of the City’s Visions Statement for all citizens of Forest Grove.

Policy 1.1.1 The Committee for Citizen Involvement will periodically review and initiate updates to the City’s Vision Statement to reflect emerging issues and the changing needs and desires of the community.

Policy 1.1.2 The Committee for Citizen Involvement will work to ensure implementation of the City’s Vision Statement as City resources allow.

Goal 2.1 Citizen Involvement Program

Promote the participation of an engaged public and accessible, responsive government.

Policy 2.1.1 Encourage broad-based and active citizen involvement on the City’s advisory boards and commissions including participation by students and communities typically under-represented in civic affairs.

Policy 2.1.2 Promote the ongoing training of citizen volunteers serving on boards and commissions to encourage community leadership.

Policy 2.1.3 Pursue emerging technologies and platforms to promote and encourage citizen involvement in all phases of the planning process.

Policy 2.1.4 Identify areas of City government in which a formal citizen advisory committee or commission is warranted if funding and staff resources are available.

Goal 3.1 Inter-Agency Coordination

Promote the interests and needs of Forest Grove in local, state and national affairs.

Policy 3.1 Provide adequate resources to support meaningful participation of elected leaders and appropriate city staff on committees having a role in land use planning and civic affairs.

Goal 4.1 Fund Public Outreach and Education Efforts

Implement a framework for facilitating open two-way communication between City representatives and the broader community.

Policy 4.1.1 Support the Committee for Citizen Involvement in initiating and planning community events about important City matters affecting the general public.

Policy 4.1.2 Continue to budget resources for public outreach and education as part of the annual budget process.

Goal 5.1 Updating the Forest Grove Comprehensive Plan

Encourage and facilitate citizen involvement and inter-agency coordination in the development, implementation and updating of the Comprehensive Plan

Policy 5.1.1 The City shall develop and carry-out an ongoing citizen involvement and inter-agency coordination program in conjunction with the comprehensive planning process of the city.

Appendix: City Vision Statement
Comprehensive Plan Amendment Process

Forest Grove Vision Statement

This statement is written and designed to reflect the best of what exists now, and what we aspire to become, as a community.

Forest Grove is a friendly, twenty-first century, small, full service city. It was settled in 1841 by pioneers who valued respect for education, faith, enterprise, service to humanity, and the bountiful resources of the Tualatin Plain. Those values persist to inspire a common vision for a high quality of life in a thriving and progressive community that reaches from its historical commercial core around Pacific University to a horizon of forests, farms, vineyards, and the Coast Range. As an engaged and diverse people, we assure sustainability in our economy and our environment, thus supporting a community that nurtures our youth, educates all residents, and attracts and welcomes visitors. Forest Grove is itself a *destination* that thrives by *design* and is our *home*.

Forest Grove is a *Destination* that offers visitors and residents:

- **A rich heritage** preserved by honoring the city's natural, cultural, and historic treasures while also embracing the future.
- **A centrally located gateway** to forests, waterways, beaches, and mountains; this wealth of resources is cherished and preserved to foster sport, recreation, reflection, and leisure.
- **Arts & culture** that abound throughout the year; we celebrate our cultures and participate in a wide variety of visual and performing arts and festivals.
- **A community** recognized for its commitment to conserve, preserve, protect and restore our natural assets.

Forest Grove is a community by *Design* through:

- **Participation** of an engaged public and accessible, responsive government.
- **Planning** that considers and accommodates both the desires and needs of all community members to ensure their quality of life and prosperity.
- **Sustainable transportation** modes, systems, and networks that provide opportunities for all to conveniently and safely move about within and outside of the community.
- **Economic development** that encourages innovative, diverse and ecologically sound enterprises that provide ample opportunities for employment, and ensures the vitality of the community.
- **Fiscally sound funding** of quality public safety and municipal services including locally owned public utility and watershed.

Forest Grove is *Home* to:

- **Individuals** who are respected and valued for their experience, abilities, and differences, and where all residents are included in the life of the community through excellent education, recreation, and social programs.
- **Young people** who are nurtured and encouraged to achieve their full potential.
- **Families** of every size and description who have community resources needed for lifelong learning and development.
- **Older residents** whose ongoing leadership, wisdom and investment in the community build the foundation for our future.
- **Distinctive neighborhoods** replete with a variety of accessible housing options, schools, parks, places of worship and social gathering, and farmlands and open spaces.
- **A community** in harmony, bound by commonly shared respect for its residents, natural resources, economic vitality, and its active role in a global society.

Comprehensive Plan Amendments

Introduction

The Forest Grove Comprehensive Plan is the primary policy framework used by the City to link land use, economic development, public facilities and key community services. The Comprehensive Plan implements the City's Vision Statement and takes it a step further by establishing the City's expectations for land use and development for a twenty-year period.

The Comprehensive Plan also demonstrates compliance with the Oregon Statewide Land Use Planning Goals, Oregon Revised Statutes, Oregon Administrative Rules, and regional policies related to land use, transportation and other key public facilities.

The Comprehensive Plan is not intended to be a static document and should respond to market needs and evolving community preference for what Forest Grove should and could be. The following section describes the process for revising the plan text including the data, goals, policies and land use map.

Types of Comprehensive Plan Amendments

Generally speaking there are two basic types of plan amendments:

1. Text Amendments; or
2. Map Amendments.

Text amendments serve to update information that serves as the foundation of the plan or removes, revises or adds goals and policies to the plan. In contrast, map amendments change the land use designation for property within the City's planning area. Regardless of type of plan amendment changes to the plan must be based on factual information that addresses the applicable decision criteria identified in the following section.

There are two methods for amending the plan. An amendment is either quasi-judicial or legislative. Amendments to the Comprehensive of Plan Text are processed through a Legislative (Type IV) process. This process is described in detail in Article 1 of the Forest Grove Development Code Article 1. A Type IV plan amendment requires public notice including publication of notice in the local newspaper. A Type IV plan amendment requires public hearings with the Planning Commission and City Council. Comprehensive Plan text amendments must be adopted by City Council ordinance.

Amendments to Comprehensive Plan Map are processed through either a legislative (Type IV) or quasi-judicial process (Type III) depending on whether the map amendment affects a small group of properties or large area. The Type III process is also described in Forest Grove Development Code Article 1. A Type III process requires notice to surrounding property owners, publication of the notice in the local newspaper and public hearings with the Planning Commission and City Council. Amendments to the Comprehensive Plan map will be adopted by City Council ordinance.

Plan amendments may be initiated by the following parties:

- Property owner of record or authorized agent of the property owner of record;
- Contract purchaser;
- City Council;
- Planning Commission;
- City Manager; or
- Community Development Director.

Individuals may submit a request to amend the text of the Comprehensive Plan at any time. The Planning Commission will consider the merits of the proposal. If warranted, the Planning Commission will make a recommendation to the City Council to initiate the amendment process. A recommendation to initiate the amendment process must address the applicable decision considerations identified below.

The City Council may approve a proposed text or map amendment as submitted, approve the proposed amendment with specific changes based on findings of fact, or deny the amendment. Decisions of the City Council are appealable to the Oregon Land Use Board of Appeals.

Decision Considerations

Amendments to the comprehensive plan will be considered by the Planning Commission and City Council based on:

- Consistency with applicable Comprehensive Plan policies;
- Consistency with the Metro Regional Framework Plan;
- Consistency with the Metro Urban Growth Management Functional Plan (Metro Code Chapter 3.07) or Regional Transportation Functional Plan as applicable; and
- Consistency with the Oregon Statewide Land Use Planning Goals

Application Contents

A non-City initiated application for a Comprehensive Plan Map or Text amendment shall be made on forms provided by the City. The plan amendment application shall be accompanied with a deposit to cover processing costs as prescribed by City Council resolution. The application form shall also be accompanied by a narrative with text and supporting maps describing how the proposed amendment complies with the Comprehensive Plan Amendment Decision Considerations identified above.

A public hearing on the proposed amendment with the Planning Commission and City Council will be set once the application is deemed complete by the Community Development Director or designee.

The Community Development Director shall render a decision on application completeness within 30-days of submittal to the City. Rejection by the Director for

incompleteness shall be based solely on failure to address the development standards or supply information required for the application. Rejection shall not be based on differences of opinion as to quality or accuracy. Acceptance indicates only that the application is ready for review.

Application Submittal Checklist

- _____ City of Forest Grove Land Use Application
- _____ Comprehensive Plan Amendment Filing Deposit
- _____ Supporting Narrative including Text and Supporting Maps

DRAFT

Citizen Involvement

Meeting	Topic	Date
PC Work Session	Public Facilities and Community Services	August 19, 2013
CC Work Session	TSP, Land Use, Comp. Plan Text	June 24, 2013
PC Hearing	Public Facilities, Schools, Natural Hazards and Resources,	December 2, 2013
PC Work Session	Public Facilities and Urbanization	July 18, 2011
PC Hearing	Land Use Inventory, BLI, Wetland Inventory, EOA	November 7, 2011
PC Work Session	Periodic Review Work Program Review	October 3, 2011
CC Work Session	Water Master Plan, EOA Resolution	August 23, 2010
CC Work Session	EOA Update	February 11, 2011
PC Work Session	Periodic Review Update – Results of Community Open House	September 20, 2010
PC Work Session	Housing	October 18, 2010
PC Work Session	Economic Development	November 1, 2010
PC Work Session	Land Use Inventory Buildable Land Inventory	October 4, 2010
PC Work Session	Economic Development	January 3, 2011
PC Work Session	Economic Development	February 21, 2011
PC Work Session	TSP Update	April 1, 2013
CC Work Session	Comp. Plan Update TSP Update	June 24, 2013
CC Public Hearing	Adoption of EOA	August 23, 2010
PC Work Session	Downtown Planning Public Facilities Element	August 19, 2013
PC Work Session	TSP Update Comp. Plan Land Use Concept	May 20, 2013
PC Work Session	Land Use and Transportation Policy Framework and Evaluation Criteria	September 17, 2012
CC Public Hearing	Acceptance and Approval of Land Use Inventory, BLI and Development Capacity Estimates, Wetland Inventory Update and EOA	November 28, 2011
Economic Development Commission	Economic Development Element	March 3, 2011
PC Work Session	Community Sustainability	March 7, 2011
PC Work Session	Economic Development	February 7, 2011
	Newsletter	March 2009
Sustainability Committee	Community Sustainability	April 26, 2012
Committee for Citizen Involvement	Periodic Review Work Program	April 14, 2009
Committee for Citizen Involvement	Periodic Review Work Program	May 12, 2009
CC Work Session	EOA	January 12, 2009
Washington County	EOA and Housing Needs	March 5, 2009

Cities		
PC Work Session	Land Use Alternatives	March 5, 2012
PC Hearing	Comp Plan Land Use	November 4, 2013
PC Hearing	TSP	November 18, 2013
PC Hearing	Public Facilities	December 2, 2013
PC Hearing	Growth Projections	December 16, 2013
Newspaper Insert	Planning Assumptions	Summer 2010
Newspaper Insert	Land Use Alternatives	Summer 2012
Project Website		
Open Houses		

Community Sustainability

Introduction

The term sustainability addresses many facets of community life. To some people sustainability means minimizing human impacts on the natural environment. To others sustainability means having a job and being able to meet financial obligations. To some sustainability means having equal access to healthy food options. In general, sustainability can be summed-up as follows: where the natural environment, economy, social equity, and individual needs intersect. How we as a society meet these needs, now and in the future, determines how sustainable we are as a community.

A common definition of sustainability was developed by the United Nations World Commission on Environment and Development often referred to as the Brundtland Commission. The commonly quoted definition of sustainable development is:

" [D]evelopment that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Promoting a sustainable community is an ongoing goal of the Forest Grove City Council. To address this goal the City formed an ad-hoc sustainability committee in 2011. To focus their efforts the sustainability committee drafted the following mission statement:

The people of Forest Grove are committed to improving the quality of life in our community by providing stewardship of our economic, social, environmental and cultural resources in a manner that is equitable for all present and future generations.

The City of Forest Grove recognizes its responsibility to:

- *Provide efficient, equitable and responsible access to and use of social, economic and natural resources;*
- *Utilize resources cost effectively while ensuring they are used no faster than they can be replenished through natural systems;*
- *Assure the benefits and costs of society are equitably distributed throughout the community;*
- *Consider the long-term environmental, economic and social impacts of our actions;*
- *Promote education and awareness of the benefits of sustainable practices to enhance the community;*
- *Support citizens, organizations, businesses and neighborhoods both within and outside the community to invest in sustainability and continually improve their practices and environments; and*

- *Prioritize long-term needs over short-term gains to ensure that the resources necessary to sustain life are available now and in the future.*

The committee met regularly over the course of two years to craft goals and strategies for energy and green building, local food production, materials management, natural resources, social equity, transportation and planning. This element of the Comprehensive Plan incorporates the work of the ad-hoc sustainability committee.

The comprehensive plan and sustainable development go hand-in-hand. The reason for this is quite evident since the plan greatly influences the community's environmental and social fabric through land use. For example, a plan determines how efficiently land is used and whether future growth is accommodated within the established urban growth boundary. This in turn influences opportunities for social interaction and a household's ability to afford the purchase price of a home in our community. On its surface, many of the topics in the comprehensive plan may seem unrelated; however they all play a critical role in determining whether or not we as a community meet our needs with the foresight to not compromise the ability of future generations to meet their needs.

The City's Vision Statement is replete with references to community sustainability consistent with the concept of civic ecology. Each element of the comprehensive plan has an important role in furthering the sustainability principles contained in the Vision Statement. These principles include:

- A community that is recognized for its commitment to conserve, preserve, protect and restore our natural assets;
- Planning that considers and accommodates both the desires and needs of all community members to ensure that their quality of life and prosperity;
- A community in harmony, bound by commonly shared respect for its residents, natural resources, economic vitality, and its active role in a global society;

In essence, the Vision Statement promotes a sustainable Forest Grove - a complete community, where local residents have opportunities to shop near where they live, work close to home, and use a variety of transportation options. A sustainable Forest Grove promotes local food production including community gardening. A sustainable Forest Grove also encourages partnerships and collaborations to encourage the sharing of environmental resources and to promote opportunities for localized neighborhood scale energy production.

To further the sustainability principles contained in the Vision Statement the concept of sustainability is woven throughout this plan. For example, the Land Use Element promotes the idea of creating complete neighborhoods where residents have an opportunity to shop and get services close to home. The Land Use Element also promotes opportunities for more housing to increase the vitality of the Forest Grove Town Center. Together these initiatives should promote sustainability by encouraging

the efficient use of land and reduce the need to drive long distances to meet daily needs. This will help the City achieve objectives for reducing greenhouse emissions a possible contributor to climate change.

The Housing Element also supports sustainability by promoting a diverse community. This is achieved by encouraging housing types suitable to a variety of households including single persons, large and small families, retirees and persons in need of extra care. A variety of housing types helps contribute to financial sustainability of the community and diverse population contributes to social interaction.

The Urbanization Element promotes the cost-effective extension of public services and the efficient delivery of services. This is achieved through annexation and other urbanization tools.

The Transportation Element supports a balanced transportation system accommodating pedestrians, bicyclists, transit riders and drivers. The Transportation System Plan promotes roadway design to minimize environmental impacts.

Sustainability Guiding Principles

The organization ICLEI (International Council for Local Environmental Initiatives) comprised of local governments for sustainability developed the STAR Community Index. The Index includes 81 sustainability goals and 10 guiding principles. The STAR Community Index provides a framework for promoting healthy, inclusive, and prosperous communities.

STAR guiding principles for sustainability include reducing local contributions to the accumulation of natural materials, reducing local contributions to the concentration of synthetic substances, reducing the ongoing physical degradation of nature and avoidance of undermining our ability to meet basic needs.

This can be achieved by:

1. Compact and complete communities;
2. Interconnected land use;
3. Greenhouse gas reduction;
4. Energy use; and
5. Climate adaptation.

Establishing a minimum level of performance in each of these areas is crucial to meeting long-term sustainability objectives.

Greenhouse Gas Emissions Inventory

The City of Forest Grove prepared a local greenhouse gas emissions inventory for City operations in 2012 to guide future efforts on sustainability. This inventory will serve as a baseline against which the City's progress in reducing emissions can be demonstrated. The greenhouse gas inventory follows the protocol established by the ICLEI for preparing emissions inventories.

The table below shows Co2e greenhouse gas emissions by sector for City operations. Emissions are estimated based on the 2009 version of ICLEI's analytic software. Sectors evaluated including building and facilities, vehicle fleet, streetlight and traffic signals, water delivery facilities, employee commuting, contracted services, and government generated solid waste. The data indicates that building and facilities comprise approximately 31% of the greenhouse gas emissions based on the sector analysis.

Sector	Metric Tons Co2e
Building and Facilities	1,052
Vehicle Fleet	564
Streetlights and Traffic Signals	506
Water Delivery Facilities	170
Employee Commute	128
Contracted Services	600
Government Generated Solid Waste	4
Totals	3,023

The following table shows Co2e by energy source. Energy sources include electricity, natural gas, diesel, refined gasoline and other petroleum based energy sources. Electricity accounts for approximately 56% of greenhouse gas emissions based on source of energy used for municipal operations.

Source	Metric Tones Co2e
Electricity	1,700
Natural Gas	2
Diesel	755
CNG	1
Gasoline	471
Off Road Diesel	54
Off Road Gasoline	11
Waste	4
Fuel Oil (#1 2 4)	26
Totals	3,023

Further analysis of greenhouse gas emissions will guide efforts leading to the development and implementation of a sustainability strategic plan for the City. This plan will promote a more sustainable Forest Grove. The sustainability plan will include action steps to promote reducing greenhouse gas emissions. Through these efforts the City

will be in a much better position to adapt to the potential impacts resulting from a changing climate.

Sustainability Vision

The Forest Grove Ad-hoc Sustainability Committee developed a vision statement for each topic area in the Forest Grove sustainability Action Plan which captures the essence of Forest Grove as a community. This sustainability vision states:

1. Forest Grove will become a leader in the support of green building practices and the promotion of energy and natural resource conservation.
2. Forest Grove will be a thriving food community in which all residents have the opportunity to grow, prepare and consume nutritious local food in order to support the health of the land and its people.
3. Forest Grove will be a city that focuses on the recapture, reduction, and elimination of its material stream to enable a high quality of life for all residents.
4. The residents of Forest Grove demonstrate good stewardship of our natural resources by preserving the health of our watershed, forest, air and green space for future generations.
5. Forest Grove is a place that welcomes and supports equitable and sustainable opportunities for all community members by providing the means for human needs to be met.
6. Forest Grove is community with a safe, affordable, reliable, sustainable, and connected transportation system this is energy efficient while supporting other transportation modes.

The sustainability vision statements provided above serve as the basis for specific goals to achieve and policies to implement as part of the Comprehensive Plan. The goals and policies are presented below:

Sustainability Goals

Land planning and design are important aspects of local efforts to promote long term community sustainability. The goals and policies identified below are those that most directly impact land use policy.

1. Support the function and identity of neighborhoods by encouraging communication, strengthening community bonds, local participation and interaction, and enhancing sense of place through design¹.
2. Encourage involvement of underrepresented groups in civic affairs.

¹ Adapted from ICLEI, Star Community Index, Sustainability Goals and Guiding Principles, October 2010.

3. Promote financial sustainability through a compact and land efficient development pattern intended to reduce long term costs for providing municipal services.
4. Reduce barriers to affordable housing by advocating for an inventory of a minimum 20-year supply of land for needed housing types when Metro considers urban growth boundary expansions.
5. Promote economic prosperity by providing a twenty-year supply of land for employment needs and by improving access to local employment opportunities.
6. Foster excellence in the design of public and private development projects to minimize environmental impacts, maximize financial efficiency, optimize social equity and benefits, and improve public health².
7. Promote interconnected land uses that encourage diverse, accessible, and proximate land uses that promote active living and access to vital services including employment, education, and healthy food³.
8. Create complete neighborhoods, through land use regulations, with housing, recreational opportunities, retail, services and employment nearby.
9. Foster the preservation, construction and maintenance of an adequate supply of healthful, affordable, resource-efficient, and inclusive housing⁴.
10. Promote the preservation and reuse of historic resources, including buildings, structures, sites, neighborhood districts and cultural landscapes to assist in the retention of local, regional and national history and heritage, reinforcement of community character, and conservation of material resources⁵.
11. Encourage the clustering of residential development in the David Hill area to reduce impacts to the environment and minimize degradation of views from lower elevations especially the Town Center.
12. Through land use policy reduce the amount of greenhouse gas production in the community.
13. Update the Development Code to allow for neighborhood and building scale local energy production projects.
14. Promote opportunities for community gardens within neighborhoods.

² ICLEI, Star Community Index, Sustainability Goals and Guiding Principles, October 2010.

³ ICLEI, Star Community Index, Sustainability Goals and Guiding Principles, October 2010.

⁴ ICLEI, Star Community Index, Sustainability Goals and Guiding Principles, October 2010.

⁵ ICLEI, Star Community Index, Sustainability Goals and Guiding Principles, October 2010.

15. Reduce impacts on the Forest Grove solid waste transfer facility and regional landfills by supporting efforts to collect material which is difficult to recycle.
16. Increase the amount of urban forest tree canopy while planting species adapted to this area.
17. Encourage water conservation efforts such as installation of gray water systems in buildings, construction of bio-swales, and use of low impact design techniques to slow storm water runoff.
18. Increase the amount of park land and natural areas serving the community.
19. Support the restoration of natural areas such as Fern Hill Wetlands and Thatcher Woods.
20. Support education efforts on the benefits, care, and maintenance of trees for aesthetics, shade and carbon storage.
21. Promote efforts to improve access to housing meeting household needs.
22. Support efforts to increase transit accessibility throughout the community by establishing minimum development densities necessary to provide for cost-effective transit service.
23. Promote a balanced transportation system increasing opportunities for bicycling and walking throughout the community.
24. Anticipate the possibility of local in-migration due to the relocation of individuals and families impacted by a changing climate.
25. Develop and implement policies recognizing that climate change includes two components: mitigation and adaptation.

Policy Measures

1. Participate in the preparation of a comprehensive community sustainability plan for City operations as well as the broader community. The community sustainability plan should involve local organizations, institutions and community stakeholders and address community systems, governance, and desired sustainability outcomes.
2. Prepare and adopt a citizen involvement program for land use matters to ensure the involvement of underrepresented groups in civic affairs. The citizen involvement program should be based on a demographic analysis of the City's population.
3. Periodically review, and if needed amend, the Comprehensive Plan and development regulations to foster community sustainability initiatives.

4. Evaluate the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) for Neighborhood Development program as a framework for assessing the social, economic and financial sustainability of new residential subdivisions.
5. Establish a program to provide incentives for use of low impact design techniques such as bio-swales, rain gardens, porous pavement, green streets, or other generally accepted techniques in new developments.
6. Evaluate local partnerships for establishing Eco-Districts⁶ as tool for implementing sustainability initiatives.
7. Support the urban forest management program through land use regulations intended to retain and expand the urban forest canopy.
8. Promote local food production through land use policy by encouraging community gardens in neighborhoods. Study using City parks and land owned by religious organizations for neighborhood community gardening efforts.
9. Support transportation connectivity through the Transportation System Plan, Engineering Design Standards and Development Code requirements to reduce vehicle miles traveled and encourage bicycling and walking to destinations.
10. Evaluate the feasibility of allowing small scale local energy production such as solar or wind in neighborhoods.
11. Ensure that needed housing for all segments of the population in the community is met through land use policy.
12. Monitor population migration trends due to climate change impacts to anticipate potential changes in population growth during the 20-year planning period.
13. Evaluate and adopt appropriate development standards to mitigate climate change impacts resulting from severe seasonal storms, slope instability, higher temperatures and increased fire danger at the urban/wildland interface.

⁶ An Eco-district is a neighborhood or district that has committed to achieving ambitious sustainability performance goals guiding district investments and community action, and tracking the results over time. (Seltzer, Ethan, et. al., Making Eco-Districts, Concepts and Methods for Advancing Sustainability in Neighborhoods, September 2010, Portland, Oregon, p. 9).

FOREST GROVE COMPREHENSIVE PLAN BACKGROUND

Introduction

Forest Grove is a full-service community located at the far western edge of the Portland regional urban growth boundary near the foothills of the Coastal Mountain Range. The surrounding farms and forest give the community a rural feel seemingly far removed from the suburban landscape found elsewhere in the region. Because of this unique setting, Forest Grove has the resources and natural amenities that form the very character and high quality of life experienced by residents and visitors of the community. The Forest Grove Comprehensive Plan strives to protect this quality of life while accommodating expected housing and employment growth over the next twenty years.

In addition to Forest Grove's natural setting, Forest Grove is home to Pacific University, a renowned private liberal arts and health professions university. The city is also known for its strong and vibrant historic town center, mature and developing neighborhoods, a retail corridor, high quality parks and open spaces, and many community gathering places where cultural and entertainment events take place throughout the year.

These amenities, available land, and competitive cost of living, have helped fuel a steady rate of population growth since the comprehensive plan was adopted in 1980. In 1980, the population of Forest Grove was about 11,500 persons. Since 1980, the population of Forest Grove has almost doubled to over 21,000 persons. The prediction of the 1980 plan that Forest Grove can be expected to almost double its population over the next twenty years was very well founded.

Although Forest Grove will not likely experience another doubling of its population over the next twenty years growth will continue at a steady pace. Population growth will occur due to natural increase, nearby employment opportunities, moderate climate availability of water and competitive local utility rates. It is expected that the population of Forest Grove will increase to about 28,000 persons by the year 2030. This population will require approximately 2,500 housing units based on an average of 2.71 persons per dwelling unit. This represents approximately 50% of the development capacity within the urban growth boundary of approximately 4,850 housing units. This suggests that it's possible to accommodate expected residential growth within the confines of the existing urban growth boundary. In contrast, analysis suggests that land within the urban growth boundary is inadequate for large lot industrial needs. The land use and economic development elements of the comprehensive plan addresses land needs in more detail.

The comprehensive plan is a tool for maintaining the quality of livability of the community by coordinating development and use of natural resources with anticipated urban growth as it occurs. The plan will be most effective as a tool to provide long run money saving benefits not only to City government function but to the community as a whole. Development will be coordinated with utility services so that streets, water lines, sewers, storm drains, etc. will not be overloaded before their economic life has finished.

Services and development will be provided in a logical, sequential manner in an effort to reduce duplicating costs and environmental damage.

Significant Changes since Last Plan Update

Aside from population growth, there have been many significant changes since adoption of the Comprehensive Plan in 1980. Western Washington County has experienced considerable employment growth with the evolution of the high technology sector; the Oregon Highway 47 bypass was constructed changing traffic patterns in the city; and significant policies affecting land use were adopted by regional and state agencies as explained below.

Hillsboro exemplifies much of the change in western Washington County since 1980. Hillsboro has grown from a population of about 28,000 persons in 1980 to a population of over 90,000 persons in 2010. Some of this growth is attributable to annexation of previously unincorporated territory. However, considerable population growth is due to gains in employment especially in the high technology sector.

The growth of Hillsboro is clearly beyond our control, however what happens in Hillsboro has an impact on Forest Grove. Such impacts include the type of housing built in Forest Grove, the shopping opportunities that are provided for residents and the need for new or expanded roads to accommodate commuting to job opportunities outside the city.

To help tackle regional issues such as housing and transportation, Metro adopted the Region 2040 growth management concept in 1995. The Region 2040 concept impacts how and where cities in the region grow. Generally, regional growth is guided by the location of the urban growth boundary, regional investments in transportation, local zoning designations including minimum density requirements, annexation policies and location of water and sewer lines. Region 2040 addresses growth management by promoting mixed-use town centers, a multi-modal transportation system, coordination between land use and transportation decisions, and separation between urbanizable and rural lands.

As noted above, transportation decisions have significant impacts on the use of land. The Regional Transportation Plan adopted by Metro, impacts how federal and certain state transportation funds are spent in the region. Adoption of the RTP is a federal requirement for use of federal transportation funds. As a result of this requirement many transportation decisions are made at the regional level. Metro has the responsibility for allocating federal transportation projects such as investment in high capacity transit as well as highway improvements. Regional allocation of the limited and decreasing transportation funding for local needs is highly competitive. Close coordination with regional partners is needed to ensure Forest Grove's interests are considered and acted upon.

Another significant policy change is the establishment of urban and rural reserves in the Portland area. The Oregon Land Conservation and Development Commission will consider regional recommendations for urban and rural reserves. These reserves are

intended to identify areas for potential urbanization during the next fifty years as well as areas where agricultural and forestry operations will be protected. The intent of this policy is to provide certainty to the agricultural community and development interests. This certainty will enable long term financial investment decisions in and around the region.

Plan Context

Forest Grove's Comprehensive Plan represents a cooperative effort by the City and its residents, businesses, and industries. The principal aim of the plan is to establish a coordinated set of policies addressing the quantity, quality and location of future urban development in and around Forest Grove. By developing and adopting such a set of policies for the area, future urban development can be guided into areas best suited for development taking into account areas with severe building limitations or where municipal services cannot be provided in a cost effective manner. Through such efforts urban sprawl type development can be avoided saving acres of valuable agricultural and forestry land as well as other natural resources.

While the comprehensive plan represents a position and commitment by the entire community relative to urban growth, many of the adopted policies represent specific directives for action to various City departments, commissions, and the City Council. Based in Oregon State Law, the authority and responsibility for the planning, management and protection of the community's resources, the coordination of the physical development, and the provision of adequate public facilities and services are all under the purview of local government. However, it is the intent of the law that policies contained in the comprehensive plan should reflect the position of the general public through an adopted citizen involvement program. It was through just such a process that the Forest Grove Comprehensive Plan was developed.

Predictability in Planning

Planning is a process. This process is intended to provide an opportunity for citizen involvement in the preparation of plans and policies affecting land use. This process is also intended to improve predictability in land use decisions. The aim is to establish policies leading to decisions that provide landowners with clear expectations as to what they can and can't do with their land. In addition to guiding how land might be used today, the comprehensive plan also describes how land could be used in the future. Therefore, by its very nature, the comprehensive plan should reduce uncertainty for landowners and the community as to what that vacant tract of land next to a subdivision might be used for in the future.

Forest Grove in the Region

Forest Grove's place in the region has changed since the comprehensive plan was adopted in 1980. Forest Grove is located in the far western boundary of the Metro Portland planning area. In relation to other cities in the Portland regional urban growth boundary, Forest Grove is located the furthest from downtown Portland. Forest Grove is roughly the same distance from downtown Portland as Newberg and Estacada. This

presents both opportunities and challenges for the City. First, land use and transportation policies that might work in Portland, Tigard or Beaverton may not be applicable to Forest Grove. Comparatively, population densities are lower and land economies are very different in Forest Grove than larger and closer-in cities with better access to Interstate 5 and Highway 26. Regional policies should take these differences into consideration.

Forest Grove's role in the region is defined by Forest Grove being a college town; a market center for the surrounding western Washington County agricultural areas; a retirement community; and place to live and raise a family while also working in the high technology industries of western Washington County.

Forest Grove's planning area includes the area within the Forest Grove city limits as well as unincorporated territory within the urban growth boundary west of the City of Cornelius. Roles and responsibilities for planning in the unincorporated area are described in the urban planning area agreement between the City of Forest Grove and Washington County.

Issues and Opportunities Addressed in the Plan

The Forest Grove Comprehensive Plan identifies a number of issues and opportunities. Issues include limited employment options in Forest Grove, improved transportation connections to the region including Hillsboro, limited retail opportunities in the City, lack of Town Center gathering place.

Opportunities include proximity to Hillsboro, proximity to agricultural resources, Pacific University, cost competitive electrical rates, water supply and local control over watershed, Town Center.

Fundamentally a comprehensive plan is a map and coordinated policy statement showing how the city expects to grow in the future. A comprehensive plan is more than a map or list of goals of goals and objectives. The plan shows what's important to the community – what we as residents' and business owners' value. It shows how parts of the city are interrelated. It shows how we'll respond to change and ensure that current and future community needs are met. Simply put a comprehensive plan is who we are as a community.

- It is a policy document intended to coordinate decision making;
- It is a database that establishes a sound basis for decisions. Data should be updated and consulted as part of making land use findings and decisions;
- It sets broad priorities for the City
- It establishes the basis for land use and development regulations
- It coordinates decision making
- It gives guidance to landowners and developers
- It provides certainty about how and where the city grows
- It ensures there is an adequate supply of land for expected housing and employment needs.

Planning Authority

Oregon Revised Statutes Chapter 197 provides the legal framework for local planning in the State of Oregon. ORS 197 describes the planning responsibilities for cities and counties. Under this statute cities must prepare, adopt, or amend and revise comprehensive plans in compliance with goals approved by the Land Conservation and Development Commission. In addition, cities must enact land use regulations to implement the comprehensive plan. Land use decisions must be made in compliance with an approved (acknowledged) comprehensive plan and land use regulations.

Oregon Revised Statutes Chapter 195 addresses local government planning coordination. ORS Chapter 195 describes procedures for annexation of unincorporated territory, urban reserve areas, urban service agreements, and regional coordination of planning activities.

Oregon Administrative Rules establishes guidelines for meeting State of Oregon Land Use Planning Goals.

Forest Grove Vision Statement

This statement is written and designed to reflect the best of what exists now, and what we aspire to become, as a community.

Forest Grove is a friendly, twenty-first century, small, full service city. It was settled in 1841 by pioneers who valued respect for education, faith, enterprise, service to humanity, and the bountiful resources of the Tualatin Plain. Those values persist to inspire a common vision for a high quality of life in a thriving and progressive community that reaches from its historical commercial core around Pacific University to a horizon of forests, farms, vineyards, and the Coast Range. As an engaged and diverse people, we assure sustainability in our economy and our environment, thus supporting a community that nurtures our youth, educates all residents, and attracts and welcomes visitors. Forest Grove is itself a *destination* that thrives by *design* and is our *home*.

Forest Grove is a *Destination* that offers visitors and residents:

- **A rich heritage** preserved by honoring the city's natural, cultural, and historic treasures while also embracing the future.
- **A centrally located gateway** to forests, waterways, beaches, and mountains; this wealth of resources is cherished and preserved to foster sport, recreation, reflection, and leisure.
- **Arts & culture** that abound throughout the year; we celebrate our cultures and participate in a wide variety of visual and performing arts and festivals.
- **A community** recognized for its commitment to conserve, preserve, protect and restore our natural assets.

Forest Grove is a community by *Design* through:

- **Participation** of an engaged public and accessible, responsive government.
- **Planning** that considers and accommodates both the desires and needs of all community members to ensure their quality of life and prosperity.
- **Sustainable transportation** modes, systems, and networks that provide opportunities for all to conveniently and safely move about within and outside of the community.
- **Economic development** that encourages innovative, diverse and ecologically sound enterprises that provide ample opportunities for employment, and ensures the vitality of the community.
- **Fiscally sound funding** of quality public safety and municipal services including locally owned public utility and watershed.

Forest Grove is *Home* to:

- **Individuals** who are respected and valued for their experience, abilities, and differences, and where all residents are included in the life of the community through excellent education, recreation, and social programs.
- **Young people** who are nurtured and encouraged to achieve their full potential.
- **Families** of every size and description who have community resources needed for lifelong learning and development.
- **Older residents** whose ongoing leadership, wisdom and investment in the community build the foundation for our future.
- **Distinctive neighborhoods** replete with a variety of accessible housing options, schools, parks, places of worship and social gathering, and farmlands and open spaces.
- **A community** in harmony, bound by commonly shared respect for its residents, natural resources, economic vitality, and its active role in a global society.

Metro Region 2040 Growth Concept

Metro adopted the Region 2040 growth concept in 1995 to promote the efficient use of land within the urban growth boundary. The underlying premise of the growth concept is to preserve access to nature and promote strong communities for people who live in the Portland region today and will live here in the future.

The growth concept establishes a hierarchy of mixed-use, pedestrian friendly centers that are well connected by high capacity transit and corridors. The concept supports a multi-modal transportation system that ensures continued mobility of people and goods throughout the region. Coordination of land uses and the transportation is imperative to realizing the future envisioned by the growth concept. Finally, the concept promotes an urban to rural transition to reduce sprawl and keeping a clear distinction between urban and rural lands. The Region 2040 growth concept defines several categories of land uses including regional centers, town centers, transit station communities, corridors and employment areas.

Regional centers are larger established concentration of activities. There are seven regional centers in the Portland area. Hillsboro serves the western portion of the region. Regional centers are the focus of compact development, redevelopment, high quality transit service, and multi-modal street networks.

Town Centers are smaller than regional centers serving a more localized market area. Similar to regional centers, town centers are characterized by compact development and transit service. Town centers provide local shopping, employment, cultural and recreational opportunities. Downtown Forest Grove is a designated town center under the Region 2040 growth concept.

Transit station communities are concentrations of development focused around a light rail or high capacity transit station. Station communities feature a high quality pedestrian environment with sufficient densities to encourage transit use. Station communities encompass an area approximately one-half mile from a station stop. As of 2009, the Region 2040 growth concept does not designate any station communities in Forest Grove.

Corridors are not as dense as centers but are located along good quality transit lines such as TriMet Line #57. Corridors are areas with opportunities for increased development densities, high pedestrian environments and convenient access to transit. Typical development along corridors include rowhouses, duplexes and one- to three-story office and retail buildings. Some corridors are characterized by narrow bands of higher intensity development along arterial roads. Others are more nodal with smaller focused areas of activity at major intersections or locations with high quality pedestrian access, good connections to surrounding neighborhoods and convenient transit access. Pacific Avenue/Oregon Highway 8 is a designated corridor in the Region 2040 Growth Concept.

Industrial and employment areas are locations needed to meet current and projected manufacturing, warehousing and wholesaling activities. These areas are generally found near major transportation routes and inter-modal facilities including air and marine terminals, freight rail yards and truck terminals.

Land Use

Introduction

The land use element of the comprehensive plan establishes a long-term (usually 20 years) framework for the urban form of the city – where houses, businesses, schools, and other activities are placed within the urban growth boundary. This element describes the existing land use pattern of the city and possible future land use scenarios based on population and employment growth projections. In addition, the element supports the goals, policies and implementation measures¹ affecting land use.

It is important to note that the American economy has experienced a period of uncertainty that began in 2008 with the housing lending crisis. The economic volatility over the past two to three years makes it difficult to forecast land needs based on past trends with any degree of certainty. Given this uncertainty land needs shown on the comprehensive plan map are based on the medium growth scenario described in the Economic Opportunity Analysis prepared in 2009. Using the medium growth scenario should ensure that there is enough land designated on the comprehensive plan map to meet needs during the next twenty-years. The medium growth scenario assumes a 2.3% average annual rate of population growth which seems somewhat optimistic given economic conditions at the present time.

The land use element complies with the requirements of Statewide Planning Goal 2: Land Use. Goal 2 requires that local jurisdictions establish a land use planning process and policy framework as a basis for all decision and actions related to the use of land and to assure an adequate factual base for such decisions and actions. The factual basis includes inventories of existing and future socio-economic trends, assessment of land capacity, adequacy of public facilities and documentation of the roles and responsibilities of governmental units.

The land use element is divided into several sections. Sections include an overview of significant changes since adoption of the original comprehensive plan in 1980 and subsequent updates in 1985 and 1991, summary of existing conditions, description of future projections, a statement of land use goals, policies, and implementation actions and finally an illustration of land use alternatives and preferred land use scenario.

The land use map shows the general distribution of current and future land activities within the urban growth boundary. In addition, the land use element of the comprehensive plan establishes goals and policies for reaching the community's vision of how Forest Grove should develop over the next twenty years.

¹ Implementation measures are the means used to carry out the plan. There are two types of implementation measures: (1) Management Implementation Measures – ordinances, regulations or project plans, and (2) Site or Area Specific Measures – permits, construction of public facilities or provision of services.

Comprehensive Plan Consistency

It is very important to ensure that various elements of the comprehensive plan are consistent with one another and are mutually supportive. The Land Use Element of the Comprehensive Plan must provide the framework to achieve the goals and objectives of all aspects of the Comprehensive Plan including the Housing, Economic Development, Transportation and Urbanization elements of the plan. Furthermore, the Public Facilities element must align with the land uses shown on the Comprehensive Plan map.

Designating land for commercial or employment use is of little value to the community if public services cannot be provided to support the level of development called for in the plan or if public services are cost prohibitive to provide. A discussion follows providing an indication of how the various elements of the comprehensive plan relate to the Land Use element.

The Housing Element fulfills the requirements of Statewide Land Use Planning Goal 10: Housing. This element of the Comprehensive Plan provides a basis for establishing housing needs – both short- and long-term. Housing needs are assessed based on the socio-economic and demographic characteristics of the present population as well as assumptions about future needs based on a *coordinated twenty-year population forecast*² for the City of Forest Grove.

The Land Use Element must set aside enough land on the Comprehensive Plan map to accommodate identified twenty-year housing needs contained in the Housing Element and Economic Opportunity Analysis. In addition, land identified on the Comprehensive Plan map must provide sufficient opportunity for a variety of housing types available at price levels proportionate with the financial resources of individual households. That is to say, the City must provide opportunities for housing meeting the needs of low-, moderate- and higher income households that would like to live in the community.

There is a significant role for the City to ensure that there is an adequate supply of land for housing, as well as other land uses, to accommodate expected growth within the city's planning area. Such land is identified on the Comprehensive Plan map. An adequate supply of land is necessary to avoid imposing supply constraints that inadvertently increases the price of land and increases the cost of housing.

² State law (ORS 195.025) requires that Metro prepare a coordinated population forecast with local governments inside the Portland regional urban growth boundary. Metro updates the population forecast approximately every four to five years as part of updating the Regional Transportation Plan and the Urban Growth Report. The population forecast relies, in part, on an assessment of residential and employment land capacity to distribute population and employment growth throughout the region. Land capacity is based on a buildable land inventory taking into account the amount of vacant and redevelopable and infill land that is unconstrained by natural features or prior development.

Once land is identified on the Comprehensive Plan map the City establishes policies, through the Comprehensive Plan, to guide how land is developed. Such policies could include setting minimum and maximum development densities, establishing incentives to encourage the construction of affordable housing in the community and identifying locations factors for suitable development sites. Although the City identifies land for development and establishes policies for land use it's important to recognize that the City does not provide or construct housing. Most of the housing in the community is built by private contractors working on behalf of private developers. Developers provide housing based on a number of factors including the characteristics of the local economy, availability of adequate building sites, price of land, the cost of construction, financing, degree of risk and profit potential. In some cases developers might not construct needed housing due to lack of available financing, high risk, or lack of return on investment. This is especially true for very affordable housing with low sales prices or rent levels. In this case, the City should look for ways to promote opportunities for affordable housing through community development grants, sale of surplus property for affordable housing or incentives such as fee or development charge waivers or reductions.

The Economic Development Element fulfills the requirements of Statewide Land Use Planning Goal 9: Economic Development. Locations for employment and commerce are shown on the Comprehensive Plan map. The amount of land shown is based on the data and analysis contained in the City's Economic Opportunity Analysis. The Economic Opportunity Analysis also provides the basis for the goals and policies included in the Economic Development Element.

The Comprehensive Plan takes into account the social, environmental, energy, and economic impacts of the land use plan on the community. With respect to the social aspect of economic development consideration of impacts includes promoting employment opportunities matching the jobs skills of residents, providing opportunities for enhancement of job skills, and encouraging higher wage employment opportunities in Forest Grove. Environmental impacts include ensuring that development does not impair natural resources. Energy considerations include promoting energy efficiency, sustainable development practices, use of alternatives to high carbon fuels and reducing commute distances. Economic impacts include building on the economic strengths of Forest Grove, diversifying the local economy and promoting employment opportunities in Forest Grove to reduce the need to commute long distances for work.

The Transportation Element addresses requirements of Statewide Planning Goal 12: Transportation. Goal 12 promotes a safe, convenient and cost-effective transportation system. The transportation system includes streets to accommodate vehicle travel, bike lanes, sidewalks and associated traffic control devices. Goal 12 gives special attention to the needs of individuals with limited transportation options including persons with limited mobility and households without access to automobiles.

Land use and transportation are inescapably linked. The relationship between land use and transportation can be illustrated by the impact land use has on the design of transportation facilities. For example, a proposed large shopping center will likely generate significant amounts of traffic. This increase in expected traffic may require street improvements such as adding an additional lane for traffic to accommodate turning or traffic signals to improve safety.

The transportation system also influences how land is used. One reinforces the other. It goes without saying that the transportation system provides access to property. Access could be in the form of a street, river, or pathway. Without some kind of access the ability to develop land is severely limited unless access is improved. The quality of access influences the value of the property. Development sites in areas with very good access may receive a premium in the form of higher rent or sales prices. Only certain types of land use activities may be able to pay these higher prices. This is why the most intensive retail activities tend to take place in central locations with high quality transportation connections.

The Transportation Element identifies the planned transportation network necessary to support land use activities identified on the Comprehensive Plan map. Therefore, the Land Use Element and Transportation Element must support each other and be consistent.

The Urbanization Element addresses Statewide Planning Goal 14: Urbanization. The intent of Goal 14 is to ensure that local comprehensive plans establish a framework for the orderly and efficient use of land set-aside for urban development. The Urbanization Element implements Goal 12 at the local level by establishing goals and policies intended to ensure enough land is planned and zoned within the urban growth boundary to accommodate expected growth during the twenty-year time horizon of the plan. The Comprehensive Plan map shows specific land use designations used to guide zoning of unincorporated land annexed into the city.

Guiding Principles

Efficient Use of Land

The land use element is based on several fundamental principles. First, the land use element emphasizes the efficient use of land within the urban growth boundary. Efficient use of land within the urban growth boundary serves to reduce the need to expand the UGB to accommodate future growth. Serving land outside of the current UGB with public services is expensive, takes agricultural land out of production, and reduces the likelihood that passed over vacant land within the UGB will develop at higher densities.

Using land efficiently within the urban growth boundary also reduces the need to travel long distances for work, school, shopping and other essential services. Minimizing

travel distances reduces energy consumption, improves health by encouraging walking and bicycling and generally saves money for individuals and public service providers.

Complementary Land Uses

The second principle used to develop the land use element has to do with providing opportunity for placing complementary uses close together. Providing complementary uses near residential areas increases the likelihood for walking or bicycling to meet daily needs. This in turn reduces the areas carbon footprint³ and helps the City address the issue of climate change including meeting regional and state targets for the reduction of greenhouse gases.

Strengthen Downtown Forest Grove

The third principle addresses the Forest Grove Town Center. The land use element establishes policies to strengthen the Forest Grove Town Center as the focal point of the community. The Forest Grove Town Center is included in the Metro Region 2040 land use concept. Town centers are areas with ample urban style amenities and mixture of uses served by good public transit service.

Neighborhood Character

Some areas of the community are zoned to allow higher development density than is characteristic of the historical land use pattern. While this promotes to encourage the efficient use of vacant or underutilized land it could serve to undermine a neighborhood's identity and character. A common principle of urban design is to respect the elements of a neighborhood that provide a sense of place that establishes a neighborhood's character and identity. Such elements include street width, presence of mature trees, wide sidewalks, housing style and placement of a building on a lot. The Land Use Element of the Comprehensive Plan strives to preserve the identity of established neighborhoods by reducing development densities in areas where neighborhood preservation is important to the community.

To balance possible reductions in development density in specific areas of the community the plan identifies areas where development density could be increased. Areas where development density could be increased include the Town Center and mixed-use focus areas (nodes) along the Pacific Avenue/Oregon Highway 8 corridor.

³ A **carbon footprint** is "the total set of [greenhouse gas](#) (GHG) emissions caused by an organization, event, product or person."^[1] Greenhouse gases can be emitted through transport, land clearance, and the production and consumption of food, fuels, manufactured goods, materials, wood, roads, buildings, and services.^[2] For simplicity of reporting, it is often expressed in terms of the amount of [carbon dioxide](#), or its equivalent of other GHGs, emitted. (From wikipedia.com)

Higher development density within the Town Center will support businesses activity, take advantage of existing public services, promote the use of transit and encourage development of vacant lots. Higher density development along the Pacific Avenue/Oregon Highway 8 corridor will also encourage the use of transit, promote land efficient development, and encourage mixing activities where only commercial uses exist.

The land use element is divided into general land use policies, residential, commercial, industrial, parks and recreation, and institutional land uses. Separation of issues is used to facilitate presentation of the plan. However, decisions about land use should be made taking into account the inter-relatedness of land use activities as well as the long term consequences of land use decisions including impact to the economy, environment and long term needs of the community.

Policies contained in the land use element also affect the housing, economic development, urbanization, natural resources, and public facilities elements of the comprehensive plan.

Changes since Plan Adoption

The Forest Grove community experienced significant change since adoption of the Comprehensive Plan in 1980. The population of Forest Grove has grown from 11,500 to 21,000 persons; the Highway 47 bypass has been completed; the economy of western-Washington has been transformed with the maturation of the Silicon Forest; the Metro Region 2040 growth concept was adopted with emphasis on centers and corridors; the MAX light rail was constructed from Portland to Hillsboro providing additional transportation options for Washington County residents. Martin Road has been improved providing a better connection between Forest Grove, Highway 26, and Hillsboro.

Emerging Issues

Another significant change since adoption of the comprehensive plan is the emerging consensus that the climate is changing. The State of Oregon adopted aggressive targets to reduce carbon emissions affecting the climate. The targets are being integrated into regional planning efforts. This comprehensive plan recognizes climate change and the need to address issues affecting the concentration of greenhouse gases in the atmosphere.

An unprecedented regional effort to establish urban and rural reserves has been completed. The City of Forest Grove participated in this effort. The urban reserves include lands intended to meet the land use needs over the next fifty years. Rural reserves include agricultural lands that will be off limits to urbanization during the next fifty years.

Three urban reserve areas are located near Forest Grove. These include the Purdin Road (Urban Reserve 7B), David Hill (Urban Reserve 7A) and the south industrial urban reserve (Urban Reserve 7E). Future concept planning will be necessary for each of these areas prior to inclusion into the urban growth and annexation into the City of Forest Grove.

Sustainability is another emerging issue. With roots in the ecology movement of the 1960s and 1970s, sustainability has gained momentum as a way to address climate change and the interrelatedness of the environment, economy and community needs. Sustainability addresses the interrelatedness of environmental, economic and social needs of the community. Sustainability also provides a framework for long-term continuity by explicitly recognizing possible long term consequences of decisions made today. Principles of sustainability are embedded throughout the comprehensive plan.

Intergovernmental Coordination

Statewide Planning Goal 2 requires the consistency between local comprehensive plans and other city, county, state and federal, and special district plans and actions related to land use. Such plans include the Metro Regional Framework and Functional Plans, Regional Transportation Plan, Regional Solid Waste Plan, Clean Water Services Plan. The comprehensive plan is also coordinated and consistent with the Forest Grove Water Master Plan, Sewer Master Plan, Transportation System Plan, and Parks and Recreation Master Plan.

Development of the comprehensive plan was coordinated with the following agencies:

- Metro (compliance with Regional Framework and Function Plans);
- DLCD (compliance with statewide land use planning goals);
- Washington County;
- City of Cornelius;
- City of Banks;
- City of Gaston;
- Community Planning Organization 15;
- Business Oregon (economic development impact);
- Oregon Department of housing and community services (affordable housing);
- Forest Grove Planning Commission;
- Forest Grove Economic Development Commission; and
- Forest Grove City Council

Plan Designations

Residential

The designation of residential land within the urban growth boundary is shown on the adopted comprehensive plan map. As identified on the map, these residential designations satisfy:

1. Identified residential land needs for the next twenty years;
2. The goals and policies identified by the City;
3. The location requirements for residential land;
4. The location of vacant buildable land identified as being suitable for residential land use;
5. Requirements of the Metropolitan Housing Rule (OAR 660-007-0035) which requires the City to provide for an overall development density of 8 or more dwelling units per net buildable acre.

Overview of Residential Land Use Concept

The most important determining factors for the particular designation of residential land included the housing need as identified in the Economic Opportunity Analysis, existing pattern of development, the existing and planned transportation system, desire to support a variety of transportation modes and the cost-effectiveness of providing public services.

Single Family Residential Designations

The A-Medium plan designation corresponds to the R-5 single family residential zone district. This designation is intended for development of housing at a target density of 8.71 dwelling units per net acre. Detached single family housing is the predominant housing type in this zone. Accessory dwelling units⁴, duplexes and attached housing types are also permitted subject to the density limitations of the zone. A limited range of compatible non-residential uses such as parks and schools are also permitted or allowed with conditional use approval. The A-Medium designation applies to the historic residential neighborhoods in the city to reflect the historic platting patterns of early Forest Grove. There are approximately 170 acres of A-Medium land designated on the comprehensive plan map.

The B-Standard plan designation corresponds to the R-7 single family residential zone district. The R-7 zone is intended for development of housing at a target density of 6.22 dwelling units per net acre. Detached single family housing will be the predominant housing type in this zone. Accessory dwelling units, duplexes and attached housing

⁴ Accessory dwelling units are defined in the Article 12 of the Development Code as one or more rooms with private bath and kitchen facilities comprising an independent, self contained dwelling unit within or attached to a single family dwelling.

types are also permitted or allowed with conditional use approval. There are approximately 790 acres of B-Standard land designated on the comprehensive plan map.

The C-Low plan designation corresponds to the R-10 single family residential zone district. The R-10 zone is intended for development of housing at a target density Of 4.35 dwelling units per net acre. Detached single family housing will be the predominant housing type in this zone. Accessory dwelling units, duplexes and attached housing types are also permitted subject to the density limitations of the zone. A limited range of compatible non-residential uses such as parks and schools are also permitted or allowed with conditional use approval. There are approximately 290.7 acres of C-Low land designated on the comprehensive plan map.

The D-Suburban plan designation corresponds to the Suburban Residential (1 unit per acre) zoning district. This district applies to areas within the urban growth boundary above the 440 foot elevation. The 440 foot elevation is significant since land above this elevation is not able to receive municipal water due to system limitations. The Water Master Plan addresses this limitation. The one acre minimum lot size is consistent with state law related to land area necessary for septic tank systems. There are approximately 69 acres of D-Suburban land designated in the land use plan.

New comprehensive plan designations for single-family residential designations are proposed to improve consistency with the Development Code. The new designations correspond with the planned target development densities of the associated zoning district. Descriptions of the plan designations are provided below:

Previous Plan Designation	New Plan Designation	Target Density
A-Medium	R-8.7	8.7 dwellings per net acre
B-C	R-6.2 or R-4.3	6.2 to 4.3 dwellings per net acre
B-Standard	R-6.2	6.2 dwellings per net acre
C-Low	R-4.3	4.3 dwellings per net acre
D-Suburban	R-1.0	1.0 dwellings per net acre

Multiple Family Residential Designations

The Medium Density Residential district corresponds to the Residential Multifamily Low zone district. The RML zone is intended for development of housing at a target density of 12 dwelling units per net acre. Small-lot single family housing, duplexes, attached dwellings and small multi-dwelling residences will be permitted housing types subject to the density limitations of the zone. A limited range of compatible non-residential uses such as parks and schools are also permitted or allowed with conditional use permit approval. The RML zone functions as a transition zone between lower density residential zones the higher intensity residential and non-residential zones. The RML designation also encourages land efficient housing options such as townhouses. There are approximately 198 acres of Medium Density Residential land designated on the comprehensive plan map. The Economic Opportunity Analysis indicates no additional

need for RML land during the twenty-year planning period. This reflects the current amount of RML land designated on the comprehensive plan map and the existing split between single family and multiple family units.

The High Density Residential district corresponds to the Residential Multifamily High zone district. The RMH zone is intended for development at a target density of 20.28 dwelling units per net acre. Multi-unit residential buildings will be the predominant housing type in this zone. RMH zoning is generally applied near existing or planned transit service and adjacent to commercial or employment districts. The RMH zone also allows for a limited range of non-residential uses to help provide services for residents and enhance the quality of the higher density neighborhood.

High Density Residential development should occur in areas with few environmental constraints that are well served by access and other public services. High density residential development should not be isolated but rather integrated into the surrounding neighborhood. There are approximately 345 acres of High Density Residential Land designated on the comprehensive plan map. The Economic Opportunity Analysis indicates no additional need for RMH land during the twenty-year planning period. This reflects the current amount of RMH land designated on the comprehensive plan map and the existing split between single family and multiple family units.

Previous Plan Designation	New Plan Designation	Location Factors
Medium Density Residential	RML	<ol style="list-style-type: none"> 1. Slope less than 10%⁵; 2. Carrying capacity of the land given presence of wetlands, soil characteristics, and infrastructure capacity including water, sewer, and transportation. 3. Sites located within ¼ mile of planned or existing transit service; 4. Constructed with single family residential development if approved through Planned Residential Development process.
High Density Residential	RMH	<ol style="list-style-type: none"> 1. Slope less than 10%⁶; 2. Carrying capacity of the land given presence of wetland, soil characteristics, and infrastructure capacity; 3. Sites located within ¼ mile of planned or existing transit service; 4. Sites adjacent to existing or planned parks or open space; 5. Sites within ¼ mile of designated employment areas; 6. Constructed with single family

⁵ Construction on slopes greater than 10% is not precluded if development is supported by a geotechnical report approved by the city engineer that shows the site is suitable for proposed development.

⁶ Construction on slopes greater than 10% is not precluded if development is supported by a geotechnical report approved by the city engineer that shows the site is suitable for proposed development.

		residential development if approved through Planned Residential Development process; 7. Creation of nodes to facilitate transit extension.
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Commercial Designations

The Town Center Core district encompasses the traditional downtown core including Main Street. The purpose of this zone is to provide a concentration of retail, office and residential uses in a defined area. Retail or service uses are required on the ground floor, with an emphasis on those uses that serve a walk-in clientele. Office and/or residential uses are allowed and encouraged on upper floors. Design standards for this district requires continuous storefront façade featuring streetscape amenities for the pedestrian. There are 7 acres of land designated Town Center Core on the comprehensive plan map.

The Town Center Core includes several iconic buildings listed on the National Register of Historic Places. A key policy consideration is whether development density should be increased in the Town Center while retaining significant historical buildings and the overall ambience of what makes downtown Forest Grove a focal point for the community.

The Town Center Transition district is established to increase employment and housing opportunities in close proximity to the Town Center Core. A mix of retail, office, light industrial and residential uses are allowed in the TCT zone. Ground floor retail uses are permitted but not required within the Town Center Transition district. Consistent streetscape improvements such as street lighting, wayfinding signage, street trees and sidewalks are encouraged to link the Town Center Transition zone with the Town Center Core. There are approximately 9 acres of land designated Town Center Transition on the comprehensive plan map.

The Town Center Support district is established to increase employment and housing opportunities that complement the Town Center Core. A mix of office, light industrial and residential uses are allowed in the TCS zone. Ground floor retail uses are permitted but not required in the Town Center Support district. Pedestrian and bicycle improvements are encouraged to link the Town Center Support zone with the Town Center Core. There are 23 acres of land designated Town Center Support on the comprehensive plan map.

The Neighborhood Commercial district is established to provide for small to medium sized shopping and service facilities in close proximity to residential neighborhoods. The Neighborhood Commercial district is intended to meet the daily convenience shopping and service needs of the immediate neighborhood. NC districts should be located on arterial or collector streets, preferably at an intersection. NC zones should be spaced at approximately one-half (1/2) mile intervals and each district should be

limited to a total size of approximately five (5) acres. There are 0.8 acres of land designated Neighborhood Commercial on the comprehensive plan map.

The Mixed-Use plan designation is established to provide for a variety of retail and office uses near residential neighborhoods. Limited Commercial zones should be located on or bounded by arterial and collector streets to create nodes or concentrations of activity.

The Community Commercial district is established to promote a concentration of mixed-uses – including retail, service, office and residential uses – along the regional transit corridor. The link between land use and transit is intended to result in an efficient development pattern that supports the regional transit system and makes progress in reducing traffic congestion and air pollution. The location, mix and configuration of land uses are designed to encourage convenient alternatives to the auto, a safe and attractive streetscape, and a more livable community. There are approximately 245 acres of Community Commercial land designated on the comprehensive plan map.

The Transit-Oriented Commercial plan designation is established to promote retail and office uses integrated with the surrounding neighborhood that is supportive of high capacity transit service. Areas zoned for transit-oriented commercial activities should be developed at a density sufficient to generate a critical mass of activities and designed to be walkable with pedestrian and bicycle connections to surrounding residential areas. Off-street parking must be minimized and shared of off-street parking is strongly encouraged.

Previous Plan Designation	New Plan Designation	Location Factors
Central Business District	Town Center Core	Within ¼ mile of existing or planned transit service;
Central Business District	Town Center Support	Adjacent to Primary Core Area; Within ¼ mile of existing or planned transit service; Pedestrian and Bicycle Connections to TCC;
Central Business District	Town Center Transition	Adjacent to TCS; Within ¼ mile of existing or planned transit service; Pedestrian and bicycle connections to TCS
Neighborhood Commercial	Neighborhood Commercial	Adjacent to residential areas Within 1/8 mile of collector street or arterial street intersection; Maximum site size: 5 acres
Commercial Auto	Community Commercial	Adjacent to Pacific Avenue/19 th Avenue couplet or Oregon Highway 8;

New	Transit-Oriented Commercial	Within ½ mile of existing or planned high capacity transit ⁷ service; Level site; Designed to minimize environmental impacts
New	Mixed Use	Areas where a mixture of residential, office and retail uses are appropriate to create complete neighborhoods or provide needed services and housing. Sites tend to be 10 acres in land area or less.

Employment Designations

The comprehensive plan establishes three employment designations separate from the Town Center and commercial designations. Designations include Light Industrial, General Industrial, and Campus Employment. Additional detail about these designations is provided below.

The Light Industrial designation is intended for a wide variety of manufacturing and other industrial uses with controlled external impacts. These types of industries are often involved in the secondary processing of materials into components, the assembly of components into finished products, transportation, communication and utilities, wholesaling and warehousing. Industrial activities occur in enclosed buildings. On a limited basis, supporting commercial and office uses are permitted in the LI zone. There are approximately 127.0 acres of Light Industrial land designated on the comprehensive plan map.

The General Industrial designation is intended for industrial uses that are generally not compatible with residential development because of their operational characteristics. This district is also intended for uses that may require extensive outdoor areas to conduct business activities or for product storage or display. General industrial uses include those involved in the processing of raw materials into refined products and/or industrial uses that have external impacts. The purpose of this district is to permit the normal operations of any industry that can meet and maintain compliance with established state and federal performance standards. The district is intended to contain supportive retail development. Commercial or retail uses that do not primarily serve the needs of people working or living in the employment or industrial areas are prohibited in this district⁸. New residential uses are not permitted in the GI zone. There are 388 acres of General Industrial land designated on the comprehensive plan map.

⁷ High capacity transit includes any form of public transit that has an exclusive right of way, a non-exclusive right of way or a possible combination of both. High capacity transit vehicles make fewer stops, travel at higher speeds, have more frequent service and carry more people than local service transit such as typical bus lines. High capacity transit includes options such as light rail, commuter rail and bus rapid transit. (Metro)

⁸ Policy choice: should the City allow for limited retail activities in the GI zone such as outlet stores and tasting rooms. A balance is needed to ensure that retail activities are large enough to be commercially

The Campus Employment designation is intended for development of industrial and office parks with a high level of amenity value including landscaping and open space. Typical uses include high technology companies, call centers, research and development firms, and business incubators. Industrial activities typically take place in enclosed structures. The district is intended to contain supportive retail development and business services.

Previous Plan Designation	New Plan Designation	Location Factors
General Industrial	General Industrial	Slope Less than 5%
Light Industrial	Light Industrial	Slope less than 5%
New	Campus Employment	Greater than 25 gross acres; Direct access to arterial streets; Buffered from surrounding residential and agricultural uses.

Residential Land Use

Forest Grove is characterized by historic residential neighborhoods, new subdivisions, assisted living facilities and college dormitories. Residential development makes-up approximately 42% of the land area within the Forest Grove city limits. There are approximately 7,760 housing units within the City. Of this number approximately 2,535 multiple family units and 5,122 single family residential units⁹.

The overall residential density in Forest Grove has increased from 5.4 dwelling units per acre in 1976 to 6.3 dwelling units per net acre in 2011. Recent development activity has been constructed at an average density of 8.5 dwelling units per net acre since 2000.

A summary of changes since adoption of the Comprehensive Plan is provided below:

1976 land use inventory

Residential Acres 668 acres
Residential Density 5.41 units per acres

2011 land use inventory

Single Family 1,198 acres
Multiple Family 153 acres
Residential Density 6.30 units per net acre

viable but not so large as to interfere with other industrial operations. Allowing limited retail activities could support Forest Grove’s food processing sector and proximity to specialty beverage producers.

⁹ Forest Grove Land Use Inventory 2011

The Issues

Forest Grove is suburbanizing. This is evident by a review of recent subdivision activity and local commuting patterns. A challenge over the next twenty years will be how to ensure that Forest Grove remains a complete community with housing and employment options available to all current and future residents regardless of income.

There's no doubt that new techniques for housing construction will occur. There will likely be additional pressure to build on smaller lots, reuse lots for higher density development and mix housing with jobs. The comprehensive plan and implementing ordinances must be flexible enough to respond to these challenges.

A common approach to land use planning is to separate uses. Research has shown that this results in increased traffic congestion, isolation of neighborhoods and higher costs to provide public services. A business-as-usual approach to residential development is no longer sustainable in an era of tight fiscal budgets, higher energy costs and increasing lack of affordable housing options. The Forest Grove comprehensive plan establishes a framework for responding to these issues.

A complete community requires both housing and jobs. As Forest Grove suburbanizes it will be important to ensure there are adequate employment opportunities for area residents. There are several important benefits to this including reducing commute times and costs associated with travel. Energy use could be reduced as well production of greenhouse gases and pollutants. Currently the City of Forest Grove has a jobs-to-housing balance of 1.25. A jobs-to-housing balance is an indicator of the number of jobs available in an area in relation to the number of households or housing units. A jobs-to-housing balance of 1.25 indicates a relatively low level of employment opportunities for each household. That is to say businesses in Forest Grove do not currently offer enough local employment to meet the job demand of current residents.

The residential housing market has changed. The economic downturn beginning in 2007 fundamentally changed market conditions affecting housing. The construction of new housing units has slowed considerably while the inventory of vacant units has increased due to foreclosure. Credit markets have tightened making it more difficult to obtain housing financing. It's too soon to know what the impacts of this will be or whether the housing market will rebound and return to a level before the economic downturn.

Factors such as a limited regional supply of land for single family dwellings, employment growth in the high technology sector of western-Washington County, increasing transportation costs and the regional response to climate change will have an impact on land use and development patterns.

The cost of constructing housing is increasing. Many factors affect the cost of housing. System development charges used to recover costs from new development on public

systems, cost of building materials, the cost of land, and the cost of financing are all components that contribute to housing cost. Many of these factors are beyond the scope of the comprehensive plan. One area the comprehensive does address is the availability of land. The availability of land directly affects the cost of land. This element of the comprehensive plan identifies a land use concept to ensure availability of land within the Forest Grove portion of the urban growth boundary based on the best available information at the time of plan adoption.

Policy Choices

The location of housing affects many aspects of our lives. The location of housing determines how far we have to commute to work, where our children play and whether or not we can walk or bicycle to stores and services¹⁰. In addition the amount of land available for development and land use regulations impact the cost of housing. The City of Forest will adopt policies and strategies to respond to identified issues and problems affecting land use. A policy is a general directive statement that identifies the class of actions to be performed; the conditions under which they are to be performed; and the individuals, groups, or agencies by which they are to be performed.¹¹

Policies and strategies include:

1. Adopt land use map designations for all land use categories based on the findings, goals and policies in the comprehensive plan. Where redevelopment of an existing residential neighborhood is deemed necessary to accommodate other uses, standards shall allow mixing of uses when combined with the appropriate plan review for setbacks, screening, landscaping and compatibility with existing residential uses.
2. ~~The zoning ordinance shall include design standards for mobile home developments. Standards shall cover minimum lot size, covered car area, covered storage, open/recreation space, setbacks, streets, sidewalks, curbs and storm drainage.~~ **This has been accomplished**
3. ~~Multi-family developments shall be near the commercial core of major arterials.~~ [Revise to say location factors for the placement of multi-family development shall be included in the Comprehensive Plan and updated periodically to reflect changes in development best practices.] ~~Multi-family developments shall be buffered from major arterials by evergreen plantings, bike paths, setbacks, building orientation away from arterials, and other suitable means.~~ [too specific for comprehensive plan, should be in implementing ordinances]
4. ~~Off-street parking for multi-family developments shall be permitted in required yards.~~ [this is a development standard and should be deleted].
5. The land use regulations shall provide for clustering of houses, zero lot line construction, and common wall construction.

¹⁰ Additional information about housing related issues is contained in the American Planning Association Policy Guide on Housing available at www.planning.org

¹¹ The Planning Commissioners Guide, APA, Page 97

6. Access to multi-family units through single family areas shall be avoided. ~~Planned unit development standards and procedures shall promote the redevelopment of deteriorating neighborhoods and the development of passed over lands.~~ [Not necessary, the PRD section in the Development Code already establishes standards.]
7. ~~Land partitioning procedures and zoning ordinance standards shall encourage the filling in of vacant land with mixed uses in the core area.~~ [How do land partitioning procedures promote infill and mixed-use development?]
8. The following density standards shall apply in the various residential zoning districts: [list densities]
9. The City shall take into consideration the housing rules of the State Land Conservation and Development Commission when considering plan amendments affecting future development densities or the mix of housing types.
10. Planned residential developments shall ~~be granted~~ allow for density bonuses in order to encourage the use of the planned development process. Measures shall be taken to ensure that density bonuses do not result in greater negative impacts on surrounding neighborhoods.
11. ***Land designated for single family attached and multi-family developments shall be distributed throughout the city taking into consideration availability of public services, topography and environmental constraints. Preferred locations for medium and higher density residential development include areas within walking distance of schools, parks, commercial areas, or existing/planned transit service.*** [This policy helps to distribute multi-family developments throughout the community since schools and parks are found throughout the community. The reference to planned transit service is broader than the current wording of existing transit service.]
12. Development regulations shall promote a variety of housing types suitable for owner- and renter-occupants. The Economic Opportunity Analysis indicates a need for 3,859 owner-occupied units and 878 renter-occupied units over then next twenty-years.
13. Ensuring the availability of affordable housing is a priority for the City of Forest Grove. Affordable housing options provided for through planning and development regulations should reflect the documented housing needs of current and future residents of the City.
14. Develop and implement incentives for the construction of affordable housing meeting documented community needs.
15. Amend land use regulations to expand the definition of accessory dwelling units to include units not attached or within an existing residential structure¹².
16. New neighborhoods in steeply sloped areas shall be designed to minimize the impact of views from the broader community.
17. Regulations shall require that new developments pay a proportional share of the cost of capital improvements based on impact to community systems.

¹² Policy Issue: should the accessory dwelling definition be expanded? If so, what are the implications?

18. Prior to redevelopment of manufactured housing parks the City shall identify sites for replacement housing.
19. Adopt development standards to promote compact and cluster residential land use patterns without requiring a planned unit development review process. This could include development standards for court bungalows, zero lot line housing¹³, co-housing¹⁴.
20. Prepare and adopt neighborhood plans for areas within the city.

Commercial Land Use Policies

Findings

Forest Grove has 127 acres of developed commercial land mostly along the Pacific Avenue/19th Avenue/Oregon Highway corridor and within the Town Center. Commercial land makes-up approximately 4% of the total land area in the City of Forest Grove.

The Forest Grove Economic Opportunity Analysis indicates a potential demand of 97 acres to 142 acres for commercial land over the next 20-years. Medium sized sites comprising 10 acres represents the largest are of demand. In contrast, the City of Forest Grove has nearly 31 acres of buildable commercial acreage remaining within the urban growth boundary. The EOA concluded that Forest Grove is completely lacking any large commercial retail acreage to serve expected demand based on population growth¹⁵. There are no sites available for commercial development greater than 25 acres for future growth during planning period covered by the Comprehensive Plan.

A potential opportunity site for commercial land is located west of Sunset Drive and south of Highway 47. This site, under single ownership is approximately 23.5 acres in gross land area. Other potential opportunity sites include the area near Watercrest Road and Thatcher Road and David Hill Road and Thatcher Road.

The Issues

Commercial land fulfills two important functions. The first is to serve the retailing and services needs of residents, workers, and visitors. The second function is providing employment opportunities for local residents. An adequate supply of commercial land is necessary to fulfill these needs. The Comprehensive Plan serves to balance the amount of land designated for commercial purposes with expected future demand for commercial enterprises serving Forest Grove and the surrounding area.

¹³ Single family dwellings arranged on individual lots as either detached structures with one or more side walls on a side property line.

¹⁴ A planned community composed of private [homes](#) supplemented by shared facilities. Shared facilities may include a kitchen, [dining room](#), [laundry](#), [child care](#) facilities, offices, internet access, guest rooms, and recreational features. (Wikipedia)

¹⁵ Forest Grove Economic Opportunity Analysis (2009), page 53

The ability for residents to meet needs locally is paramount to a strong and vibrant community. Commercial land use in Forest Grove is located in two distinct areas. The first area is the Forest Grove Town Center. The second area is the Pacific Avenue/19th Avenue corridor. Residents living in newly developed parts of town must drive to go shopping, banking, grab a bite to eat or meet other daily needs. As the city grows over time there will be increased demand for retail services in the northwest part of the community.

Forest Grove needs additional land designated for commercial development. The Forest Grove Economic Opportunity Analysis indicates a need of 66 to 111 additional commercial acres to meet the needs of anticipated population growth through 2030. Unmet commercial retail land need is mostly concentrated in medium sized sites followed closely by larger retail commercial uses. Opportunities for commercial retail development are especially needed in the northern and western parts of the community. Establishing commercial uses in these areas will serve to reduce the need to travel to the Pacific Avenue corridor for shopping and services.

The Community Commercial Zone does not encourage nodal development. The 2005 Commercial Corridor Study recommends the development of mixed-use nodes along the commercial corridor. Nodal development promotes more efficient use of land and potentially reduces traffic congestion. The community commercial zone applies to all properties fronting Pacific Avenue and 19th Avenue east of Cedar to the city limits line. While the Community Commercial zone allows for residential development the zone does not specifically identify specific areas for mixed-use development. A new development zone should be created to focus the desired type of development within node areas. Other possible strategies include identifying nodal areas in the Transportation System Plan, constructing supportive road improvements or providing development incentives.

Commercial Office The 1980/1985 Comprehensive Plan identified conflicts between commercial and residential land use in the Community Commercial area located in two areas: on the west side of B Street near Pacific Avenue; and between Douglas and Hawthorne and south of 19th to Maple Street. The 2005 Commercial Corridor study recommended a small scale commercial district in this area with a mixture of residences, small stores and offices. This district should retain the lower intensity commercial character of the area created by single family residences in the area.

Town Center

Downtown Forest Grove is designated as a Town Center in the Metro Region 2040 land use concept. A Town Center is smaller in scale than a Regional Center. The closest Regional Center to Forest Grove is downtown Hillsboro approximately 6 miles to the east.

Town Centers are easily accessible by pedestrians and are connected by good transit service. Town Centers include a high level of urban amenities such as full service grocery stores, restaurants, coffee shops, bakeries, and delis to name a few.

The Forest Grove Town Center contains 107 gross acres and functions as the cultural and service center for Forest Grove and the surrounding area. The center has 991 residents (not counting students), 1,326 employees and 460 dwelling units¹⁶. The Town Center is generally characterized by two- and three-story buildings placed adjacent to the sidewalk. While there are a number of underutilized properties, including several parking lots, the Town Center also has several buildings listed on the National Register of Historic Places. This historic character of the Town Center is part of the ambience of the Town Center that makes it the primary location for community festivals and events.

Retail Corridor

The Pacific Avenue/19th Avenue area is designated as a corridor by the Metro Region 2040 land use concept. The Metro Regional Framework plan describes corridors as having a lower development density than town centers. The Forest Grove corridor has developed with an auto orientation. There is high level of traffic and few crosswalks making pedestrian travel difficult.

The Region 2040 land use concept promotes nodal development along corridors with medium to high density housing and retail uses. Nodal development is characterized by a series of small centers at major intersections or other locations along an arterial road that has high quality pedestrian amenities, good connections to adjacent neighborhoods and good transit service. The ideal land use pattern is one with rowhouses, duplexes, and one- to three-story office and retail buildings.

In 2005, the Community Development Department completed a study of the Pacific Avenue/19th Avenue corridor. The corridor study contains goals and objectives for the future development of the corridor. The corridor contains a significant amount of vacant land and vacant or under-utilized buildings. The corridor study recommends a transition to nodal development pattern and an increase in the number of housing units along the corridor.

Objectives

1. *Distribute commercial activity throughout the city to serve existing and planned residential or employment areas.*
2. *Designate on the Comprehensive Plan map at least ~~116 acres~~ 100 acres of land for additional commercial development over the next twenty-years including 30 acres for large commercial sites (over 20 acres in area), 45 acres for medium (5*

¹⁶ State of the Centers, Metro, May 2011

to 20 acre) sites, and 25 acres for small (5 or fewer acre) sites. This land should be distributed throughout the urban growth boundary, in appropriate locations, to serve new and existing neighborhoods.

3. Land designated for commercial use shall have a slope of 5% or less, ~~be free of building hazards, have proximity to peak traffic flows, access to mass transit service,~~ space to accommodate a variety of services and have availability of full urban services. [This policy promotes commercial development along the corridor only. The policy should be broadened.] *Land designated for commercial use must be suitable for development taking into account environmental constraints and topography, have direct access to arterial or collector streets, be accessible to employment, residential or recreational areas that are within walking distance (generally ½ mile) and be designed to act as a focal point for surrounding neighborhoods.*
4. *Designate commercial/mixed-use nodes along the Pacific Avenue/19th Avenue Corridor consistent with the findings contained in the 2005 Commercial Corridor Study.*
5. *Implement development standards to promote transit-oriented land use within walking distance of planned high capacity transit corridors.*
6. *Establish a commercial office zoning designation to promote office and professional service activities throughout the city.*
7. *Implement development standards to ensure the preservation and the integrity of single family residential homes converted to office or shops in the Pacific Avenue/Hawthorne Street area.*
8. *Priority should be given to retrofitting single use commercial and retail developments into walkable, mixed-use areas.*
9. Encourage improvement of the ~~Central Business District Town Center~~ by cooperating with the Downtown Business Association and ~~the Oregon Downtown Development Association in their Main Street Program .~~
10. ~~Sufficient land shall be included in the Central Business District to allow for the opportunity for growth and expansion. [Is this necessary given the creation of the various Town Center zones?]~~
11. ~~Off-street parking for new uses in the Central Business District shall be provided in the best manner possible, provided that it may not be located at the front of the building. [No longer necessary since off-street parking is not required in the Town Center].~~
12. Provide standards for screening, access, location, circulation, parking, landscaping, density, and scale for both commercial and multi-family uses to reduce conflicts between adjoining uses and protect the livability of residences.

[Such standards are in place. Focusing on conflicts serves to separate uses. Opportunities should be pursued to integrate such uses together especially multifamily residential and commercial development.

13. The Comprehensive Plan Map and corresponding zoning standards shall provide for ~~a neighborhood convenience center near commercial development opportunities serving~~ newly developing areas in the City.
14. ~~Limit the overall space available on neighborhood commercial zones through appropriate zoning standards.~~ [Not sure what this means. I think this has been done.
15. Require that proposed development along arterial streets make provision for limiting access to its site by sharing curb cuts with adjoining property at such time as the adjoining property is developed.
16. *Improve* Adopted standards related to landscaping, access, signing, utility locations and building orientation which minimize the negative features of commercial strip development *based on best practices*. ~~Adopt standards which encourage grouping, clustering, and/or master planning of consolidated tracts of commercial property along arterial streets.~~ [This has been done through the Commercial Planned Development district which hasn't been too successful).
17. ~~Make provision in development proposals along arterial streets for financial participation by property owners in traffic management projects which may be developed at a later date.~~ [This shouldn't be in the commercial land use section]
18. ~~Through appropriate ordinances and design measures, ensure that accessibility for non-auto traffic (pedestrian, bicycle, mass transportation) is not impeded along arterial streets.~~ [This shouldn't be in the commercial land use section]
19. ~~Explore the possibility of placing all existing overhead power and telephone lines underground along Pacific and 19th Avenues.~~ [This shouldn't be in the commercial land use section].

Designation of Commercial Land

1. Designate at least 10 acres of commercial land in northwest Forest Grove to meet the expected retailing needs of developing areas of the community;
2. Create and implement the commercial land use designations;
3. Designate the area between Cedar, Hawthorne, 21st Avenue and 19th Avenue as Commercial Village;
4. Designate the area west of B Street to E Street and 19th Avenue to Pacific Avenue as Commercial Village.

Industrial Land Use Policies

The Issue

The economy of Forest Grove has changed significantly since adoption of the Forest Grove Comprehensive Plan in 1980. Agricultural processing and forest industries have been on the decline.

The Forest Grove economy is characterized by education and healthcare services and one high technology company. Employment in healthcare services has been relatively stable over the past five years. The majority of healthcare employment in Forest Grove is in nursing and residential care facilities.

Forest Grove has challenges with respect to recruiting high technology manufacturing. Transportation is the most significant challenge.

Findings

Information about developed industrial land and general composition of the workforce is contained in the Economic Opportunity Analysis. A summary of land absorption for various activity types consistent with the Economic Opportunity Analysis is provided below. The baseline growth level is based on a 2% population growth rate. The medium growth scenario assumes an annual population growth rate of 2.3%. The high growth scenario assumes an annual population increase of 2.6%.

Average Annual Land Use Demand in Acres

Use Type	Baseline	High Growth	Medium Growth
Office Commercial	14	18	16
Retail Commercial	19	28	25
Overnight Lodging	4	4	4
Specialized Uses	20	20	20
Industrial	35	64	52

Gross Employment Land Demand

Use	Baseline	High	Medium
Office	56 acres	71 acres	65 acres
Industrial Anchor Tenant	45 acres	81 acres	67 acres
Large Industrial Tenant	51 acres	92 acres	75 acres
Medium Industrial Tenant	34 acres	61 acres	50 acres
Expanding User	9 acres	17 acres	14 acres
Small Business	24 acres	43 acres	36 acres
TOTAL	219 acres	365 acres	307 acres

High Technology

Strengths for Forest Grove in this cluster include proximity to Oregon’s largest high technology manufacturing center. One high technology firm has a presence in Forest Grove.

Challenges in this cluster include limited supply of large lot serviced industrial land. Forest Grove’s work force does not readily match the needs of high technology firms.

Another challenge is regional land use policies which prioritizes regional investments in regionally significant industrial areas.

Development within the high technology corridor of Washington County demonstrates that high technology firms favor large sites with ample room for expansion. The Forest Grove Economic Opportunity Analysis and 2011 Land Use Inventory indicates a lack of large sites designated for light industrial uses with services within the urban growth boundary. Two vacant sites between 25 and 35 acres remain in the southeast industrial area in the vicinity of Heather Street. Vacant General Industrial land in the Oak Street area, south of Highway 47, exists and may be suitable for a high technology firm once urban services are extended. This site is approximately 75 acres in area.

Agricultural/Farm Products

Cluster strengths include proximity to high-quality farmland and availability of water. Agricultural processing has an established presence in Forest Grove and a workforce with expertise in this area. Forest Grove has the potential to take advantage of agri-tourism. Forest Grove is also well located to take advantage of export markets. Wages in this sector tend to be low relative to other clusters.

Forest Grove is fairly well positioned to take advantage of the burgeoning specialty agriculture products sector especially beverages (distilling, brewing and wine production).

Cluster challenges include type of agricultural product produced in the Forest Grove area. The raising of nursery stock, seasonal fruit varieties and exporting raw logs limits the potential for value added agricultural processing. Climate change may also impact the type of agricultural produce that is viable in the region.

Education

Cluster strengths include the presence of Pacific University which attracts regional, national and international students.

Cluster challenges include primary and secondary school funding and expansion of the Pacific University graduate programs in Hillsboro.

Retirement Services

Cluster strengths include the livability of Forest Grove area and favorable demographics. Approximately 20% of the City's population is aged 55 and older. These households provide support for leisure activities and financial services. Over the next five years, the retirement age population is expected to increase by 16%.

Adding to the strength of this cluster is the presence of Forest Grove hospital. The Forest Grove hospital operated by Tuality Healthcare is purported to have one of the finest geriatric facilities in the region.

Existing Conditions

Existing industrial activity in Forest Grove is concentrated in four distinct areas: the Taylor Way industrial area, 24th Avenue industrial area, 23rd Avenue industrial area and the Southeast industrial area.

The Taylor Way industrial area includes the National Guard Armory, Forest Grove School District bus yard, Sake One distillery, Kerr Construction company, and a wholesale warehouse facility. The Taylor Way industrial area is characterized by land intensive enterprises. Opportunities exist to intensive development in this area.

The 24th Avenue industrial area includes a variety of activities including warehousing flex space, food processing, warehousing, industrial services, and some light manufacturing.

The 23rd Avenue industrial area includes agricultural food processing, the City Public Works shops and agricultural processing businesses. This industrial area is in a state of transition.

The Southeast industrial area is anchored by a high technology firm specializing in circuit board manufacturing. A sizable amount of vacant industrial land remains in this area. The majority of manufacturing employment in Forest Grove is located in this area.

Based on the Economic Opportunity Analysis there is a potential 20-year need for approximately 240 vacant acres of industrial land. The current supply of vacant land is approximately 290 acres. This amount of land does not include land with vacant structures that could accommodate future needs. Consideration should be given to converting excess industrial land in appropriate locations for other employment needs such as medical facilities and offices. Some land designated industrial could also be used for mixed-use development or residential development.

Objectives

1. Provide at least ~~309 acres~~ 250 acres of land for ~~additional~~ industrial development anticipated over the next 20 years. [Vacant supply is 290 acres. At least 40 acres of industrial land could be re-designated]
2. Land designated for industrial use shall have a slope of 5% or less and access to arterial and collector street and adequately sized utilities.
3. ~~Attempt to annex sufficient land so that one-half of the 20-year need and one 75-acre tract is available for development.~~ Ensure the availability of at least one large industrial tract comprising at least 50 gross acres in land area.

4. Develop plans for the financing and construction of streets and sanitary sewers serving land designated for future industrial use.
5. Maintain an inventory of available industrial land, updating it annually. [Shouldn't be in comprehensive plan]
6. Provide for specific industrial activities as permitted uses in designated industrial districts, restricting retail and office uses to those directly accessory to the main industrial use of a site. [need to revise policy to allow for direct sales of product produced on site]
7. Provide that industrial activity shall be separated from established residential neighborhoods and all future residential development, and require either natural or man-made buffers between industrial and residential land.
8. The City shall cooperate with the local Chamber of Commerce and other economic development entities in the area in promoting industrial development in Forest Grove.
9. Coordinate the designation of industrial and other land use activities in the Comprehensive Plan with the Transportation Element. Through the designation of industrial land use linked to the recommended transportation network of arterials and collectors, existing and proposed residential areas can be avoided to the maximum extent possible
10. Access to industrial sites shall be from arterials or local industrial streets, oriented away from residential areas wherever feasible.
11. Estimate industrial land needs for the next 50 years and identify the most appropriate locations for this development to occur. The design of future sewers and other facilities should take into account the servicing of this additional land area.
12. Implement development standards to promote start-up businesses.
13. Work with our regional partners to ensure there's an adequate supply of industrial land in locations meeting the economic development needs of Forest Grove.
14. Develop a concept plan for the Purdin Road Urban Reserve Area.
15. Implement development standards to promote the efficient use of industrially zoned land.
16. Transition industrial activities out of the Town Center and re-use these sites for commercial and residential mixed-use activities.
17. Redesignate appropriate industrial areas to employment areas to promote a diversity of employment activities and encourage the re-use of underutilized land.
18. Seek opportunities to recruit industrial activities that could take advantage of the City's cost-competitive electricity rates and the skills of the resident labor force.
19. Develop economic development programs that support Forest Grove's location in the region and limited connectivity with Hillsboro and Portland. Work with regional partners to overcome these constraints.
20. Promote small scale manufacturing and services with housing in zoning and development standards.
21. Implement a land use concept to increase jobs-housing ratio in Forest Grove from 1.2 to 1.5.

22. Transition industrial activities out of the Town Center and re-use these sites for commercial and residential mixed-use activities.
23. Implement development standards and incentives to protect large industrial sites.
24. Implement development standards and incentives to encourage the preservation of large industrial sites.
25. Redesignate appropriate industrial areas to employment areas to promote a diversity of employment activities and the re-use of underutilized land.

Implementation Actions

Specific land use implementation actions are described below:

1. The City of Forest Grove will adopt a land use concept that promotes the efficient use of land within the urban growth boundary¹⁷. Measures to promote the efficient use of land will take into account local land economics and market feasibility. Examples of development standards to encourage the efficient use of land include implementing minimum floor area requirements in all commercial and employment zones, increasing minimum development densities, reducing off-street parking requirements, allowing for density bonuses, and/or transfer of development rights.
2. The City of Forest Grove will support policies that promote the continued viability of the Forest Grove Town Center as the focal point of the community. Future comprehensive plan text and map amendments affecting land use should consider potential positive and negative impacts to the Forest Grove Town Center. Potential positive impacts include increasing housing in the Town Center and finding creative ways to efficiently use upper floor space. Negative impacts include implementing policies that increase land values beyond what downtown shop owners can afford and allowing the continuation of incompatible land extensive activities better suited for employment or industrial areas. Other negative impacts include adopting zoning provisions that do not recognize market realities.
3. The City of Forest Grove will support policies that encourage locating complementary land uses in proximity to reduce demand on transportation systems and improve the overall quality of life of the community.
4. The City of Forest Grove will develop land use concept plans for approved urban reserve areas that support the complete community concept by complementing the historic development pattern of the community, promoting jobs-housing balance, providing cost-effective public services and governance and limiting

¹⁷ The efficient use of land reduces pressure to expand the urban growth boundary and thereby conserving agricultural land, reduces the cost of development by reducing the cost to extend public services, reduces traffic congestion by placing complementary activities near one another and improves air quality and lowers greenhouse production, reduces the length of automobile trips and reduces the cost to operate a vehicle.

development impacts affecting surrounding agricultural activities and investments.

5. The City of Forest Grove will promote policies designed to protect the character of single family residential neighborhoods while also allowing for limited infill development.
6. The City of Forest Grove will support policies to consolidate access points along the Pacific Avenue corridor.
7. The City of Forest Grove will participate in regional affairs to advance policies that address local land use and development needs.

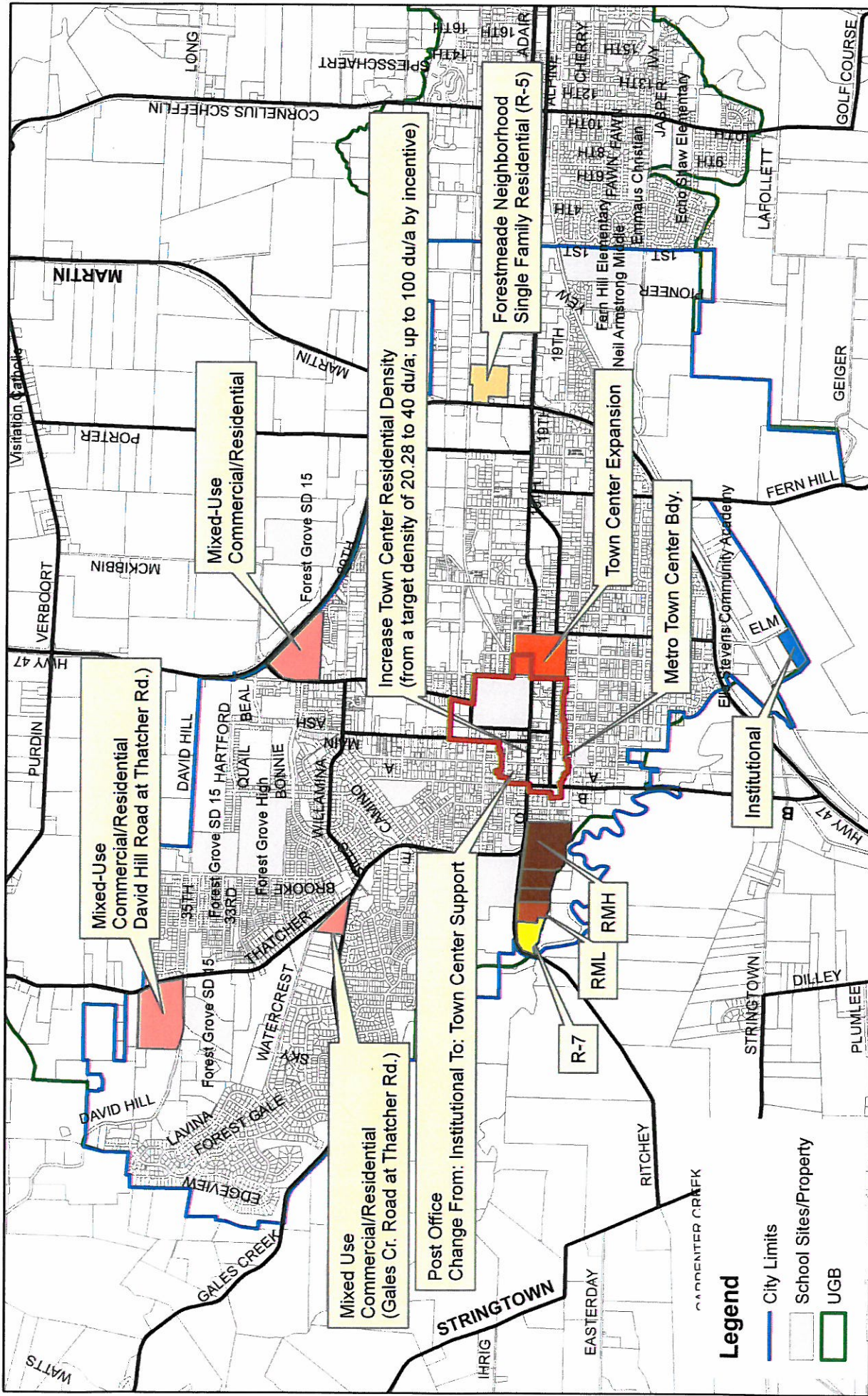
Plan Monitoring

The comprehensive plan is intended to be a dynamic document. The plan should be reviewed periodically and updated to ensure that policies remain relevant based on changing conditions and community needs.

Cross References

ORS 197, Metro Regional Framework Plan, Statewide Land Use Planning Goal 2, Comprehensive Plan Background chapter, Comprehensive Plan Housing Element, Comprehensive Plan Economic Development Element, Comprehensive Plan Urbanization Element.

Allow for fee credit or SDC reduction if project or development is LEED certified and it can be documented that there will be a reduction in storm water runoff, water use, or sanitary sewer impact, etc.



PLANNING COMMISSION RECOMMENDATION
Comprehensive Plan
Land Use Concept



Legend
 City Limits
 School Sites/Property
 UGB

Natural Resources and Hazards

The natural amenities that made Forest Grove attractive for permanent settlement also create potential hazards for persons and property. Forest Grove is located near the Coast Range foothills and Tualatin River watershed. Gales Creek and Council Creek are prominent features providing a sense of place in the metropolitan region. Forest Grove is located in an area susceptible to a variety of natural hazards. Forest Grove's location near the Coast Range foothills, Gales Creek, Council Creek provides scenic vistas. These amenities also present potential hazards due to landslide and flooding.

Oregon's land use planning program requires that communities in Oregon address potential natural hazards to minimize risks to people and property. Natural hazards include earthquakes, floods, landslides, wildfire, and wind storms.

In 2010, the City of Forest Grove adopted the Forest Grove Emergency Operations Plan. The plan defines the roles and responsibilities of emergency responders that serve the Forest Grove area. In addition, the Emergency Operations Plan identifies specific hazards potentially affecting the community.

Oregon Statewide Land Use Planning Goal 7

Oregon Statewide Land Use Planning Goal 7 addresses areas subject to natural hazards. The primary objective of Goal 7 is to protect people and property from natural hazards. Goal 7 requires that local governments adopt comprehensive plans (inventories, policies, and implementing measures) to reduce risk to people and property from natural hazards. Natural hazards for purposes of Goal 7 include floods, landslides, earthquakes and related hazards, tsunamis, coastal erosion, and wildfires. Local governments may identify and plan for other natural hazards. This element of the Comprehensive Plan addresses the topics included under Goal 7.

Goal 7 also suggest that when reviewing development requests in high hazard areas, local governments should require site-specific reports where appropriate for the level and type of hazard (e.g. hydrologic reports, geotechnical reports or other scientific or engineered reports) prepared by a licensed professional. Such reports should evaluate the risk to the site as well as the risk the proposed development may pose to other properties. While development should not be completely prohibited due to slope care should be taken to avoid development on unstable slopes.

Building limitations are associated with the character of the geology and the soils in the Forest Grove study area. Four general geologic formations underlie the region and produce soils. Columbia River Basalt and a layer of sedimentary rock lie in the northwest of the study area composing the uplands of David Hill. Building is limited here by steep slope, uneven settlement, sewage disposal problems, and by potential erosion and landslides. The two other geologic layers are the young alluvial deposits in the flood plain of the area and the older valley fill which underlies much of the City and areas to the north. Building limitations associated with these formations result from poor drainage and moisture problems leading to potential shrink-swell, low shear strength (weak foundation) and high water table.

Oregon Statewide Land Use Planning Goal 5

Oregon Statewide Land Use Planning Goal 5 addresses Natural Resources. The purpose of Goal 5 is to protect natural resources and conserve scenic and historic areas and open spaces. This chapter of the Comprehensive Plan addresses the natural resources aspect of Goal 5. Historic areas and open spaces are addressed in the Public Facilities and Community Services chapter of the Comprehensive Plan.

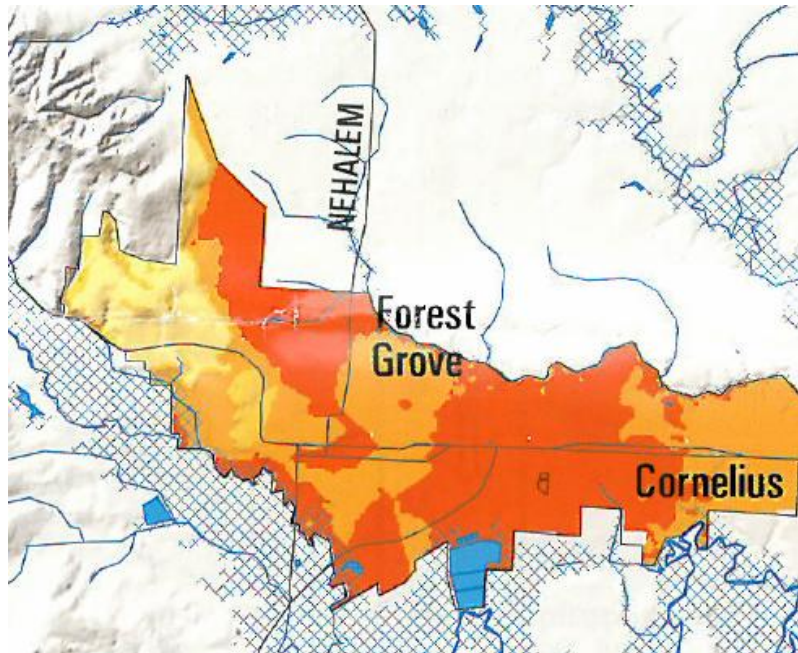
Seismic Activity

Seismic activity presents a potential risk for the Forest Grove community. Several identified fault lines run parallel to the Coast Range just west of Forest Grove. The historical record shows that more than 56 earthquakes have been widely felt in or near the greater Portland area. The more severe earthquakes occurred in 1877, 1880, 1953, 1962, and 1993.

Forest Grove Town Center is characterized by many late 19th and early 20th Century buildings. These buildings add to the charm of the community. These same buildings are also susceptible to potential damage during a moderate to severe seismic event. City policy should reinforce state building requirements regarding seismic retrofits and upgrades. Effort should be made to protect these community resources through building reinforcement.

Many utility lines are placed underground including water, sewer electricity and telecommunications. These connections are vulnerable to damage during a seismic event.

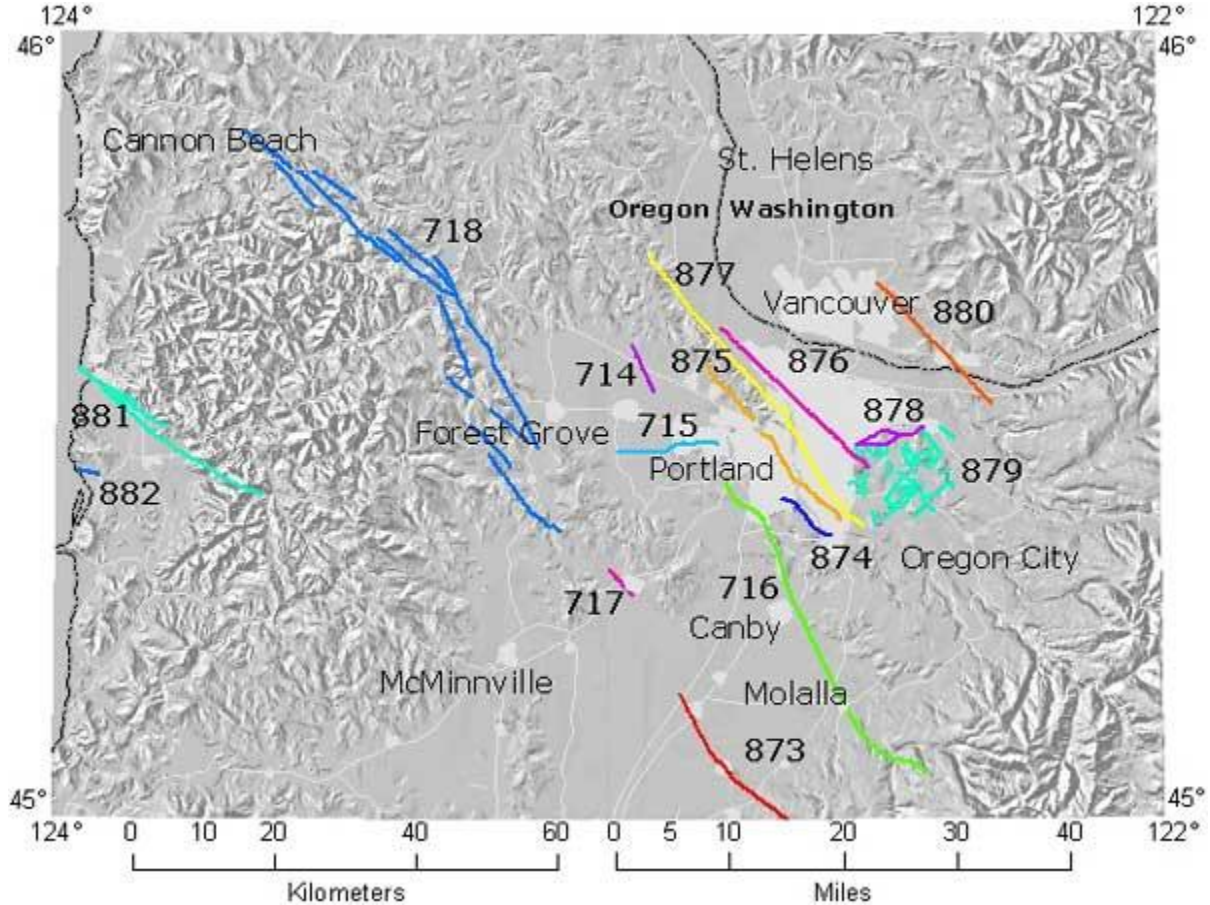
Damage from seismic activity may result from amplification, liquefaction, and slope instability. The map below, prepared by the Oregon Department of Geology and Mineral Industries, shows relative earthquake hazard areas. The darker orange areas are locations rated as a high relative earthquake hazard area. Yellow indicates a lower zone of earthquake hazard.



As the Oregon Emergency Management website states: Since the late 1980's, the citizens of Oregon have become increasingly aware that their home is definitely earthquake country and that damaging earthquakes will strike the state. This growing awareness increased dramatically in 1993 when western Oregon experienced two damaging upper crustal earthquakes, Scotts Mills (magnitude 5.6) and Klamath Falls (magnitudes 5.9 and 6). The last significant earthquake in Oregon, prior to 1993, was in 1962.

In addition to earthquake activity in the historic record, prehistoric evidence for great subduction zone earthquakes and associated tsunamis has been found in coastal wetlands along the Pacific Northwest coast. The last one, approximately 300 years ago, may have been a magnitude 9 or greater, affecting coastlines from British Columbia to Northern California. What is most surprising is that evidence for this great earthquake also came from Japan. Japanese historic records indicate that a destructive distantly-produced tsunami struck their coast on January 26, 1700. It is very possible that the subduction zone earthquake, that produced this tsunami, occurred off the Pacific Northwest coast. Indian legends also lend some support to the timing of this last event.

Faults

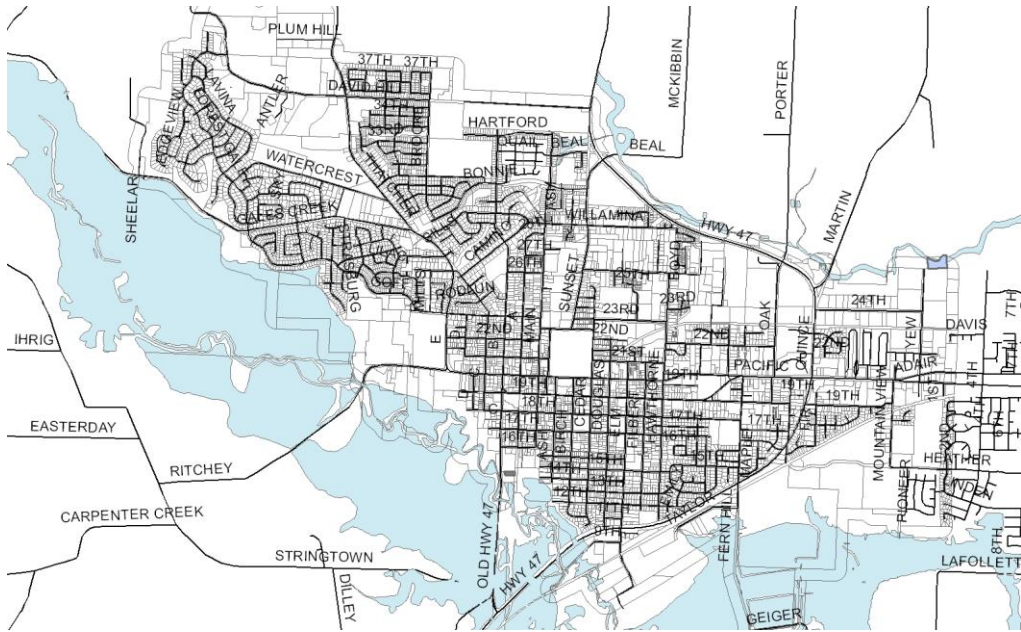


Floods

Northwest Oregon is susceptible to strong winter storms that are carried along the Jet Stream over the Pacific Ocean. Heavy rain events are not uncommon during the fall, spring, and autumn months. These rain events caused localized flooding especially south of Forest Grove along the Gales Creek. B Street south of the Forest Grove Town Center is often impacted by Gales Creek flood waters. Fern Hill Road, south of Highway 47, also floods after heavy rain events. Closure of these streets presents an inconvenience to Forest Grove travelers. Alternative transportation routes exist including Elm Street, Golf Course Road in Cornelius and Oregon Highway 219 in Hillsboro.

Forest Grove is located Gales Creek poses the greatest risk to flooding. Winter storms routinely result in flooding over B Street between Highway 47 and the Forest Grove Town Center. In addition flooding also occurs over Fern Hill Road south of Highway 47. This flooding reduces access from Forest Grove to points south.

The map below shows the extent of flooding impacting Forest Grove during the 1996 Flood. As the map shows B Street, a portion of Highway 47, and Fern Hill Road were inaccessible during the 1996 Flood



The land within this flood plain constitutes about 3500 acres and is associated with sections of Gales Creek, the Tualatin River and Council Creek. Most of this land is in agricultural uses south of the City with only a few acres actually within the present city limits. The flood plain represents a large section of land bordering the City which blocks expansion for development to the south and north. Because of the building hazard, the flood plain represents a large section of land with open space characteristics. This land could fit easily into an open space system while simultaneously utilizing it as an agricultural resource. Drainage hazard areas exist and are identified in addition to the three major streams in the area.

Scoggins Dam

Scoggins Dam is located southwest of Forest Grove near the City of Gaston. According to the Bureau of Reclamation Tualatin Project Internet Site:

Scoggins Dam is a 151-foot-high zoned earthfill structure that is 2,700 feet long at the crest and contains 4 million cubic yards of material. The upstream side of the dam is faced with rock riprap for protection against wave action; the downstream side is faced with topsoil and planted with grass. Total capacity of Henry Hagg Lake is 59,910 acre-feet (active 53,600 acre-feet).

As stated in the Forest Grove Emergency Operations Plan:

“[A]ll dams are subject to earthquakes, tremors and other threats (sabotage, hurricanes, ice flows, winter storms, and severe runoff). Should the Scoggins Dam fail, downstream homes, roads, bridges, fields, etc. could quickly become saturated and flooded. While flood waters impacting Forest Grove could be relatively shallow, flooding would cause debris exacerbating conditions. Flood debris could release environmental contaminants and potentially impede

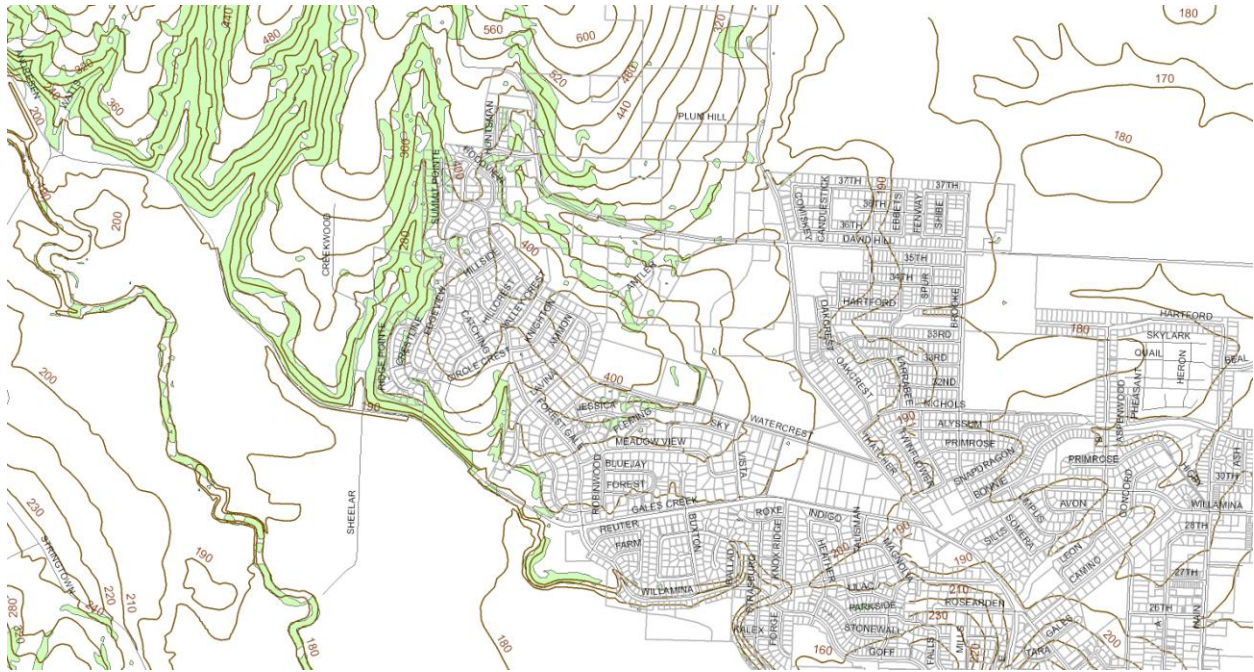
movement and commerce. The Scoggins Dam Emergency Action Plan, prepared by the U.S. Bureau of Reclamation, outlines procedures to be taken in the event of a dam failure.”

Slope

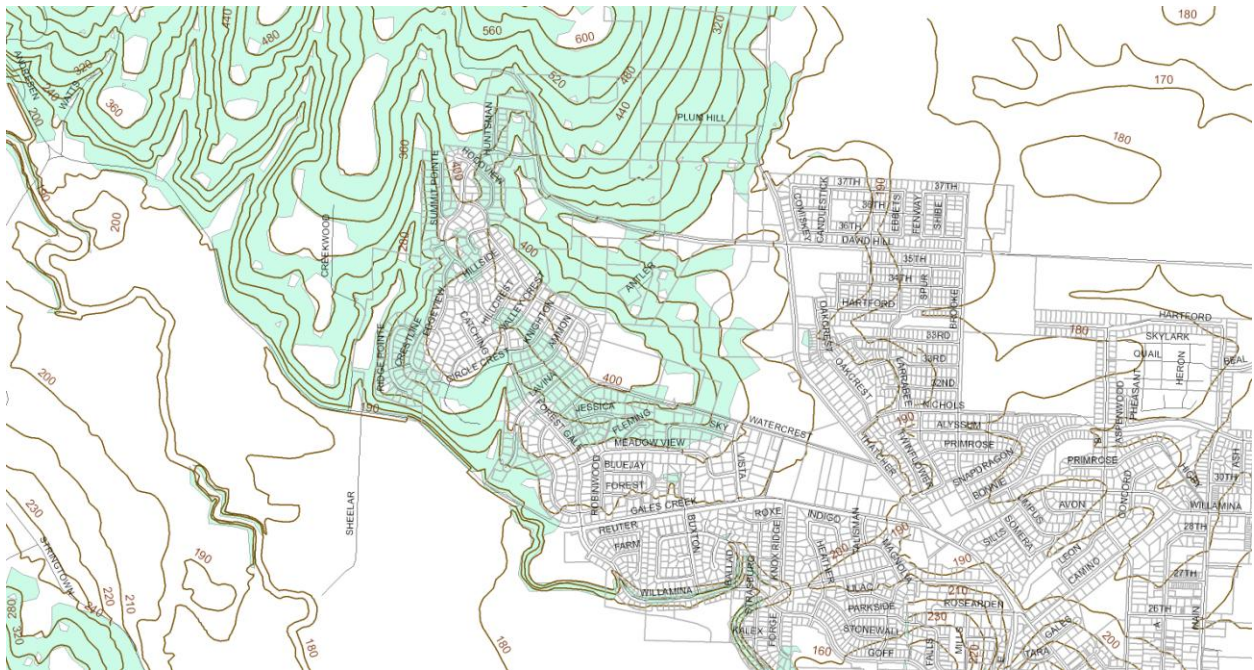
Lands with slopes above 20% are considered constrained for purposes of building. A considerable amount of such land exists in the northwest section of the study area on David Hill mixed with land of lesser slope. Only a small portion of this hazardous sloping land exists in the existing city limits with the bulk of the study areas and only steep slopes on David Hill might be subject to such hazards.

The David Hill area includes the steepest land within the Forest Grove portion of the UGB. Slopes exceed 20% with elevations ranging from 320 feet to 480 feet. Building limitations are associated with character of the geology and soil types. Four general geologic formations underlie the Forest Grove area. Columbia River Basalt and a layer of sedimentary rock are present in the northwest part of the UGB comprising the uplands of David Hill. Historically, building has been limited in this area due to steep slopes, uneven settlement, sewage disposal problems, and by potential erosion and landslides. The two other geological layers are alluvial deposits in floodplains and older valley fill which underlies much of the City and areas to the north. Building limitations associated with these areas formations result from poor drainage and moisture problems leading to potential shrink-swell, low shear strength and high water table. High water table corresponds to seasonal flooding.

The map below shows contour elevations and areas that exceed 25% slope.



The map below shows areas that exceed 10% slope.



Soil Type

Particular soil types in the study area have potential shrink-swell and low shear strength problems. These characteristics of the soil limit the ability of the soil to support building foundations and can damage structures through expansion and contraction in response to

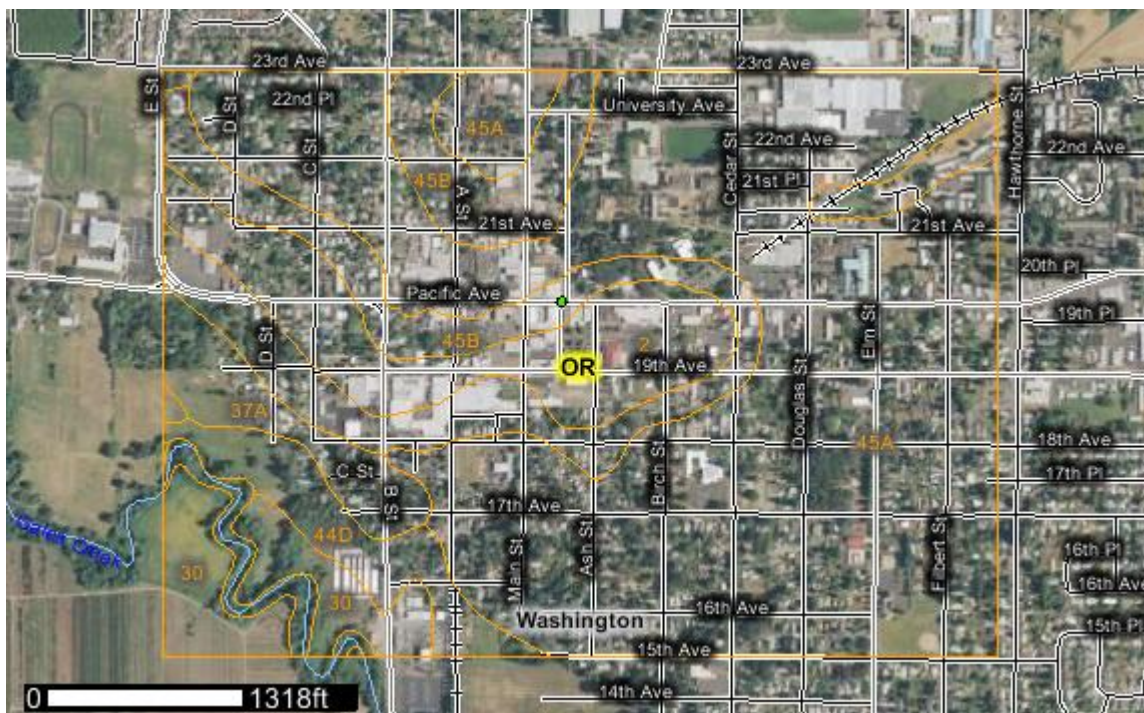
moisture levels. The latter problem of shrink-swell potential is associated with isolated patches of land in the flood plain and the extreme northern section of the study area. The weak foundation problem of low shear strength is more common in areas within the city and immediately north of the city. These potential building limitations require careful analysis of building sites and building adaptations and safeguards.

North of David Hill Road the predominant soil type is Laurelwood Silt Loam. This soil type is well drained, depth to water table more than 80 inches. South of David Hill Road the predominant soil type is Cornelius and Kinton Silt Loam. This soil type is moderately well drained. Depth to water table about 27 to 37 inches. East of Thatcher that predominant soil type is Woodburn Silt Loam. The Woodburn soils are on nearly level to gently sloping broad valley terraces at elevations of 150 to 400 feet above sea level. This soil type is moderately well drained with slow to medium runoff and slow permeability.

As the supply of land is exhausted at lower elevations there will be increased pressure to build at higher elevations and on steep slopes.

The maps below provide delineation of soil types in Forest Grove and associated characteristics. Soils in the region tend to be soft and slick especially in higher elevations.

Central Forest Grove



45 A – Woodburn Silt Loam 0% to 3% slope (runoff is slow)

45 B – Woodburn Silt Loam (3% to 7% slope)

2 – Wapato Verboort Cove Association (very deep, poorly drained, level silt clay loams and clays)

- Assemble the list of hazard components
 - Fuel
 - Topography
 - Weather
 - Fire history
 - Roofing materials

Step 3

- Rank the hazard components
- Define a system to rank the hazard level of the components
- Evaluate and rank each individual component
- Develop an overall hazard rating system
- Calculate the overall hazard rating

Step 4

- Compile the hazard rankings in a useable format
- Use a variety of display methods to make the data understandable
- Consider maps and computer modeling for analyzing data

Step 5

- Develop future actions
- Use the information developed to reduce the fire-loss potential

This assessment methodology is useful for identifying hazard areas. Once identified the population residing for project to reside in the hazard could be calculated. In addition, the value of structures could be calculated to estimate potential loss form a wildfire event.

Winter Storms

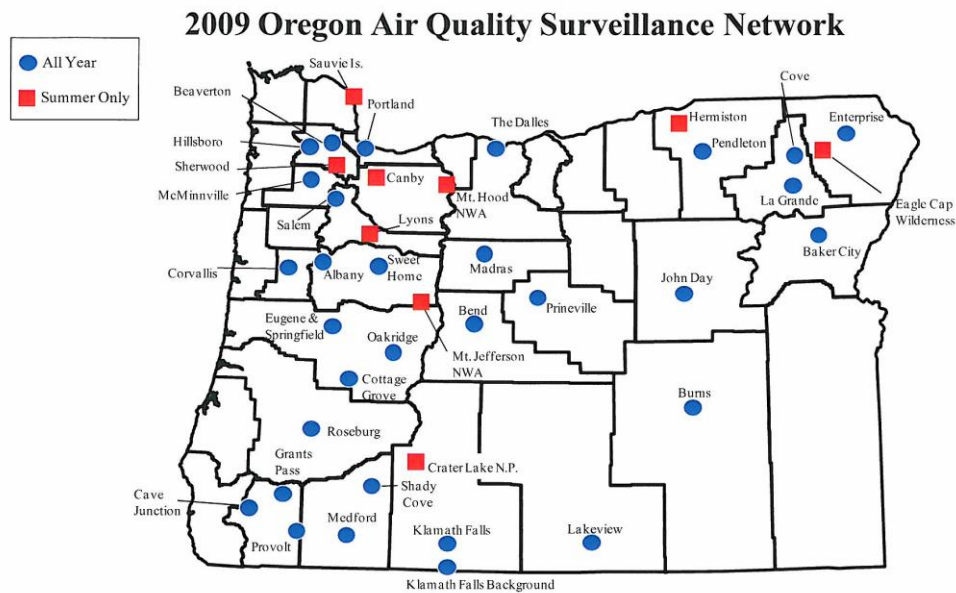
Forest Grove is susceptible to winter storms. Winter storms may result from strong winds, heavy rain and snow/ice. Strong winds may damage trees causing property damage and personal injury. The most common problem from winter storms includes tree damage and localized flooding.

Air Quality

The problem to be faced by Forest Grove and other fast growing communities in the state in the coming years will be how to accommodate their share of anticipated regional growth while at the same time protecting the quality of the community's environmental resources. As has often been the case in the past, as the resident population of an area increased, the demands placed upon the land for residential, commercial and industrial use has often had this development occurring in environmentally sensitive areas. As a result, the quality of the areas air, water and land resources has often suffered, with the damage done being irreversible. In the future, it will be up to each individual community in the state to develop and implement comprehensive guidelines for development to ensure that the economic benefits derived from growth will not be cut short from the unnecessary abuse or neglect of the community's environmental resources.

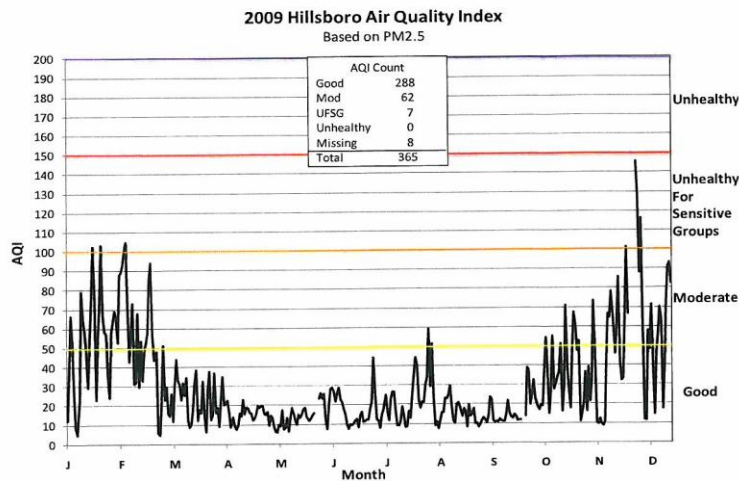
Lacking specific data on air quality in Forest Grove to evaluate the extent and degree of air pollution within the community and study area, data for Hillsboro from the Oregon Department of Environmental Quality was used for analysis.

The map below shows the Oregon Air Quality Surveillance Network. Monitoring stations in Washington County include Hillsboro, Beaverton, and Sherwood (summer only). An air monitoring station is also located in McMinnville.



The graph below shows the seasonal nature of air quality in the region as measured in Hillsboro. Air quality in western-Washington County tends to be worst during the winter months with the unhealthiest air quality in mid-November.¹

¹ USFG on the chart below means Unhealthy for Sensitive Groups



Water Quality

In 1972, Congress enacted the Water Pollution Control Act which directed states to establish standards relative to water quality and formulate regulations to ensure that these standards are met. In response to this Federal mandate, the Oregon Department of Environmental Quality established standards for all rivers in the state.

As a community in the greater Portland metropolitan area, the City of Forest Grove has worked closely with other local and regional governmental bodies, especially Washington County Clean Water Services, to ensure that the quality of surface and ground water resources of the city would be adequately protected from the unregulated discharge of wastewater.

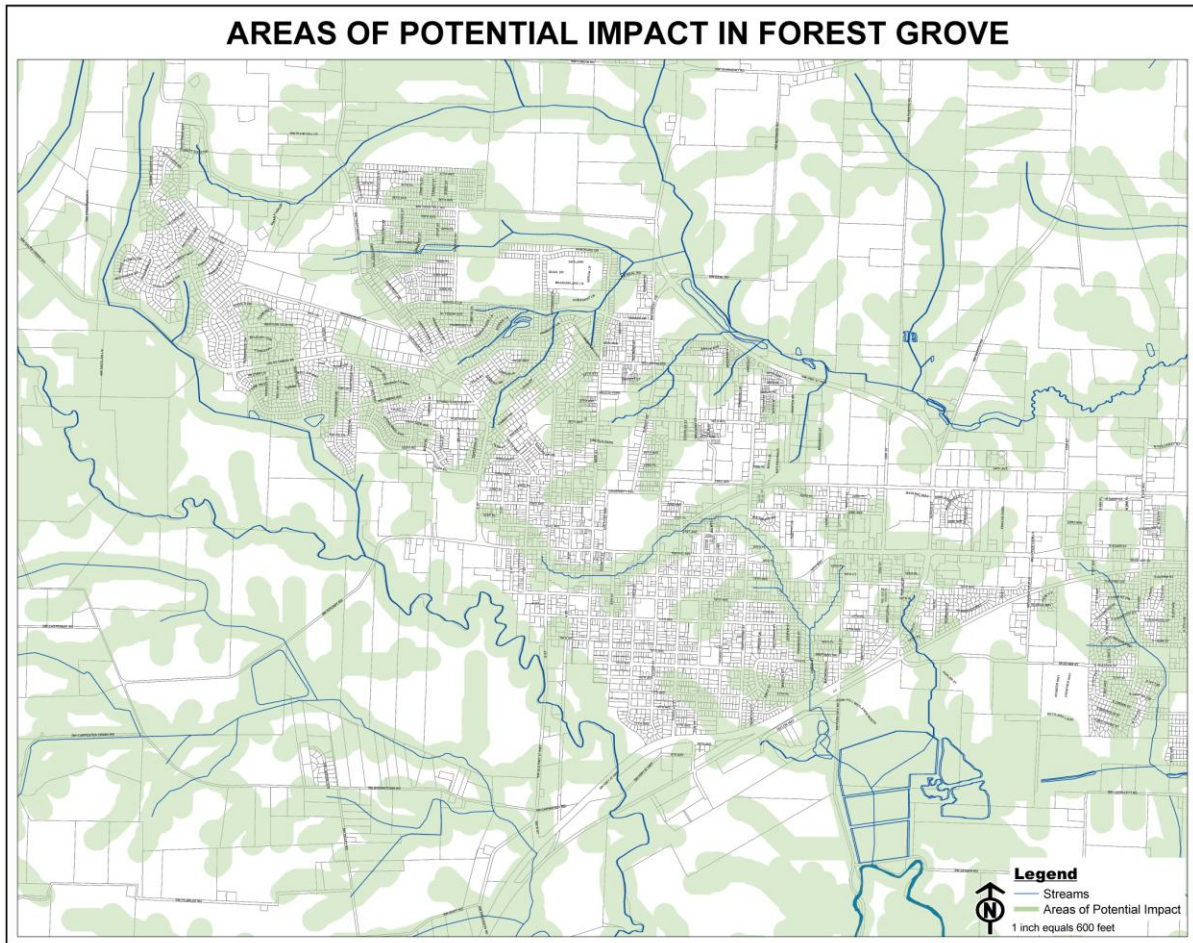
Local ground- and surface water is a significant resource for the community. Water resources include:

- Clear Creek Watershed;
- Gales Creek;
- Scoggins Reservoir/Henry Hagg Lake;
- Tualatin River;
- Wetlands; and
- Groundwater

Land use practices and development design affect the quality of the community's water resources. As such, the City will enact policies to protect and restore water resources in partnership with Washington County Clean Water Services and Metro including Title 3 of Metro's Urban Growth Management Functional Plan (Water Quality and Flood Management) and Title 13 (Nature in Neighborhoods)..

Vegetative Corridors

Clean Water Services has mapped areas of potential development impact along streams in the Forest Grove area. These areas of potential impact are also referred to as “vegetative corridors.” The purpose of this chapter is to outline design requirements for storm and surface water management related to water quality Sensitive Areas and Vegetated Corridors. Greater review is required for projects within these areas to address potential water quality impacts. The review requirements are intended to prevent or reduce adverse impacts to the drainage system and water resources of the Tualatin River Basin. In combination with other state, federal, and local laws and ordinances, these requirements promote protection of the beneficial uses of waters within the Tualatin River Basin and within the Clean Water Services District including Forest Grove.



Goals

- 1) All development shall consider, take into account and demonstrate suitability relative to the natural hazard limitations of the Forest Grove area.
- 2) Flood plain areas shall be protected from incompatible uses to reduce potential for property damage.
- 3) The area's air quality shall be maintained and where possible improved to ensure community livability.
- 2) The area's water quality shall be protected, maintained and improved wherever possible to ensure livability.
- 3) Maintain and improve community sustainability by promoting future economic activities that are environmentally desirable.

Policies

- 1) Areas with known Geologic hazards, or soils which the Soil Conservation Service has rated as severe hazard soils including shrink-swell potential, weak foundation support (shear strength), and erosion hazard shall permit construction and densities only when adhering to recommendations made through engineering analysis, review and ordinances.
- 2) Those involved in development will be required to address hazard conditions by the inclusion of basic environmental data (i.e. soil type, elevation of the flood plain, geologic limitations, etc.) and related designs and for engineering solutions in the submittal requirements for the development.
- 3) Adopt as a provision in both the zoning and subdivision ordinances that an environmental report be prepared and certified by a qualified engineer for all development proposals in areas having natural physical hazards and/or limitations. As part of the environmental report, the engineer shall identify the intensity of urban development to be permitted based upon the carrying capacity of the land. Open space may be required within the development in order to protect the public health and safety.
- 4) Permanent structural improvements will not be permitted in areas delineated as being located within the floodway of the 100 year flood plain as indicated from flood plain surface elevations provided by the U.S. Army Corps of Engineers.
- 5) The development of areas delineated as being within the 100 year flood plain as indicated from flood plain surface elevations provided in the most current Washington County, Oregon - U.S. Army Corps of Engineers information shall be limited to appropriate open space uses.
- 6) Fill and compensatory excavation of the flood plain shall be used only as a final design solution for development adjacent to the floodway. Developers shall be

required to spell out how development alternatives were evaluated and conclusions were made.

- 7) Cluster development to accommodate needed housing while preserving larger blocks of forest land and open space. (ADF, Tree City USA Bulletin No. 63)
- 8) Establish landslide mitigation measures including logging regulations on steep slopes, landscape requirements, drainage controls, and pre-development technical studies.
- 9) Minimize the risk of loss of life and damage to property from wildfires within the City and the urban growth boundary.
- 10) Collaborate with local agencies to evaluate the local risk of wildland-urban interface fires.
- 11) Collect data related to fuel locals and mapping vulnerable areas Prepare landscaping regulations to improve fire resistance
- 12) Adopt adequate roadway requirements to assure response by fire protection agencies.
- 13) Amend development standards in areas with potential landslide hazard to minimize potential landslides while allowing appropriate development.
- 14) Evaluate the need for seismic retrofit improvements to existing buildings in the Town Center to minimize potential damage where feasible.
- 15) Land use controls and project reviews will be used to determine and regulate the impact of development on water quality.
- 16) Transportation Plan objectives and alternatives that encourage and provide for increased bicycle and mass transit ridership shall be adopted.

Education and School Facility Element

Purpose

This element of the comprehensive plan highlights public and private educational opportunities in and around Forest Grove. This element also addresses the requirements of Oregon Revised Statutes Chapter 195.110 related to long term school facility planning.

Introduction

Forest Grove's history is tied to education. The City of Forest Grove grew-up around the Tualatin Academy; the first educational institution chartered by the Oregon Territorial Legislature in 1849. The Tualatin Academy, was a secondary school that became what is now Pacific University. The mission of the Tualatin Academy continues today through a partnership between the Forest Grove School District and Pacific University. This partnership provides opportunities for high school students interested in taking classes at the university level.

The Forest Grove School District is the primary provider of public instruction in Forest Grove for grades kindergarten through high school. The Northwest Regional Education Service District supplements programs offered by the Forest Grove School District including services for special needs students.

Forest Grove is also located within the Portland Community College district boundary. Based on enrollment, Portland Community College is the largest post-secondary public provider of education in Oregon. Classes are primarily offered at the PCC Rock Creek and Sylvania campuses and Hillsboro Center. Portland Community College offers associate degree programs as well as continuing education classes.

Pacific University is the most prominent educational institution in Forest Grove. Pacific University is a private liberal arts and graduate teaching and health professions university. Undergraduate programs are taught on the Forest Grove campus with most graduate classes taking place in Hillsboro. Pacific University is well known for their optometry and psychology degree programs.

Other providers of education include a variety of private vocational colleges in Hillsboro and Portland.

Demographics

Characteristics of the population help to inform school needs both now and in the future. The information that follows provides a broad overview of general population characteristics.

General Population Characteristics

The table below shows general population characteristics for Forest Grove residents. The total population of Forest Grove in 2010 is approximately 21,080 persons. The median age of Forest Grove residents is 32.7 years.

Approximately 79% of Forest Grove residents are White. Persons identifying themselves as some other race is the next largest category at 12.5% of residents. This category is followed by persons of two or more races at 3.9%. Asian, Native American and the African American population makes-up approximately 5% of Forest Grove residents.

Approximately 23% of the Forest Grove population identifies themselves as being of Hispanic Origin. It's important to note that Hispanic Origin is not a racial category as defined by the US Census Bureau. Persons identifying themselves as being of Hispanic Origin may also be counted under one or more racial category.

Forest Grove General Population Characteristics

Total Population	21,083
Median Age	32.7
Population below age 15	22.0%
Population above age 65	12.8%
White	78.8
Other	12.5%
Two or More Races	3.9%
Asian	2.6%
Native American	1.1%
African American	0.8%
Hispanic Origin	23.1%

Cornelius General Population Characteristics

Total Population	11,869
Median Age	30.4
Population below age 15	31.8%
Population above age 65	7.3%
White	64.0%
Other	27.2%
Two or More Races	4.0%
Asian	2.2%
Native American	1.3%

African American	1.2%
Hispanic Origin	50.1%

As the tables above show, Forest Grove has an older population than Cornelius. The median age of a Forest Grove resident is 32.7 years of age. In contrast, the median age of a Cornelius resident is 30.4 years.

Cornelius is a more diverse city than Forest Grove. Approximately 50% of the population in Cornelius identifies themselves as being of Hispanic origin. This compares to Forest Grove where 23% of the population is of Hispanic origin.

Households also tend to be larger in Cornelius than households in Forest Grove. According to the US Census Bureau, the average household size in Cornelius is 3.51 persons per household. The average household size on Forest Grove is approximately 2.77 persons per household. This is a significant difference.

School Age Population

The tables below show the current and future distribution of school age population in Forest Grove for the years 2010 and 2030. The 2010 population estimates are from the US Census Bureau's American Community Survey. For planning purposes the City estimated population by school age group for the year 2030. The City's estimate is based on long-term household and population projections, prepared by Metro, for the year 2030. Population for the year 2030 was assigned to school age groups based on the current (year 2010) distribution of population by age group. The City recognizes that this methodology is not as accurate as performing a cohort survival analysis. However, this technique is the best way to assess potential population by age group given available resources.

Estimated School Age Population for Forest Grove (2010)

Age Group	Population	Percent
5 to 9 Years	1,637	7.9%
10 to 14 Years	1,439	7.0%
15 to 19 Years	1,635	7.9%
20 to 24 Years	1,730	8.4%
Total	6,441	31.2%

Source: US Census Bureau, American Community Survey 2010

Estimated School Age Population for Cornelius (2010)

Age Group	Population	Percent
5 to 9 Years	1,149	9.7%
10 to 14 Years	1,053	8.9%
15 to 19 Years	1,018	8.6%
20 to 24 Years	787	6.6%

Total	4,007	33.8%

Projected School Age Population for Forest Grove (2030)

Age Group	Population	Percent
5 to 9 Years	2,265	7.9%
10 to 14 Years	2,007	7.0%
15 to 19 Years	2,265	7.9%
20 to 24 Years	2,409	8.4%
Total	8,946	31.2%

Projected School Age Population for Cornelius (2030)

Age Group	Population	Percent
5 to 9 Years	1,989	9.7%
10 to 14 Years	1,824	8.9%
15 to 19 Years	1,763	8.6%
20 to 24 Years	1,359	6.6%
Total	6,935	33.8%

Difference Between 2010 and 2030 for Forest Grove

Age Group	Population
5 to 9 Years	628
10 to 14 Years	568
15 to 19 Years	630
20 to 24 Years	679
Total	2,505

The chart below, prepared by the Forest Grove School District, shows the number of students enrolled or projected in various grade levels on an annual basis over a six school year period. The chart shows how “age cohorts” progress through grade levels.

October

Year	Kinder	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Total
2006-2007	462	448	479	465	442	475	449	478	449	524	488	491	495	6,145
2007-2008	465	460	445	456	448	409	473	446	460	480	522	515	452	6,031
2008-2009	446	473	465	453	462	429	413	440	439	489	482	555	435	5,981
2009-2010	429	437	475	458	453	456	427	428	442	500	488	501	480	5,974
2010-2011	428	436	429	471	460	445	462	439	439	532	482	477	486	5,986
2011-2012	433	430	428	403	451	445	442	450	428	478	496	453	484	5,821
vs 10-11 Cohort	5	2	(8)	(26)	(20)	(15)	(3)	(12)	(11)	39	(36)	(29)	7	(107)
vs 10-11 Cohort	1.17%	0.47%	-1.83%	-6.06%	-4.25%	-3.26%	-0.67%	-2.60%	-2.51%	8.88%	-6.77%	-6.02%	1.47%	
vs 07-08	(29)	(18)	(51)	(62)	9	(30)	(7)	(28)	(21)	(46)	8	(38)	(11)	(324)
Cohort Project.	433	435	422	402	386	436	442	431	439	466	446	466	460	5,663

The table below shows estimated school enrollment for residents over the age of 3 in Forest Grove. The data is from the American Community Survey prepared by the US Census Bureau. Elementary school enrollment represents the largest percentage of school enrollment in Forest Grove. Elementary school enrollment is followed by college enrollment at 33%. This is expected with the presence of Pacific University in Forest Grove.

Grade	Forest Grove Population	Forest Grove Percent	Cornelius Population	Cornelius Percent
Nursery/Pre-School	211	3.4%	249	7.1%
Kindergarten	257	4.1%	120	3.4%
Elementary (Grades 1 – 8)	2,585	41.3%	1,976	56.2%
High School (Grades 9 -12)	1,131	18.1%	677	19.3%
College or Graduate School	2,073	33.1%	494	14.1%
Total	6,257	100%	3,516	100.0%

Source: US Census Bureau, American Community Survey 2010

Educational Attainment (Population 25+)

The table below shows educational attainment for persons age 25 years and older living in Forest Grove. Approximately one-quarter of Forest Grove residents 25 years of age and older have some type of college degree. Another quarter of the population attended some college but did not receive a degree. Approximately 10% of the Forest Grove population older than 25 have less than a 9th grade education. Another 9% attended high school but did not receive a diploma. Therefore, almost one-fifth of the adult population, 2,250 persons over 25 in Forest Grove, has not graduated from high school.

Grade	Forest Grove Population	Forest Grove Percent	Cornelius Population	Cornelius Percent
Less than 9 th	1,160	9.5%	1,586	24.0%
9 th to 12 th (No Diploma)	1,088	8.9%	516	7.8%
High School Graduate	3,353	27.4%	1,707	25.8%

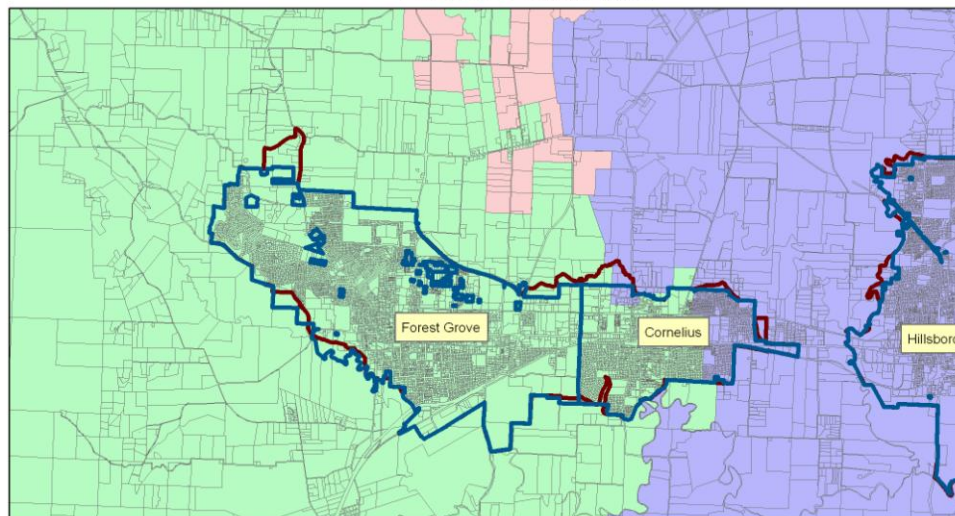
Some College, No Degree	3,261	26.6%	1,517	22.9%
Associate's Degree	782	6.4%	484	7.3%
Bachelor's Degree	1,679	13.7%	582	8.8%
Graduate or Professional Degree	918	7.5%	225	3.4%
Total	12,241	100%	6,617	100%

Source: US Census Bureau, American Community Survey 2010

Forest Grove School District

The Forest Grove School District serves a large portion of western Washington County including the communities of Forest Grove, portion of Cornelius, Gales Creek, Glenwood, and Dilley. The Forest Grove School District boundary is shown below with Forest Grove and Cornelius at the eastern edge of the boundary. The western boundary is the Washington/Tillamook County line.

**Forest Grove Area
 School Districts**



Legend

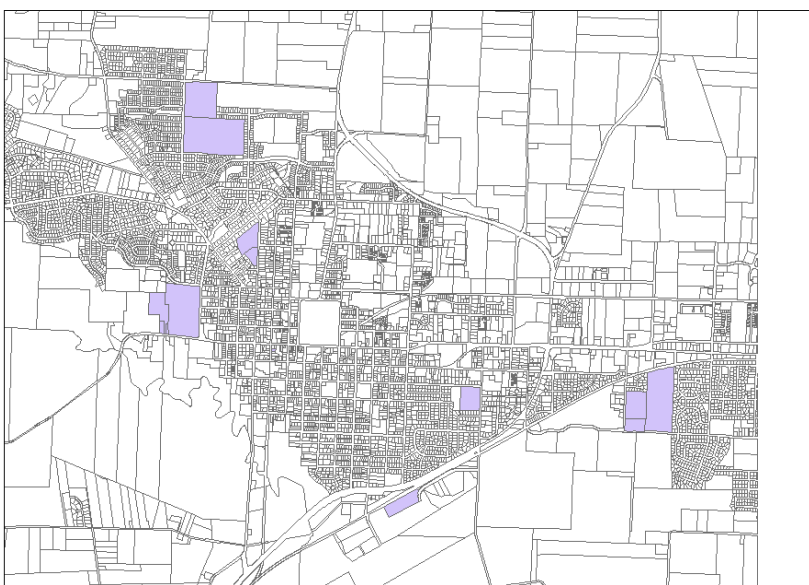
- City Boundary
- Urban Growth Boundary
- School Districts**
- SCHDIST
- Banks Banks School District
- Forest Grove Forest Grove School District
- Hillsboro Hillsboro School District



As of 2009, the District has ten school buildings and two support facilities. This includes seven elementary schools, one upper elementary school, one middle school and one high school. The two support facilities include the District's central office on Main Street and the Taylor Way support annex off of Fern Hill Road south of Highway 47.

The map below shows the locations of existing school locations in Forest Grove.

School Facilities in Forest Grove



The Forest Grove school district serves a diverse population. Approximately 2,800 students are White making-up 49% of total school enrollment. About 2,850 students are identified as being of Hispanic origin. Hispanic students comprise about 48% of the student population. The school district estimates that nearly 1,340 students are English language learners (approximately 23% of the student population). Approximately 955 students, or 16% of enrollment, come from migrant farm worker families.

The diversity of the student population is an asset enhancing learning opportunities. An example of this is the district's Two Way Immersion Program. Students participating in the program spend half their time learning English and half their time learning Spanish. The goal of the program is to create students who are literate in both languages. The program, which started in 1996, includes about 300 students, including native Spanish speakers, Native English speakers and students who have grown-up in bilingual households.

Growth in the Latino population is an important factor behind Forest Grove's enrollment growth prior to 2008. Historically, Hispanic enrollment increased more rapidly than other enrollments at the national, state and district levels. This could be attributable to higher birth rates and a wave of immigration from Latin America prior to the 2008 economic downturn. Between 2000 and 2005, Hispanic enrollment climbed by over 54 percent. During 2006, Hispanic students accounted for over 38 percent of the total student enrollment in the Forest Grove School District. This percentage has increased to 48 percent based on current statistics.

The chart below shows the breakdown of enrollment by grade level for the 2010 school year. As of 2010 there were approximately 1,960 high school students, 880 middle school students and 3,100 elementary school students.

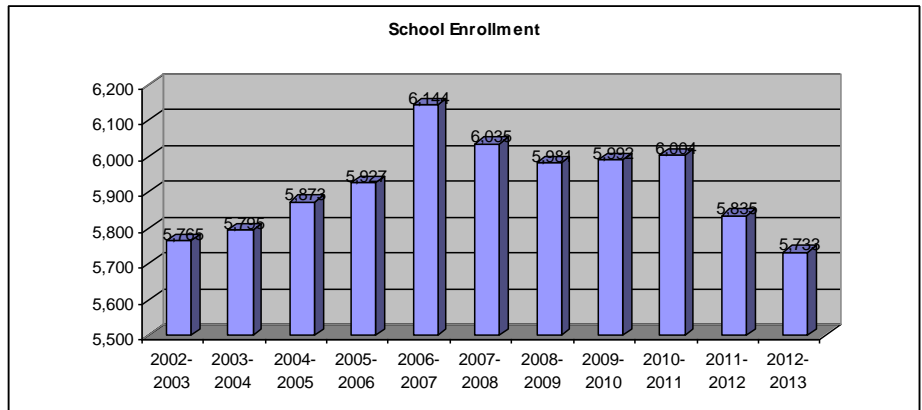
**Forest Grove School District Enrollment (2010)
Breakdown by Grade Level**

Grade Level	Students
Kindergarten – Fourth Grade	2,074
Grades 5 and 6	888
Grades 7 and 8	877
Grades 9 through 12	1,963
Charter School	144
Total Enrollment	5,946

The economic downturn that began in 2008 had a significant impact on school enrollment. The chart below shows how annual school enrollment has changed since 2002. Projections for the 2012-2013 indicate that school enrollment could fall back to near 2002-2003 levels.

Forest Grove School District Enrollment

2002-2003	5,765
2003-2004	5,795
2004-2005	5,873
2005-2006	5,927
2006-2007	6,144
2007-2008	6,035
2008-2009	5,981
2009-2010	5,992
2010-2011	6,004
2011-2012	5,835
2012-2013	5,733



A number of factors may contribute to the decline in school enrollment. One possible factor is the loss of employment, especially construction jobs in the region, since the start of the economic downturn. Immigration has slowed due to fewer local job opportunities. As a result, some families have returned to their native countries.

Another factor contributing to the decline in school enrollment is the large number of housing foreclosures impacting the area. The foreclosure process is disruptive and may force some families to relocate to other areas to find shelter with family or friends.

Changes in state law could also affect enrollment in the short-term. State law allowing for “open enrollment” may reduce the number of students attending class in the Forest

Grove School District. Data from the School District suggests as many as 53 students may transfer to the Forest Grove School District from other districts. This number, however, will be more than offset by as many as 121 students transferring from Forest Grove to other school districts.

Given recent events, when will school enrollment likely return to the levels experienced in 2006-2007? It is unlikely that pre-recession housing and population growth will return for the foreseeable future. Housing preferences are changing, fuel costs continue to rise and budgets at all levels of government continue to be strained. Although prospects for robust growth appear weak, Forest Grove is well positioned to capture a larger share of the regional growth that does occur. Forest Grove has an adequate supply of vacant and buildable land for new single family dwellings, competitive water and electrical utility rates and proximity to job opportunities in western-Washington County. The supply of single family residential land is especially important given supply constraints expected to occur elsewhere in the Portland region. These trends indicate that enrollment in the Forest Grove School District will rebound and surpass pre-recession levels during the next decade. Expectations for long term enrollment growth are addressed more fully below following the discussion of school facilities.

Overview of Existing School Facilities

The Forest Grove School District has ten school facilities, two support facilities and a health center. Schools include one high school, one middle school, an upper elementary school, and eight elementary schools. The two support facilities include the central office and Taylor Way support annex. The district also operates a health center, located at the High School, for students and faculty.

Additional information about individual school district facilities follows.

Support Facilities

Central Office The Central Office facility is a one-story building, with a finished basement and a mechanical mezzanine. The building, located at 1728 Main Street in Forest Grove, was constructed in 1930-31 and was originally used as an elementary school. Due to non-conformance with seismic codes, student occupancy is no longer allowed. Major renovation of the building began in 1997. The building is approximately 271,548 square feet and is constructed of brick and concrete. The site is approximately 2.80 acres in area.

Taylor Way Support Annex – The Taylor Way Support Annex is located in near Fern Hill Road and Taylor Way in Forest Grove. The annex includes the district warehouse, maintenance area, bus barn and some office areas. The Annex also houses the Community Alternative Learning Center (CALC). The facility is two stories and was constructed in 1996 with a remodel in 2002. The facility is approximately 70,000 square feet. The site area is approximately 7.5 acres. The building includes tilt-up construction with a wood roof and a metal framing with wood roof.

Health Center The Forest Grove School Based Health Center, located at Forest Grove High School, is operated by the Virginia Garcia Memorial Health Center. Services are available to students and faculty of the Forest Grove, Banks, and Gaston School Districts. Services include immunizations, routine physical exams, treatment of minor illness and injury, vision and blood pressure screening, individual and family counseling. The health center accepts most private insurance and offers a sliding fee scale based on family income.

Elementary Schools

Harvey Clarke Elementary School Harvey Clarke Elementary School is a one story facility constructed in 1949 with an optimum capacity for 450 students and a maximum capacity of 511 students. Enrollment during the 2009-2010 school year at this facility is 490 students.

Harvey Clarke Elementary School serves most of northwest Forest Grove. This is the fastest growing part of the city with the greatest amount of developable residential land. Office additions to the building were completed in 1998. The building has a total area of 52,064 square feet and is of wood frame construction. The school site is 10.88 acres in area.

The following items were completed at Harvey Clarke Elementary School with bond funding between 2000 and 2005:

- Re-roof of areas that were originally installed before 1996;
- Replacement of glass block in gymnasium;
- Replacement of heating system;
- Replacement of domestic water lines;
- Replacement of storm damaged sun screening;
- Replacement of covered play structure;
- Replacement of asbestos floor tile;
- Abatement of asbestos pipe insulation.

Additional projects will be completed as part of the 2010 bond. These projects include classroom and student space, deferred maintenance, energy efficiency improvements, safety and security improvements and technological enhancements. Total cost for these projects is estimated at \$3.88 million (2010).

Joseph Gale Elementary Enrollment at Joseph Gale Elementary is approximately 318 students based on 2009-2010 data. The 2010 bond includes construction of a new Joseph Gale Elementary School. The new building will have a capacity of 500 students. This compares with the previous optimum capacity of 364 students and maximum capacity of 412 students. The new school will be 18,000 square feet larger than the old school building. Construction will meet a LEED silver or better rating. Sustainability initiatives include installing solar panels. The estimated cost of the project is \$20 million. The school site is approximately 11.44 acres in area.

Tom McCall Upper Elementary School Enrollment at Tom McCall Upper Elementary School is approximately 960 students. Optimum capacity is 800 students with a maximum capacity of 960 students.

Tom McCall Upper Elementary School includes two two-story buildings constructed in 2003. Tom McCall West has a capacity of 500 students. Tom McCall East has a capacity of 300, but is designed for expansion to accommodate an additional 200 students. The two buildings have a combined area of 72,000 square feet. The school site land area is 37.36 acres.

Completed bond work at the facility includes new facilities and renovation of the existing gymnasium at Tom McCall East. Planned improvements as part of the 2010 bond include installation of operable windows, lighting and HVAC upgrades, security and safety improvements and technological enhancements. Costs for these improvements are estimated at \$185,000.

Currently the Tom McCall facility is in excellent condition. The chart below summarizes improvements made:

- Expansion of Tom McCall East to accommodate 500 students
- Remodel mezzanines for access at gymnasium
- Remodel wall of library loft
- Track repairs.

Fern Hill Elementary School Fern Hill Elementary school located in Southeast Forest Grove currently has 310 students in kindergarten through fourth grade. The two-story facility was constructed in 2003 and is designed to allow expansion to house a total of 500 students. The building has a total area of 49,000 square feet. The school site is approximately 10 acres in area. The 2010 bond includes several planned upgrades to the facility including roof flashing installation, HVAC control upgrades, safety and security improvements and technology enhancements.

The Forest Grove School District has two elementary schools in Cornelius: Echo Shaw and Cornelius Elementary. Other elementary school facilities include Dilley Elementary and Gales Creek Elementary School.

Cornelius Elementary School has an optimum capacity of 364 students and a maximum capacity of 412 students. Current enrollment is approximately 419 students.

Echo Shaw Elementary School has an optimum capacity of 453 students and a maximum capacity of 513 students. Current enrollment is 465 students.

Dilley Elementary school serves the area south of Forest Grove. Dilley Elementary has an optimum capacity of 228 students and a maximum capacity of 258 students. Current enrollment is 290 students.

Gales Creek Elementary has an optimum capacity of 114 students and maximum capacity of 129 students. Gales Creek Elementary is the smallest school facility in the school district. The future of Gales Creek Elementary School is uncertain.

Middle School

Neil Armstrong Middle School Neil Armstrong Middle School is mostly a one-story building with an additional upper floor gymnasium area. This school has an optimum capacity of 1,725 students and a maximum capacity of 2,070 students. Current enrollment is approximately 957 students.

Neil Armstrong Middle School was constructed in 1970 with a partial remodel in 1996. A 9,000 square foot addition to the building in occurred in 2003. This school has approximately 946 students in seventh and eighth grades. The building is approximately 114,000 square feet and is comprised of predominately tilt-up construction. The site area is 42.92 acres.

The following items were completed at Neil Armstrong Middle School with bond funding between 2000 and 2005. These improvements include:

- Code upgrades
- Addition of seven classrooms
- Replacement of folding partitions with solid walls
- Re-roofing of the main building
- Barometric relief vents
- Boiler replacement with pumps
- HVAC direct digital control
- Domestic water line flow expansion and water line replacement
- New ceiling including installation of flame barrier
- Student locker replacement

Improvements planned as part of the 2010 bond include classroom and student space additions, ADA access to upper gymnasium, asbestos tile abatement and new flooring, track resurfacing, kitchen modifications, new bleachers to meet code requirements, lighting upgrades, safety and security enhancements, and technology improvements. The total estimated cost for these improvements is approximately \$2.6 million.

High School

Forest Grove High School The Forest Grove High School has an optimum capacity of 1,675 students and a maximum capacity of 2,079 students. Current high school enrollment is approximately 1,675 students. The building was completed in 1983 with approximately 15 additional classrooms added in 1997/1998. The building is approximately a combination of tilt-up concrete, poured concrete and steel frame construction. The building is approximately 271,571 square feet including 184,841 square feet on the first floor and 86,730 square feet on the second floor. The site area is approximately 37.01 acres.

The following items were completed at the Forest Grove High School with bond funding between 2000 and 2005:

- Welding station and electrical modification in the shop
- Additional heat in counseling area
- Electrical upgrade for parking lot lighting
- Building HVAC upgrades
- Chiller/condenser retrofit
- Computer lab cooling
- Extension of direct digital control
- Stadium handrail and bleacher repairs
- Parking lot seal coat
- Tennis court resurface
- Improvements to athletic fields

Projects planned as part of the 2010 bond include:

- Classroom and student space additions
- Completion of deferred maintenance items
- Energy efficiency enhancements
- Safety and security improvements
- Technology upgrades

The estimated cost for the projects is approximately \$36 million. Other bondable projects identified include stadium bleacher improvements, tennis court maintenance, construction of two additional fields on 20 acres adjacent to the school and stadium field lighting. These projects amount to an additional \$2.9 million in potential cost.

School Capacity

The following section addresses school capacity for various facilities in the Forest Grove School District. The optimum capacity is based on a class size factor for various grade levels. The Forest Grove School District uses factors to determine optimum and maximum school capacity. Factors are based on grade level and optimum or maximum number of students.

Grade Level	Optimum School Capacity Factor (students)	Maximum School Capacity Factor (students)
Kindergarten	20	23
Grades 1 and 2	22	25
Grade 3	25	28
Grade 4	25	28
Grade 5+	30	30

The table below shows the optimum and maximum capacity for each school in the district. Data is also provided for current enrollment. The estimated available capacity is based on comparing current enrollment with maximum capacity.

School Capacity Analysis

School	Optimum Capacity	Maximum Capacity	Enrollment (2009-2010)	Estimated Available Capacity
Fern Hill Elementary	317	359	315	44
Harvey Clarke Elementary	451	511	490	21
Joseph Gale Elementary	364	412	318	94
Tom McCall Upper Elementary	800	960	961	(1)
Neil Armstrong Middle	1,725	2,070	957	1,113
Forest Grove High School	1,675	2,079	1,675	404
Cornelius Elementary	364	412	419	(7)
Dilley Elementary	228	258	290	(32)
Echo Shaw Elementary	453	513	465	48
Gales Creek Elementary	114	129	115	14
Total	5,691	6,743	6,005	738

Land Need and Determination of Adequate Supply

ORS Chapter 195 requires that comprehensive plans include an analysis of the land required for school needs. The determination of land need requires an assessment of household and population growth. Household growth projections are used to determine the number of potential students resulting from new development in the community. A summary of household and population growth for Forest Grove is provided below. The household estimates are from Metro's growth projections developed in concert with cities and counties in the Portland region. A factor of 2.71 persons per household was used to estimate population for Forest Grove. This factor comes from the US Census Bureau's American Community Survey. Based on the household and population estimates school enrollment could increase by an additional 1,671 students between the year 2010 and 2030 due to new development in Forest Grove. Total Forest Grove School District enrollment from Forest Grove households will approach 6,170 students by the year 2030.

Forest Grove Household and Population Projection

	Households	Population
2010 Estimate	7,492	20,303
2025 Estimate	9,813	26,593
Difference 2025 – 2010	2,321	6,289
2030 Estimate	10,277	28,677
Difference 2030 – 2010	2,785	7,547

Population growth in Cornelius also impacts school enrollment. Approximately one-half of Cornelius is within the Forest Grove School District boundary. The other half of Cornelius is within the Hillsboro School District. A factor of 3.51 persons per household was used to estimate population in Cornelius. This number is based on American Community Survey data and reflects the larger household sizes in Cornelius. Based on the household and population estimates below, enrollment in the Forest Grove School District could increase by an additional 1,722 students due to future population growth in Cornelius. Therefore, total student enrollment in the Forest Grove School District could increase to 7,888 students at the end of the twenty-year planning period.

Cornelius Household and Population Projection

	Households	Population
2010 Estimate	3,518	10,544
2025 Estimate	5,369	16,107
Difference 2025 – 2010	1,851	5,553
2030 Estimate	5,738	17,214
Difference 2030 – 2010	2,220	6,660

Enrollment projections serve as the basis for estimating additional building area and land needs. The analysis of building needs, presented below, is based on estimates of building area required per additional student from the Beaverton School District. Land needs are based on prototypical site designs for various school types.

Estimated School Needs

School Type	Additional Students	Additional School Need	Additional Building Need (Square Feet)	Additional Land Need (Acres)
Elementary	779	1	65,000	13
Middle	341	< 1	44,300	-
High	380	< 1	53,200	-
Total	1,500			

Based on the information presented above, one additional elementary school may be needed by the year 2030. This translates into a land need of approximately 13 acres during the next twenty years. It may be possible to accommodate other school needs through expansion of existing facilities, installation of portable classrooms and reconfiguring existing space.

School Siting

The Oregon School Siting Handbook (Planning for Schools and Livable Communities, 2005) provides guidelines for selection of school sites. The Handbook recommends selecting school sites taking a variety of factors into. One such factor is transportation

cost. As the Handbook explains, a well sited school gives school children more transportation choice including walking and bicycling promoting physical health and well being. In addition, school locations that provide transportation options may reduce out-of-pocket costs to parents, the District for providing transportation and may reduce traffic impacting neighborhoods.

In addition to transportation choices, the Handbook recognizes that schools should serve as community focal points and neighborhood anchors:

“The school’s role as a community focal point is still seen today. Parents meet each other while taking their children to school. Neighbors bump into each other while walking their dogs on the school grounds. Grandparents attend the school play and recognize a friend from long ago. Through these informal interactions, social networks are formed that help people provide a stronger support system for children and feel more connected to their community.”

In other words, schools as neighborhood anchors promote a sustainable community that has lasting value. “A well sited school can turn a subdivision into a neighborhood.”
–The School Siting Handbook (2005), page 24.

Population projections by school age group (FGSD uses 0.6 students per household). This needs to be broken down further into school type.

The State of Oregon does not establish standards for adequate school sites. School districts, however, may adopt their own standards. The Council of Educational Facility Planners International (CEFPI) is a noted source for information about school facilities. The 2004 edition of the CEFPI updates prior recommendations for school standards. The standards now account for variations in educational programs or the difficulties in obtaining sizeable tracts of land in densely population areas. CEFPI now recommends calculating the amount of space needed based on program criteria.

School Site Characteristics

As part of the school facility planning process, state law requires that cities and counties identify desirable school sites in coordination with a school district subject to ORS 195.110. To assist with effort school may adopt standards for what constitutes a desirable school site. Such standards typically address needed land area, facility features and target enrollment by school type.

The Beaverton School district adopted guidelines for school site selection. These guidelines are presented below:

Elementary School Site

Site Size Range	7 to 10 acres
Significant Site Features	Covered Play Area Soft play area with play equipment Soccer field size grass area Room for portable classrooms
Typical Enrollment	725 students

Middle School

Site Size Range	15 to 20 acres
Significant Site Features	Covered Play Area – 4 basketball courts Soccer field(s) Football field(s) 4 – 6 tennis courts Baseball field(s) Softball field(s) Room for portable classrooms
Typical Enrollment	1,100 students

High School

Site Size Range	35 to 40 acres
Significant Site Features	Football Stadium Track and Field Area with bleachers baseball fields softball fields 4 -6 outdoor basketball courts Football practice area Marching band practice area 8 – 12 tennis courts Batting cages Field house and concessions Portable classrooms
Typical Enrollment	2,200 students

Alternatives to acquisition of additional land for school needs include assessing new ways to meet school related and/or recreational activities on-site, off-site or in other programmatic ways; assess existing school sites to determine optimal capacity; opportunities for joint partnerships with local agencies; and updated school designs.

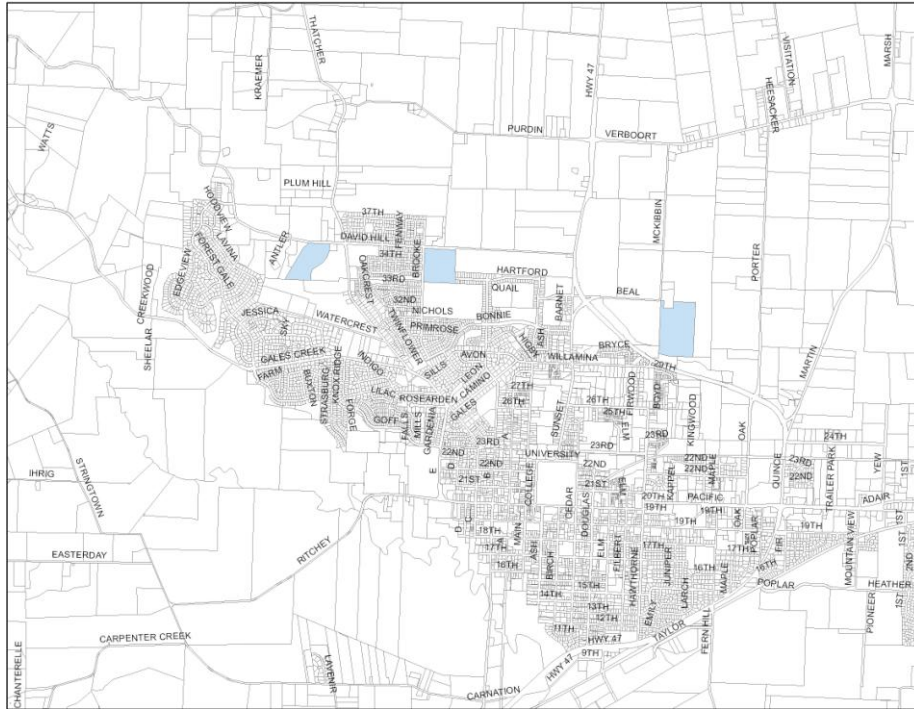
Efficiency measure may include portable classrooms; multi-story buildings (already planned for Joseph Gale School); shared use, and shared parking.

Future Development Sites

The school district owns three sites for future development. The sites include property adjacent to the Forest Grove High School, property south of David Hill Road adjacent to Thatcher Park and property on McKibbon Road north of Highway 47. The 2006 Master

Plan Report recommended that the District consider additional land acquisitions to fulfill future school facility requirements inside Cornelius and Forest Grove based on the existing urban growth boundary.

Future School Sites



Forest Grove High School Site – The District owns approximately 20 acres adjacent to the Forest Grove High School. The 2006 Master Plan recommended that the District reserve this parcel of land to accommodate future growth of facilities, parking and athletic fields for the high school. This site is being improved as part of improvements to the high school area as part of the 2010 bond.

David Hill Road Site – The District owns 17 acres of land south of David Hill Road west of Thatcher Park. The Forest Grove School District Board determined that this particular site is not very conducive for a school given the steep grade. The land is currently for sale.

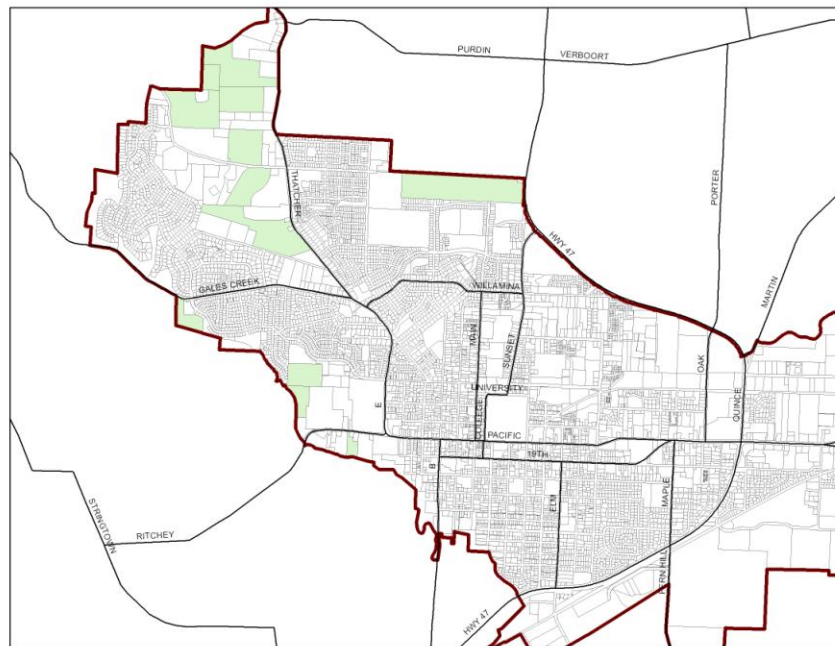
McKibbon Road Site – The District owns approximately 30 acres on McKibbon Road off of Highway 47 north of the Forest Grove city limits. The site is located outside of the urban growth boundary. This area has been designated as Rural Reserve by Washington County given the high quality agricultural land in this area. Under state law land designated as urban reserve is the priority for meeting development needs for a twenty- to fifty-year period after designation. This means the McKibbon Road area will not be developed unless state law is changed. The Master Plan recommends using a portion of the property for the Forest Grove High School Agriculture program.

Constructing a school on land beyond the urban growth boundary is a complicated and costly process. State law restricts a city's ability to provide urban services beyond the urban growth boundary. Schools must be built within urban growth boundaries to receive city services. If a school district decides to construct a school beyond the urban growth boundary the district must provide and pay for its own infrastructure. Oregon Revised Statutes Chapter 197.732 requires an application for an exception to the state land use planning goals to construct a school within three miles of an urban growth boundary.

To expand an urban growth boundary for a school site, the city would need to make a special needs argument consistent with the public facilities and services factor of statewide planning Goal 14. The application must identify clear standards for required school sites and must demonstrate that viable alternative sites do not exist within the boundary.

Buildable Residential Land

The map below shows the location of vacant and developable sites within the Forest Grove portion of the regional urban growth boundary large enough to accommodate elementary schools. The highlighted parcels are at least 10 acres in area and designated for residential development. Elementary schools are permitted as conditional uses within the City's residential development zones.



School Funding

ORS 195.110(5)(a)(D) Financial plans to meet school facility needs including an analysis of available tools to ensure facility needs are met.

Available financing tools include:

- General Obligation Bonds – voter approved property tax levy for capital construction and land acquisition. School District property tax rate in Forest Grove is \$8.2965 per \$1,000 of taxable assessed value. Local Sources: Property Taxes - \$8.9 million in (2009-2010)
- Construction Excise Tax – the Construction Excise Tax was passed by the 2007 Oregon Legislature. Under the law a school district may impose a construction excise tax on new structures and expansions. A school district may impose a \$1 per square foot charge of new residential construction and 50 cents per square foot for new non-residential construction. The city collects the Construction Excise Tax on behalf of the school district at time of building permit issuance. The proceeds may be used for capital projects and construction.
- Qualified Zone Academy Bonds (QZAB) – A QZAB is a non-interest bearing bond that the borrowing school pays back on 15 years. The QZAB is a federal program annually appropriated by Congress. The program is administered by the Oregon Department of Education. QZAB may be used for renovating and repairing buildings, investing in equipment and up-to-date technology, developing challenging curricula, training quality teachers. Eligible school districts are those where 35 percent or more of the students are eligible for free or reduced-price school meals. According to the Forest Grove School District 2010 Annual Report, 61% of district students receive free or reduced school lunches. A 10% match from a private business is required.
- State School Fund Grant
- Common School Fund
- State Managed Timber Revenue
- Miscellaneous Donations and Grants

True to Forest Grove's commitment to education, voters approved several bond measures to improve local school facilities. Bond measures were passed in 1994, 2000 and 2010. The 1994 measure provided funds for a new classroom wing at Forest Grove High School. The classrooms were constructed in 1998. The 1994 bond will be paid off in 2012.

The 2000 bond provided funds for the construction of Fern Hill and Tom McCall Elementary Schools. Completion of the new schools occurred in 2006. The 2000 bond will be paid off in 2021.

A \$65.3 million construction bond was approved by the voters in 2010. The bond will fund improvements to many schools in the district. Bond proceeds will fund construction of a new Joseph Gale Elementary school. The new school will replace the building originally constructed in 1954.

The Forest Grove School District does not anticipate moving forward with another bond measure until after 2021 at which time the 2000 bond will be paid off. Current bond

proceeds are adequate to fund necessary improvements to school facilities during the 10-year planning period required by ORS 195.110.

Northwest Regional ESD

The Northwest Regional Education Service District is a public entity responsible for providing special education instructional services and support services for 20 school districts in northwest Oregon. The Northwest Regional ESD serves school districts in Washington, Columbia, Clatsop, and Tillamook Counties. The regional office serving Forest Grove is located in Hillsboro. Funding for the ESD comes from a combination of property taxes, state timber tax receipts, the State School Fund, state and federal contracts and grants.

Pacific University

According to the Friends of Historic Forest Grove, Oregon's Pacific University is the oldest chartered university in the west. The Oregon Territorial Legislature granted its original charter as the Tualatin Academy in 1849. Pacific University is a private institution of higher learning with approximately 3,000 students as of 2010. Pacific University's undergraduate programs are centered in Forest Grove. The graduate studies have primarily migrated to the Hillsboro campus.

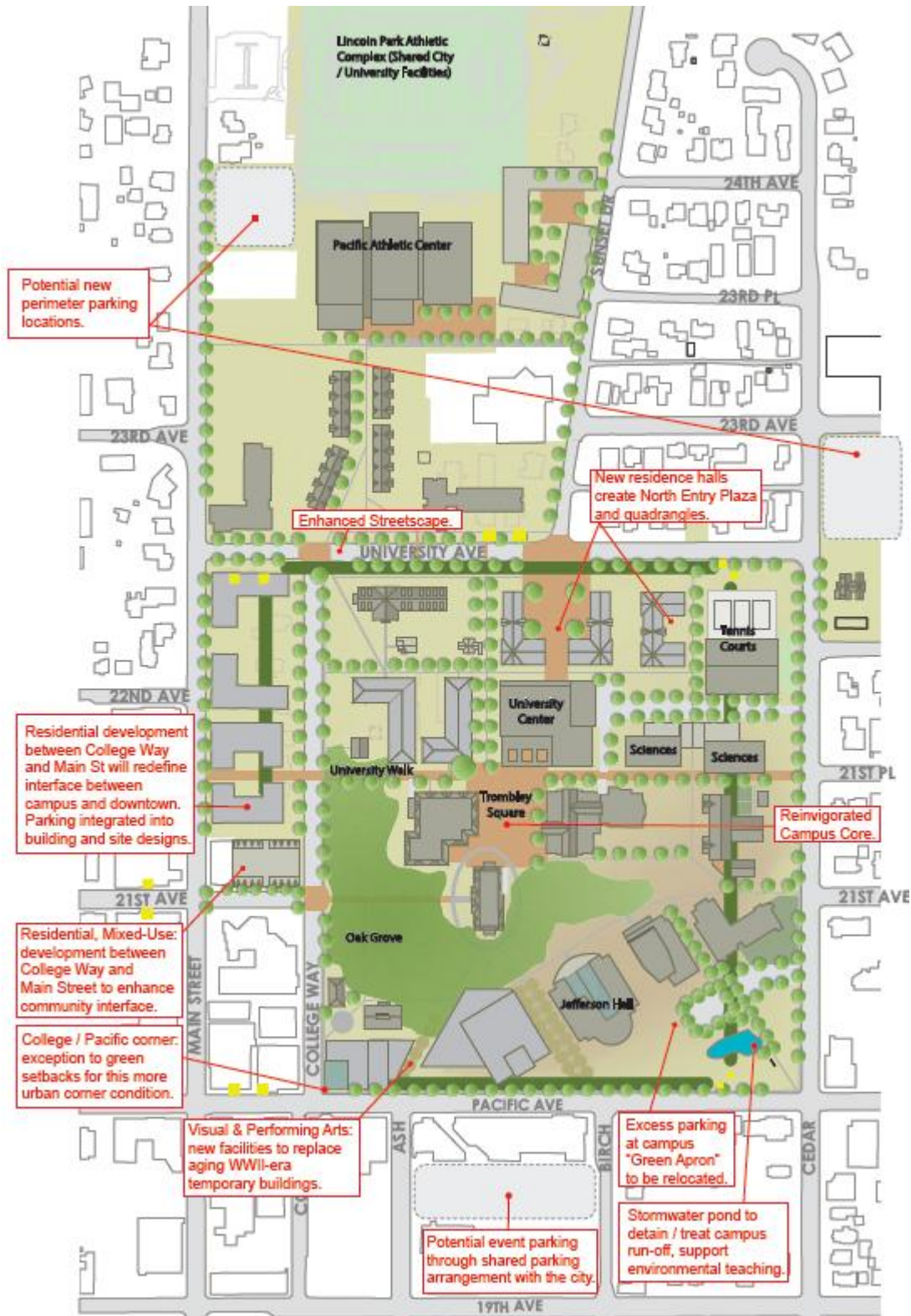
Pacific University has a well respected optometry program. In addition, Pacific University offers degrees in education, health professions and writing to a new a few.

Pacific University prepared a master plan in 2006 to guide long term development of the campus. The master plan is a companion to the Pacific University 2015 Campus Master Plan for the Forest Grove campus. In addition to guiding on campus planning, the master plan is intended to improve the integration between the University and community. The plan also provides a foundation for coordinated infrastructure planning.

Key Elements of Master Plan 2015

The master planning process included a review of all existing campus buildings as well as space allocation and facilities programming. With the launch of the Health Professions Campus in Hillsboro, large areas of classroom and office space on the Forest Grove campus will become available for new uses. An important aspect of the Master Plan is that it caps enrollment at the Forest Grove campus. Residential construction is planned for housing 80% of Forest Grove campus students. Replacement of functionally obsolete buildings is also proposed. In addition, modest expansion of existing academic buildings will occur as needed. Parking is also addressed in the Master Plan to reduce potential conflicts with the area surrounding the campus.

The diagram below shows the basic layout of the Forest Grove campus.



Enrollment Projections

The table below shows anticipated enrollment changes at the Pacific University Forest Grove Campus as described in the Pacific University Master Plan dated May 2012. The table shows a slight decline in enrollment at the Forest Grove campus between the 2005-2006 enrollment and build-out enrollment. However, the projected on-campus resident population is expected to increase significantly from 700 residents to 1,360 students.

Timeline	Health Profession	Other Grad Programs	College of Arts and Sciences	On-Campus Residents	Forest Grove Student FTE	Faculty and Staff FTE	Total Campus FTE
2005-06	748	144	1,225	700	2105	470	2,575
2006-07	243	136	1,273	860	1,640	400	2,040
Build-Out 10-15 yrs	0	230	1,700	1,360	1,930	370	2,300

Campus Housing

Pacific University has a goal of accommodating 80% of the undergraduate housing needs on-campus by the year 2015. Currently, there are 700 on-campus residents. This number should increase to 1,360 at build-out. Demand for off-campus housing should decrease as enrollment in Forest Grove declines and more students are accommodated on-campus. Therefore, the university will not have a significant impact on the demand for additional housing, especially apartments, near the campus.

Community Interface

The Master Plan addresses how the university integrates with the surrounding area and community. The Master Plan recommends reinforcing the physical, visual and perceptual linkages between the campus and the surrounding community of Forest Grove. In addition, the plan emphasizes fostering improved connections between the Pacific University campus and the City of Forest Grove and other community organizations

Coordinated Land Use and Transportation Planning

As the plan states” “With the Health Professions campus opening, connections between Forest Grove and the rest of the Portland metropolitan area will become more important for the University. The University plans to be an active partner with public agencies in pursuing improved transit service to the community.”

To this end the plan recommends:

- Working with all relevant agencies to plan for eventual light rail service to Forest Grove;

- Promoting a multi-modal system based on a balanced transportation network that allows for cars, buses, bicycle and pedestrians and in the long term either a high capacity bus lane, diesel motorized units, or light rail between the Forest Grove and Hillsboro campus; and
- Developing partnership for interim transportation projects such as shuttles and rideshare programs.

University District

The Master Plan recommends creation of a “university district” around the campus. This district would recognize the University environs as a distinct part of Forest Grove with specific characteristics that should be accentuated. In addition, the district would encourage the development of land uses that are inviting to students as well as people who work downtown or who are visiting from the surrounding residential neighborhoods or the larger metropolitan area. Design standards and guidelines could promote ground floor uses are pedestrian friendly, with windows, patios and pedestrian amenities that make the streetscape more inviting for pedestrians.

Sustainability Efforts

The long term sustainability of Pacific University is a shared goal of both the City and university. The university endeavors to construct new buildings that are designed to reduce the impact on the environment. The Master Plan recommends furthering sustainability efforts through enhanced energy and water conservation incentive programs, development of renewable energy systems, and construction of innovative systems for storm water and wastewater. In addition, the Master Plan supports creating a market for local producers of materials, goods and services needed by the university.

Amendments to Approved Master Plan

An application for an amendment to an approved master plan is addressed in Development Code. An amendment must address all relevant requirements similar to approval of a new master plan. Approval of an amendment is a legislative process requiring review by the Planning Commission with final action taken by the City Council. Review of the amendment is limited to the area affected by the amendment and does not include reconsideration of the master plan zone as a whole.

Portland Community College

Portland Community College has several campuses serving the Portland region including Forest Grove. The facility closest to Forest Grove is the Rock Creek Campus located on 185th Avenue, north of the Sunset Highway in the Bethany area of Washington County. The main PCC campus is located in southwest Portland near Interstate 5 and Barbur Boulevard.

Portland Community College also offers classes at the college’s Hillsboro Center in downtown Hillsboro. The Hillsboro Center opened during the winter of 2002. This

facility has upgraded technology, Internet access, a testing room, a study room, three classrooms, and computer lab, art classroom and common area. The Hillsboro Center offers a variety of university transfer classes and professional and technical courses. English as a second language is also taught at the Hillsboro Center. There is direct bus service from Forest Grove to the Hillsboro campus on Bus Line 57.

Expansion of Portland Community College programs in Forest Grove is not anticipated.

Vocational Schools

There are several private vocational schools offering training in select employment fields. Schools include the Northwest College of Hair Design in Hillsboro, Elite Truck School in Hillsboro and New Era Computers in Cornelius.

Goals and Policies

ISSUE

As the City of Forest Grove grows over the next two decades, the community must formulate plans to improve and expand existing educational facilities and service if the city is to meet the growing and changing needs of its residents. While in most cases present facilities and services are adequate, in the future many, if not all of these schools, will not be capable of handling anticipated student enrollment.

GOALS AND POLICIES

Local Goals

1. SUPPORT THE FOREST GROVE SCHOOL DISTRICT'S EFFORT TO PROVIDE COMPLETE EDUCATIONAL FACILITIES AND SERVICES THROUGH THE HIGH SCHOOL LEVEL.
2. SCHOOLS SHALL BE LOCATED IN RESIDENTIAL AND COMMERCIAL AREAS. THESE USES SHALL REQUIRE SPECIAL REVIEW CONSIDERATIONS.
3. SCHOOLS SHALL BE LOCATED TO SERVE RESIDENTIAL NEIGHBORHOODS.
4. IN PARTNERSHIP WITH THE FOREST GROVE SCHOOL DISTRICT DEVELOP A SCHOOL CAPACITY FORMULA AS A BASIS FOR EVALUATING PROPOSED CHANGES TO LAND USE POLICIES.
5. ADOPT STANDARDS AND CRITERIA FOR NEW SCHOOL FACILITIES BY FACILITY TYPE.
6. THE CITY OF FOREST GROVE AND CORNELIUS SHOULD WORK COOPERATIVELY WITH THE FOREST GROVE SCHOOL DISTRICT TO IDENTIFY SPECIFIC LOCATIONS FOR SCHOOL FACILITIES MEETING THE NEEDS OF THE SCHOOL DISTRICT AND INDIVIDUAL CITIES.
7. PROMOTE AND FACILITATE THE COORDINATED DEVELOPMENT OF NEW AND EXPANDED SCHOOL FACILITIES THROUGH ADOPTION OF A SCHOOL MASTER PLAN ZONE.

Local Policies

1. Cooperate with the School District to ensure opportunities for adequate school sites necessary to serve an expanding population.
2. Encourage the location of schools within the urban growth boundary and within walking distance for students.
3. Commercial and residential zones shall permit schools with standards for screening, landscaping, parking and access through conditional use procedures to reduce conflict with other uses.
4. School sites based on future growth and land use expectations shall be identified on the comprehensive plan map to serve existing and future neighborhoods.
5. Adopt an agreement with the School District for the use of their facilities for multiple use, particularly in summer recreation programs.
7. Encourage implementation of cost-effective alternatives to construction of new school facilities to meet projected enrollment needs.

Appendix A

Oregon Revised Statutes Chapter 195.110 Findings

195.110 School facility plan for large school districts.

(1) As used in this section, “large school district” means a school district that has an enrollment of over 2,500 students based on certified enrollment numbers submitted to the Department of Education during the first quarter of each new school year.

The Forest Grove School District has a 2009/2010 enrollment of nearly 6,000 students. This enrollment exceeds the minimum threshold for a large school district. Therefore, the requirements of ORS 195.110 are applicable to the Forest Grove School District and the City of Forest Grove Comprehensive Plan update.

(2) A city or county containing a large school district shall:

(a) Include as an element of its comprehensive plan a school facility plan prepared by the district in consultation with the affected city or county.

This element of the Forest Grove Comprehensive Plan is intended to serve as the school facility plan required under this section. This plan was prepared through a cooperative process between the City of Forest Grove and Forest Grove School District.

The Forest Grove School District also prepared a master plan in 2006 that identifies long term building needs. The master plan also provided the basis for passage of a successful bond measure approved in 2010 to fund priority needs.

(b) Initiate planning activities with a school district to accomplish planning as required under ORS 195.020.

The City of Forest Grove initiated planning activities with the Forest Grove School District as required under ORS 195.020.

(3) The provisions of subsection (2)(a) of this section do not apply to a city or a county that contains less than 10 percent of the total population of the large school district.

Forest Grove is the largest city served by the Forest Grove School District with an estimated population of over 20,000 persons in 2010. The estimated 2010 population of Cornelius is approximately 10,544 persons. Forest Grove represents approximately two-thirds of the population living in incorporated areas within the Forest Grove School District. The City of Forest Grove contains more than 10 percent of the total population of the Forest Grove School District. As a result, Subsection 2(a) applies to the City of Forest Grove.

(4) The large school district shall select a representative to meet and confer with a representative of the city or county, as described in subsection (2)(b) of this section, to accomplish the planning required by ORS 195.020 and shall notify the city or county of the selected representative. The city or county shall provide the facilities and set the time for the planning activities. The representatives shall meet at least twice each year, unless all representatives agree in writing to another schedule, and make a written summary of issues discussed and proposed actions.

The Forest Grove School District Business Manager was the assigned representative from the District participating in the planning process. The City and District met periodically to coordinate planning activities. Coordination activities include staff-to-staff meetings and joint meetings between the Forest Grove City Council and Forest Grove School District Board.

(5)(a) The school facility plan must cover a period of at least 10 years and must include, but need not be limited to, the following elements:

(A) Population projections by school age group.

The Forest Grove School District does not have a staff demographer or the resources available to prepare long-term population projections by school age group. For purposes of the Forest Grove Comprehensive Plan, the City estimated population by school age group for the year 2030. The City's estimate is based on long-term household and population projections, prepared by Metro, for the year 2030. Population for the year 2030 was assigned to school age groups based on the current (year 2010) distribution of population by age group. The City recognizes that this methodology is not as accurate as performing a cohort survival analysis. However, this technique is the best way to assess potential population by age group given available resources.

(B) Identification by the city or county and by the large school district of desirable school sites.

Need map of desirable school sites/buildable residential land.

(C) Descriptions of physical improvements needed in existing schools to meet the minimum standards of the large school district.

This was addressed by the 2006 Forest Grove School District Master Plan Report. The physical improvements identified in the Master Plan address needs for the minimum 10-year period required by ORS 195.110.

(D) Financial plans to meet school facility needs, including an analysis of available tools to ensure facility needs are met.

The 2006 Forest Grove School District Master Plan Report identifies costs for identified school facility needs. This information served as the basis for a bond measure

approved by voters in 2010. Revenue provided through the bond will ensure needs are met for the 10-year period required by ORS 195.110.

(E) An analysis of:

(i) The alternatives to new school construction and major renovation; and

This element of the Forest Grove Comprehensive Plan includes an analysis of alternatives to new school construction and major renovation. The Forest Grove School District has employed a variety of techniques to minimize new construction and major renovation where feasible such as placement of temporary classrooms, and adjustment enrollment boundaries.

(ii) Measures to increase the efficient use of school sites including, but not limited to, multiple-story buildings and multipurpose use of sites.

The Forest Grove School District has implemented measures to increase the efficient use of school sites including construction of multiple-story buildings, conversion of and old school to office space, and constructing classroom space at the Taylor Way support annex.

(F) Ten-year capital improvement plans.

Need to get something from the school district.

(G) Site acquisition schedules and programs.

(b) Based on the elements described in paragraph (a) of this subsection and applicable laws and rules, the school facility plan must also include an analysis of the land required for the 10-year period covered by the plan that is suitable, as a permitted or conditional use, for school facilities inside the urban growth boundary.

The Forest Grove School District owns one vacant site within the urban growth boundary large enough to accommodate school land needs during the twenty-year planning period addressed by the Forest Grove Comprehensive Plan.

(6) If a large school district determines that there is an inadequate supply of suitable land for school facilities for the 10-year period covered by the school facility plan, the city or county, or both, and the large school district shall cooperate in identifying land for school facilities and take necessary actions, including, but not limited to, adopting appropriate zoning, aggregating existing lots or parcels in separate ownership, adding one or more sites designated for school facilities to an urban growth boundary, or petitioning a metropolitan service district to add one or more sites designated for school facilities to an urban growth boundary pursuant to applicable law.

The Forest Grove School District has not determined that there is an inadequate supply of suitable land for school facilities for the 10-year period covered by the school facility plan.

(7) The school facility plan shall provide for the integration of existing city or county land dedication requirements with the needs of the large school district.

The Forest Grove Development Code addresses land dedication requirements associated with development. Existing land dedication requirements for access and infrastructure apply to school sites similar to any other type of development. These dedication requirements are based on state statute and case law taking into account the impact associated with the proposed development. Existing City code does not require the dedication of land by private developers for school needs. The city collects the School Construction Excise Tax for school needs at time of building permit issuance.

(8) The large school district shall: (a) Identify in the school facility plan school facility needs based on population growth projections and land use designations contained in the city or county comprehensive plan; and (b) Update the school facility plan during periodic review or more frequently by mutual agreement between the large school district and the affected city or county.

This element of the Forest Grove Comprehensive Plan addresses facility needs based on land use designations contained in the comprehensive plan and growth projections prepared in coordination with Metro.

(9)(a) In the school facility plan, the district school board of a large school district may adopt objective criteria to be used by an affected city or county to determine whether adequate capacity exists to accommodate projected development. Before the adoption of the criteria, the large school district shall confer with the affected cities and counties and agree, to the extent possible, on the appropriate criteria. After a large school district formally adopts criteria for the capacity of school facilities, an affected city or county shall accept those criteria as its own for purposes of evaluating applications for a comprehensive plan amendment or for a residential land use regulation amendment. (b) A city or county shall provide notice to an affected large school district when considering a plan or land use regulation amendment that significantly impacts school capacity. If the large school district requests, the city or county shall implement a coordinated process with the district to identify potential school sites and facilities to address the projected impacts.

The criteria for the capacity of school facilities contained in this document is presented for illustrative purposes only. The City and District may prepare criteria to be used for evaluation of comprehensive plan zoning code amendments. The criteria shall be incorporated into the Forest Grove Comprehensive Plan through a text amendment to the plan.

It is City of Forest Grove policy to provide notice to the Forest Grove School District when considering a plan or land use regulation that may impact school capacity. The Forest Grove School District has not requested that the City implement a coordinated process to identify potential school sites and facilities to address the projected school impacts resulting from development.

Public Facilities and Community Services

Introduction

This element of the Comprehensive Plan addresses the public facilities and community services needs necessary to accommodate growth expected over the next twenty years. This element of the Comprehensive Plan also addresses the requirements of Oregon Statewide Land Use Planning Goal 11: Public Facilities and Services and Oregon Administrative Rules Chapter 660, Division 11.

In general, the public facilities element establishes a framework for an orderly and efficient arrangement of public facilities and services for urban development. Under Goal 11 “A Timely, Orderly, and Efficient Arrangement” refers to a plan that coordinates the type, locations and delivery of public facilities and services in a manner that best supports existing and proposed land uses as shown on the Comprehensive Plan map. Under state law the public facilities element must address the following public facilities:

- Water;
- Sanitary Sewer;
- Storm Drainage; and
- Transportation

Cities and counties are free to include other public facilities and community services in the public facilities element. Other public facilities and community services identified in the public facilities elements include:

- Public Safety (Police and Fire);
- Health services;
- Energy;
- Parks and Cultural Resources;
- Solid Waste and Recycling;
- Communication services;
- Library; and
- Administrative Services

Oregon administrative rules establish requirements for public facilities plans. To comply with the rules public facility plans must include:

- Inventory and general assessment of the condition of significant public facility systems which support land uses designated in the acknowledged comprehensive plan;
- List of the significant public facility projects which are needed to support the land uses designated in the acknowledged comprehensive plan;

- Rough cost estimates for each public facility project;
- A map or written description of each public facility project’s general location or service area;
- Policy statement identifying the provider of each public facility system;
- An estimate of when each facility project will be needed to serve development. Timing should relate to planned population growth. Projects must be identified as either long term or short term.
- Under state law the public facilities element must include rough cost estimates for:
 - Sewer improvements
 - Water improvements
 - Transportation improvements
 - Provide estimate of the fiscal requirements to support the land use designations in the acknowledged comprehensive plan
 - Identification of existing funding mechanisms:
 - General Fund
 - General Obligation or Revenue Bonds
 - Local Improvement Districts
 - System Development Charges
- The City must also adopt:
 - A map and written description of the public facility projects locations or service areas as specified in (2) and (3)
 - Policies governing or urban growth management agreement designating the provide of each public facility system

A public facility element may allow for the following modifications to projects without amendment to the public facility plan:

- A. Administrative changes including modification to a public facility project that are minor in nature and do not significantly impact the project’s general description, location, sizing, capacity or general characteristics of the project
- B. Technical and environmental changes including final engineering
- C. Land use amendments significantly impacting a public facility project.

Planning Guidelines

The Oregon Administrative Rules provide guidelines for preparing public facilities plans. The guidelines state:

1. Plans providing for public facilities and services should be coordinated with plans for designation of urban boundaries, urbanizable land, rural uses and for the transition of rural to urban uses.
2. Public facilities and services for rural areas should be provided at levels appropriate for rural use only and should not support urban uses.

3. Public facilities and services in urban areas should be provided at levels necessary and suitable for urban uses.
4. Public facilities and services in urbanizable areas should be provided at levels necessary and suitable for existing uses. The provision for future public facilities and services in these areas should be based upon:
 - a. The time required to provide the service;
 - b. Reliability of service;
 - c. Financial cost; and
 - d. Levels of service needed and desired.
5. A public facility or service should not be provided in an urbanizable area unless there is a provision for the coordinated development of all the other urban facilities and services appropriate to that area.
6. Plans providing for public facilities and services should consider as a major determinant the carrying capacity of the air, land and water resources of the planning area. The land conservation and development action provided for by such plans should not exceed the carrying capacity of such resources.

Local Public Services Policy

1. It is the policy of the City of Forest Grove to require new development within the city limits to connect to public services for access, sewer, water and storm water unless private access is approved through the issuance of a land use permit.

For purposes of developing the public facilities plan the following household, population and employment estimates were used.

**Household, Population and Employment Estimates
Metro Gamma Estimate (September 2012)**

Households	10,380
Population	28,130
Employment	10, 380
Retail	1,747
Service	3,455
Other	5,343

Implementation

Public facility plans must provide for the implementation of recommendations. Implementation may include:

1. Capital improvement programming and budgeting should be utilized to achieve desired types and levels of public facilities and services in urban, urbanizable and rural areas.
2. Public facilities and services should be appropriate to support sufficient amounts of land to maintain an adequate housing market in area undergoing development or redevelopment.

3. The level of key facilities that can be provided should be considered as a principal factor in planning for various densities and types of urban and rural land uses.
4. Plans should provide for a detailed management program to assign respective implementation roles and responsibilities to those governmental bodies operating in the planning area and having interests in carrying out the goal.
5. Urban Growth Management Agreement (Washington County)

Service Providers

The following organizations provide public and community services within the Forest Grove planning area:

Police:	City of Forest Grove Police Department Washington County Sheriff
Fire:	City of Forest Grove Fire and Rescue
Water:	City of Forest Grove Public Works Department
Electricity:	City of Forest Grove Light and Power Department
Natural Gas:	Northwest Natural
Communications:	Various Private Service Providers: Telephone: Frontier Comcast Fiber Optic: Frontier Comcast Cable Television: Frontier Communications Comcast Cellular Telephone: Multiple Carriers Satellite Television: Multiple Providers
Healthcare:	Forest Grove Community Hospital (Tuality Healthcare)
Solid Waste:	Waste Management Corporation

Water System

The Forest Grove Water Master Plan was updated in August 2010. The purpose is the update was to evaluate water system facilities serving Forest Grove and determine water supply requirements and system improvements needed to serve expected housing and employment growth of the City. The Forest Grove Water System generally serves the area within the Forest Grove city limits and adjacent unincorporated lands within the Forest Grove portion of the Portland regional urban growth boundary (OAR 660-011-0010(d)). The Forest Grove water system also serves the Gales Creek unincorporated community northwest of Forest Grove. Consistent with Statewide Land Use Planning Goal 11 (Public Facilities), provision of water to the Gales Creek community does not allow for an increase in development in the Gales Creek Community due to availability of water service from the City of Forest Grove.

Local water providers include the City of Forest Grove Public Works Department, Joint Water Commission, and Tualatin Valley Irrigation District.

The 2010 Master Plan updates the City's 2000 Water Master Plan document. The Water Master Plan is a public facility plan as defined by OAR 660-011-0005. The Water Master Plan is a supporting document to the Forest Grove Comprehensive Plan and the analysis, findings and recommendations contained in the August 2010, Water Master Plan Update are incorporated into the Forest Grove Comprehensive Plan by reference.

The Water Master Plan provides an assessment of water supply requirements based on updated population and water demand forecasts. The Water Master Plan identifies distribution system deficiencies, recommends water system improvements and includes project cost estimates. The Water Master Plan partially fulfills the requirements of Statewide Land Use Planning Goal 11: Public Facilities and Services. The Water Master Plan also substantially complies with the water system master planning requirements under Oregon Administrative Rules Chapter 333, Division 661. In addition, the Water Master Plan substantially complies with the water system master planning requirements under Oregon Administrative Rules Chapter 333 - Division 61 - Section 60.

Chapter 3.800-3.812 and 4.005-4.135 of the City of Forest Grove Municipal Code establishes regulations for the Forest Grove water utility. Section 3.804 establishes procedures for establishing water system development charges. The water system development charge funds a portion of the cost of capital improvements for water storage, transmission, treatment and distribution.

History

The first public water system for the City of Forest Grove was built circa 1908. A water intake was constructed on Clear Creek, a tributary of Gales Creek. A transmission line, constructed of logs with a ten-inch hole bored through the center, conveyed water from the intake to the present site of the water treatment facility on

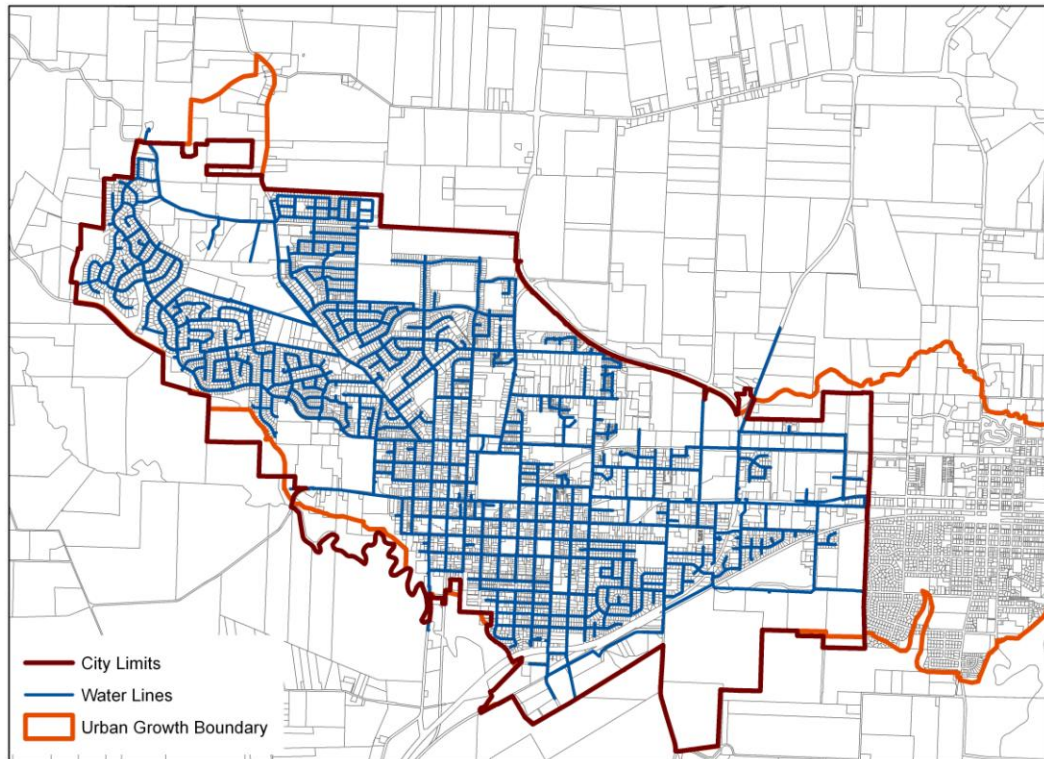
Watercrest Road. The water was stored in a concrete reservoir built at the same time as the intake and transmission line. The reservoir is still in use as the settling basin for the water treatment plant.

A five million gallon water reservoir was constructed in 1947 about the same time as an improved water treatment plant. This is reported to be one of the first rapid sand filter treatment facilities built in Oregon. During 1978 the water treatment plant was rebuilt. Construction was completed in 1980. The facility has a firm capacity of approximately 3.7 million gallons per day.

The City's water distribution system serves approximately 5,800 customers within the urban growth boundary. The water distribution system includes 78 miles of water main supplying approximately 1,000 million gallons of water during Calendar Year 2010.

The following map shows the water distribution system currently serving Forest Grove.

Water Lines



Water Supply

The City of Forest Grove has rights to the following sources of water: Clear Creek, Gales Creek, Roaring Creek, Tualatin River, Scoggins Reservoir, and Barney Reservoir. The City has intake facilities within the Clear Creek watershed. In addition, the City has a 16-inch diameter raw water transmission main from the Clear Creek basin to the City's water treatment plant located in the northwestern Forest Grove. The water treatment plant has a firm plant capacity of 3.7 million gallons per day. The plant is of conventional design, consisting of rapid mix, flocculation, sedimentation, and rapid sand filtration. Filtered water is piped by a gravity system.

The City of Forest Grove is a member of the Joint Water Commission (JWC). Other members of the JWC include Hillsboro, Beaverton, and the Tualatin Valley Water District. The Joint Water Commission provides the primary potable water supply to approximately 425,000 customers within Washington County including approximately 50% of the City of Forest Grove's water supply needs on an annual volume basis. Joint Water Commission facilities include the water treatment plant located on Fern Hill Road south of the City, intake pump, two reservoirs and main transmission lines. The JWC water treatment capacity is approximately 75 million gallons per day. The City of Forest Grove's approximate capacity ownership is 10%. The ownership percentage is used by JWC to allocate capital costs.

Pressure Zones and Service Areas

The City of Forest Grove water distribution system supplies three pressure zones and an outside service area.

The main (lower) pressure zone includes most of the City of Forest Grove. The reservoir at the City water treatment plant site and the pressure reducing station of the Joint Water Commission supply line hydraulically serve the main pressure zone. The minimum elevation of the lower pressure zone is 155 feet and the maximum is 250 feet. The lower pressure area serves approximately 1,685 acres with 5,970 connections.

The intermediate and upper pressure zones are located in the northwest corner of the City. These pressure zones are served from the main pressure zone by the David Hill pump station, Watercrest pump station and the David Hill reservoir. The minimum elevation of the intermediate pressure zone is 230 feet and the maximum is 320 feet. The intermediate pressure zone serves approximately 51 acres with 182 connections.

The upper pressure zone serves the Valley Crest, Flemming, and Lavina area of Forest Grove. The minimum service elevation is 300 feet and the maximum elevation is 445 feet. The upper pressure zone serves approximately 120 acres with 593 connections. The "hilltop" area above the 440 foot contour elevation is not serviceable from the existing water system.

The Gales Creek Service Area is outside of the city limits. This service area includes the water customers originally served off the 16-inch raw water supply line running along Gales Creek to the City of Forest Grove water treatment plant. The Gales Creek service area is at an elevation of approximately 250 feet to 300 feet. The Gales Creek service area serves 57 connections.

Distribution System

The City of Forest Grove Water System includes intake facilities within the Clear Creek watershed in the Coastal Mountain Range foothills northwest of Forest Grove. This includes intake facilities on Clear Creek, Roaring Creek, Thomas Creek, Deep Creek, and Smith Creek. The 16-inch diameter raw water transmission main from the Clear Creek basin intake facility to the City's water treatment plant is approximately seven miles long.

The City of Forest Grove water treatment plant has a firm plant capacity of 3.7 million gallons per day. The plant consists of rapid mix, flocculation, sedimentation and rapid sand filtration.

Forest Grove Water Treatment Plant



The filtered water is piped by gravity to the City's main 4.27 million gallon covered reservoir located adjacent to the water treatment plant. The City's 1.0 million gallon reservoir was constructed in 1985. This facility is located on David Hill Road outside the city limits.

The City's water distribution system has three pumping facilities:

- Raw water booster pump station along the transmission main to the City water treatment plant;
- David Hill pump station; and
- Watercrest pump station

The David Hill pump station was the primary means to pump water from the main (lower) pressure zone to the David Hill reservoir. The Watercrest pump station is currently the primary pump station feeding the David Hill reservoir and the upper pressure zone. The David Hill reservoir is now used as the back-up.

The water distribution system is comprised of piping ranging in size up to 24 inches in diameter. Pipe types include cast iron, ductile iron, copper, steel, wrought iron, galvanized iron, and polyvinyl chloride (PVC). Newer distribution piping is primarily ductile iron. The distribution system contains approximately 78 miles of distribution main pipelines.

Water System Performance Measures

- Collect approximately 180 samples annually to meet requirements of the Oregon Health Division and ensure clean and safe water.
- Replace meters after 15 years of service
- Test meters greater than 2 inches annually.
- Test 12% of the distribution system per year for leaks
- Flush distribution system annually
- Respond to service interruption within 24 hours

Water System Performance Goals

- Provide adequate water supply to meet the present and future water needs of the community
- Maintain and manage the City watershed for water supply quality and sound forest environment
- Provide reliable and efficient water treatment facilities
- Ensure sufficient water flow for all water use, including fire suppression, by maintaining the reservoirs, pump station, piping and fire hydrants throughout the distribution system
- Provide efficient metering of all water to assure fair allocation of costs and maintain reasonable water rates
- Construct pipelines and other facilities necessary to replace those that are aged and defective or to serve expansion of services
- Safeguard the water distribution system from contamination by providing a backflow prevention program
- Continue partnership with the Joint Water Commission (JWC)

Water System Recommendations

Capital Improvement	Purpose	Cost (2010) Million	Implementation
Water Rights Strategic Plan	Supply	\$0.03	Short Term
Tualatin Valley Irrigation District Supply Option Study	Supply	\$0.045	Short Term
JWC Transmission Line Emergency Intertie (Heather St.)	Transmission	\$0.25	Short Term
JWC Parallel Supply Line (18" 6mgd capacity)	Transmission	\$3.5	Long Term
Raw Water Booster Station Upgrade	Transmission	\$0.2	Long Term
Raw Water Transmission Line Replacement	Transmission	\$2.5	Long Term
Gales Creek Source Improvements	Supply	\$2.5	Long Term
TVID Supply Plan Transmission Extension	Transmission	TBD	Long Term
JWC Barney Reservoir Buy-Back	Supply	\$1.5	Long Term
TBWSP Water Supply Future Buy-In	Supply	TBD	Long Term
Scoggins Seismic Retrofit	Supply	\$4.9	Long Term
JWC ASR Future Buy-In	Supply	TBD	Long Term
Watershed Road Improvements	Other	\$0.02	Short Term
Fish Screen at Fern Hill Pump Station	Transmission	\$0.320	Long Term
Raw Water Pipeline	Transmission	\$2.7	Long Term
Water Treatment Plant Safety and Ops. Improvement	Treatment	\$0.03	Short Term
Mechanical Sludge /Residuals Collection System	Treatment	\$0.15	Short Term
Plate Settlers and Launder Replacement	Treatment	\$0.7	Short Term
TVID Supply Treatment Modifications	Treatment	TBD	Long Term
Forest Grove Water Treatment Plant Major Maintenance	Treatment	\$0.01	Short Term
Land Acquisition for Upper Zone Storage	Storage	\$0.1	0-5 years
Land Acquisition for Lower Zone Storage	Storage	\$0.1	0-5 years
Land Acquisition for David Hill Area	Storage	\$0.1	20+ years
0.30 MG Upper Reservoir 1	Storage	\$0.35	0-5 years
0.30 MG Upper Reservoir 2	Storage	\$0.35	11-15 years
2.25 MG Lower Reservoir	Storage	\$2.13	6-10 years
Flow/Pressure Improvements	Distribution	\$1.9	0-5 years
David Hill Road Waterline	Distribution	\$0.24	0-5years
Watercrest Road Pump Station Upgrade	Distribution	\$0.075	TBD
Industrial Area – 23 rd /24 th Avenue	Distribution	\$0.25	0-5years
Line Oversizing Participation	Distribution	\$0.05	Annual
Water Master Plan Update (every 6 years)	Other	\$0.125	6-20 years
Asset Management Program	Other	\$0.10	0-5 years
Joint Water Commission Commitments	Other	\$6.1	0-20 years
Tualatin Basin Water Supply Commitments	Other	\$5.3	0-20 years
Total			

Project costs were prepared using a combination of similar project costs, RS Means 2006 data, and September 2007 Engineering News Record Construction Cost Index. Total project cost was calculated by multiplying the base cost of construction times a non-construction cost factor. This factor includes contractor mobilization, contractor overhead and profit, and a planning level contingency.

Funding

The following funding sources are general used to fund the water system:

- Water System Development Charges
- Water Rates (Two Components)
 - Fixed Charge
 - Volume Charge

Local improvement districts and reimbursement districts may also be used to fund water infrastructure. Under a local improvement district benefitting properties are charge an assessment to fund the cost of infrastructure. Under a reimbursement district the City pays for the infrastructure and the City is reimbursed when property is sold or developed.

Water Service Goals

1. Water facilities shall be designed and sized to serve the need of future land uses as designated in the Forest Grove Comprehensive Plan map.
2. Protect and restore the natural systems that underpin watershed health and hydrological integrity¹.
3. The Water Master Plan shall be incorporated as part of the Forest Grove Comprehensive Plan.

Local Policies

1. A master plan including prioritized lists of capital improvement needs shall be adopted for provision of water service. This plan shall be based on future land use policies and needs.
2. All future development shall be required to comply with the adopted water master plan, Municipal Code including Development Code and the City of Forest Grove Engineering Specification.
3. The sizing of municipal water facilities shall follow land use plan designations and concentrate development close to the City Center.
4. Water easements shall, if possible, be incorporated in the Comprehensive Plan as part of an open space and trail system.
5. The master plan element for water shall include design for the adequate provision of these facilities for those areas designed in the land use plan for industrial use. These design requirements shall serve as the City standards for services to industrial areas.

¹ ICLEI, Sustainability Goals and Guiding Principles, October 2010.

6. The City of Forest Grove will develop a capital improvement program that will provide water for the processing of agricultural products when economically feasible.
7. The Master Plan for water shall be designed for service to at least the Year 2030 and be adopted as part of the Comprehensive Plan.
8. Recommendations for capital improvement needs relative to the water facility shall be included in an adopted Capital Improvement Program.
9. Develop, adopt, and achieve, local water conservation and demand management goals.
10. Protect, enhance and restore the water quality of the region through sound management of the City's watershed including to the maximum extent practicable the integrity of streams, wetlands, and floodplains.
11. Promote the protection of natural areas along waterways and enhancement of quality.
12. Retain the City of Forest Grove's regional competitive cost advantage for water service.

Storm Water (Drainage) System

As the City of Forest Grove develops during the next twenty years, the City and Washington County Clean Water Services must plan and construct storm drainage facilities to improve and expand upon the existing system. Clean Water Services, a special district of Washington County, operates and maintains the regional surface water management system. The principal aim is keeping the Tualatin River clean and healthy for fish and other ecosystems. The City of Forest Grove operates a local surface water management utility.

Storm drainage facilities should convey storm runoff to the desirable discharge point in sufficient time to avoid potential damage and inconvenience during storm events. An economic balance exists between the cost of drainage structures and the direct and indirect costs of possible damage to property and inconvenience to the public over time.

The City of Forest Grove Storm Water (Drainage) Master Plan was updated in 2007. The purpose of the update was to analyze the City's existing storm water system for current hydraulic adequacy and system performance based on future land use requirements. The update was prepared by Kennedy/Jenks Consultants. The analysis, findings, conclusions and recommendations contained in the 2007 Storm Drainage Master Plan is incorporated into the Forest Grove Comprehensive Plan by reference.

Storm water drainage is an identified facility plan under Statewide Land Use Planning Goal 11: Public Facilities Planning (OAR 660-0011-0005(7)).

The update of the Storm Drainage Master Plan included the following work:

- Review of stormwater system inventory data;
- Review of system map including existing system service areas and basin boundaries;
- Describe the existing system and inventory of known problem locations;
- Prepare land use projections as a basis for formulating flow projections;
- Develop, validate, and analyze the stormwater using the PC-SWMM hydraulic modeling program. The PC-SWMM model is consistent with the methodology used by Clean Water Services;
- Identify and prioritize capacity deficiencies and needs forming the foundation for the Capital Improvement Program;
- Categorize the model results with regard to the amount of the surcharge and the depth to overflow. This shall include prioritizing existing pipes based on existing conditions;
- Prepare a Capital Improvement Program identifying recommended capital improvements and estimated project costs for a 20-year planning period; and
- Describe the general funding mechanisms and programs available;

Hydrology

The City's planning area within the Portland regional urban growth boundary abuts two major Tualatin River tributaries: Council Creek and Gales Creek. The City includes 7 major drainage basins with a total combined acreage of approximately 3,860 acres.

Conveyance System

The conveyance system is composed of open drainageways, ditch systems, gravity storm drainage pipelines and 1 pump station. The Storm Drainage Master Plan identifies approximately 245,000 feet of storm pipeline that is the responsibility of the City.

Storm Water Capital Improvement Program

Project Number	Project Name	Description	Cost (2007)	Timing
07-1	Alyssum and Twinflower	Replacement of 12" and 18" line with 550' of 21" line. This will increase the system flow capacity to 16 cubic feet per second.	\$135,000	6-10 years
07-2	Bonnie and B Street	Add two new catch basin near intersection to collect water runoff more efficiently	\$113,000	0-5 years
07-3	Cedar Street Gravity	New gravity pipe system running north along Pacific Avenue property and discharging near 26 th Street.	\$368,000	6-10 years
07-4	26 th Street to Willamina	Restoring or rebuilding the stream from 26 th Avenue to Willamina.	\$352,000	0-5 years
07-5	Hawthorne & 23 rd Street	Stream restoration along the open channels and culvert replacements at Hawthorne Street and the railroad. This project will require long-term construction phase easements, or land acquisition.	\$342,000	0-5 years
07-6	Higby Lane Project	Stream restoration/excavation along the open channel pathways downstream of Willamina Avenue. This project will require long-term and construction phase easements or land acquisition.	\$230,000	6-10 years
07-7	Beal Pond	The existing pond develops water surface greater than crown of influent culverts. Pond influences upstream flows. Install continuous stage recording device to monitor the frequency of specific high water elevations.	\$26,000	0-5 years
89-1	Basin 1	Provide a piping system along Baseline Road between approximately Yew Street and the Forest Grove east city limit boundary. This project is needed to minimize maintenance and traffic safety concerns in the area.	\$128,000	0-5 years
89-2	Basin 2	Construct new storm sewers along Yew Street.	\$85,000	6-10 years
89-5	Basin 5	Construct new storm line should be run from the intersection of 17 th Avenue and Hawthorne Street in an easterly, downstream direction towards an existing storm line near Kingwood Street. This project is need to pick-up the slow draining intersection at 17 th and Hawthorne.	\$134,000	0-5 years

89-6	Basin 6	Improve outfall to Basin 6 crossing Tualatin Valley Highway.	\$54,000	0-5 years
89-10	Basin 10	The main channel system downstream of Willamina Avenue should be improved for stream restoration capable of safely conveying storm flows through the area.	\$257,000	6-10 years
89-11	Basin 11	Improve storm water drainage along Thatcher Road. System surcharging should be addressed in the vicinity of Willamina just southwest of the intersection of Thatcher Road and Gales Creek Road. This project should include preliminary survey and investigation to address existing grades and pipe condition. B Street and Camino Drive (north of 26 th Avenue). This project is needed to convey all flow to the north to the existing storm system further downstream in B Street. This project is needed to eliminate maintenance problems where the existing system currently directs flow to the northeast near Higby Lane.	\$271,000	6-10 years
89-15	Basin 15	Long term drainage improvements are recommended in the area in the David Hill Road/Thatcher Road area to accommodate new development. Improvements include over 1,200 feet of new piping, manholes, pavement replacement, and catch basins.	\$336,000	6-10 years
89-16	Basin 16	This is a large drainage basin that also includes territory outside the urban growth boundary along Thatcher Road. Approximately 1,000 feet of new piping ranging in size from 15' to 24", manholes, pavement replacement and catch basins.	\$185,000	6-10 years

Funding Mechanisms

The City's surface water management/drainage program is funded through two primary sources:

- Surface Water Management System Development Charge
- Surface Water Management Fee

Clean Water Services sets the rates throughout their service district. The Clean Water Services service district includes the cities within Washington County and most of the urban unincorporated area. The surface water management fee is comprised of two components – a regional fee and local fee. The fee is based on the impervious surface of a property. Clean Water Services sets both components through their Board of Directors which is made-up of the Washington County Commissioners. Cities are allowed to add or modify the local component of the fee.

Local Goals

1. Storm sewer facilities should be designed to mitigate runoff conditions based on future land uses shown on the Forest Grove Comprehensive Plan map as determined by the City Engineer.
2. Storm sewer facilities should co-locate to complement other infrastructure facilities and to avoid conflicts.
3. The City of Forest Grove Storm Drainage Master Plan shall be incorporated as part of the Comprehensive Plan.
4. Reduce storm water inflow and infiltration into the collection system².
5. Reduce storm water runoff by encouraging the use of low impact design techniques.
6. Design and maintain an integrated water, storm water, and waste water system that reduces pollution and protects and restores ecological systems, minimizes energy use and maximizes efficiency³.

Local Policies

1. All future developments shall be required to comply with the Storm Water (Drainage) Master Plan, Development Code and City Engineering Specifications related to storm water runoff.
2. Design of storm water facilities shall support Comprehensive Plan land use designations.
3. Drainage easements, if possible, shall be incorporated as part of open space and trail systems with City Engineer approval.
4. All future storm drainage facilities shall be designed for 5-year frequency storms using runoff conditions based on Forest Grove Comprehensive Plan land use designations.
5. A list of capital improvements for storm water drainage needs shall be incorporated into the City's Capital Improvement Program based on budgetary constraints.
6. Encourage sustainable development practices to reduce stormwater runoff
7. Promote the urban forest and recognize the positive benefits of the urban forest in managing stormwater.
8. Encourage "green street" standards including the planting of street trees and use of pervious surfaces in appropriate locations.
9. Manage stormwater runoff so that it is retained as close as practicable to the site at which development or redevelopment occurs.
10. Ensuring to the maximum extent practicable the quantity of stormwater leaving a site after development is equal to or better than before development.
11. Promote the incorporation of natural watershed systems into future planning and design processes to mitigate impacts of development.
12. Inspect grease and oil separators in all food establishments.⁴

² From 2012-2013 Budget

³ ICLEI, Sustainability Goals & Guiding Principles, October 2010.

⁴ From 2012-2013 budget.

Sanitary Sewer System

The City of Forest Grove operates a local sanitary sewer utility that feeds into the regional sanitary sewer system operated by Clean Water Services. Clean Water Services operates and maintains the regional sewer system including the large conveyance pipes over 24 inches in diameter and the wastewater treatment plants. One wastewater treatment plant is located in southern Forest Grove east of Fern Hill Road and south of Highway 47. Under an intergovernmental agreement with Clean Water Services, the City shares a proportional share of the revenue for the regional system.

The City's sewer utility is responsible for the safe and efficient operation and maintenance of the local sanitary sewer system. The City's Administrative Services Department performs utility billing services and provides customer service related to billing.

Clean Water Services updated the regional Sanitary Sewer Master Plan in 2009. This master plan is incorporated into the Forest Grove Comprehensive Plan by reference. The primary purpose of the Sanitary Sewer Master Plan is to provide a capacity assessment of the Clean Water Service wastewater collection facilities, and to identify improvement necessary to extend service into anticipated growth areas. A key objective of the capacity assessment is to identify physical improvements needed to reduce the risk of unanticipated discharges (sanitary sewer overflows) as flows increase over time. The master plan includes recommendations to ensure conformance to water quality standards.

Goals

1. Sewer facilities shall be designed and sized to serve the need of future land uses as shown on the Forest Grove Comprehensive Plan Map⁵.
2. Maintain a reliable collection system, to transport sewerage to the Clean Water Services conveyance system, and then to the Clean Water Services treatment facility⁶.
2. Sewer facilities shall be located in a manner to complement other infrastructure improvements and reduce conflict with incompatible uses, be guided by existing uses and be subject to special review considerations⁷.
3. The Sewer Master Plan shall be incorporated as part of the Forest Grove Comprehensive Plan⁸.

⁵ From 1980 Comprehensive Plan

⁶ From 2012-2013 Budget

⁷ From 1980 Comprehensive Plan

⁸ From 1980 Comprehensive Plan

Policies

1. To ensure adequate sewerage collection within the Forest Grove planning area, the City shall advocate for the installation of needed trunk lines to serve planned development on the north and northwest part of the urban growth boundary.
2. A master plan including prioritized lists of capital improvement needs shall be developed and adopted for sewer service. The capital improvement program shall be based on future land use policies, needs, and budgetary constraints.
3. All future development shall be required to comply with the sewer master plan, adopted engineering design standards, and requirements of the Forest Grove Municipal Code including the Development Code.
4. The sizing of sewer collection lines shall support land use plan designations and concentrate development close to the City Center.
5. Sewer easements shall, if possible, be incorporated as part of an open space and trail system.
6. The planned sewer system shall include criteria for the adequate provision of sewer services for those areas of the community identified on the Forest Grove Comprehensive Plan map for industrial use including the needs of food processing businesses.

Capital Improvement Plan

Basin	Improvement Category	Length of Sewer (ft)/ Number of Pump Stations	Estimated Cost (Million \$)
Forest Grove	Upgrades to Existing Gravity Sewers	5,297	\$1.3
Forest Grove	Upgrades to Existing Pump Stations and Force Mains	3	\$5.5
Forest Grove	New Gravity Sewer Extensions	7,126	\$2.0
Forest Grove	New Pump Stations and Force Mains	1	\$2.3
Total			\$11.1

Funding

Sewer Fund - Clean Water Services sets the sanitary sewer system rates throughout the Clean Water Services district which includes the City of Forest Grove and most of the unincorporated area within the urban growth boundary. The sewer fee is comprised of two components – a regional component and a local component. Clean Water Services sets the rate for both components through the Clean Water Services Board of Directors which is made-up of the Washington County Commissioners. Cities are allowed to modify the local component of the rate in order to properly fund local sewer services.

Sewer SDC - The sewer system development charge (SDC) is an assessment provided under Oregon Law which is paid at the time a connection permit is issued by the City. The SDC is based on the cost of using capacity previously built into the system. The

amount of the charge is proportional to the impact of the service and is therefore based on the number of water use fixture units in a building.

Clean Water Services is the regional authority for sewerage collection and treatment. The SDC revenue is allocated as follows: 80% to Clean Water Services and 20% to the City of Forest Grove. The City uses the revenue to increase capacity of sewer collection lines and participation in proportional costs associated with construction large trunk lines. The City is responsible for lines 21 inches in size and below. Clean Water Services uses the revenue to increase the capacity of large conveyance pipes and wastewater treatment facilities need to accommodate growth.

Other funding sources include reimbursement districts and local improvement districts. The City Council may establish reimbursement districts or local improvement districts to fund the extension of sanitary sewer lines. Under a reimbursement district, the city funds the cost of extending and is reimbursed for eligible costs as property develops or is sold. Under a local improvement district, the City funds the cost of extending the sewer line and benefitting property is assessed fee to repay eligible costs over time.

Forest Grove Wastewater Treatment Facility

The Forest Grove Facility, located at 1345 Fern Hill Rd., Forest Grove, Oregon, provides wastewater treatment for the City of Forest Grove, the community of Gaston, and the City of Cornelius. The facility provides secondary treatment using an activated sludge process followed by ultraviolet disinfection. The Forest Grove, Hillsboro, and Rock Creek Treatment Facilities are connected by pipeline and are integrated in



terms of operational requirements. As such, responsibility for operating the facilities is also consolidated. The Forest Grove Wastewater Treatment Facility Liquid Stream Upgrade project was completed in 2010. Principal new features that replaced outdated and undersized Facility components are a headworks, influent pump station, grit building, and aeration basin.

Treatment processes at the Forest Grove Wastewater Treatment facility is becoming more sustainable and cost-effective. Increasingly treatment is moving away from the chemical system to a natural treatment system. Natural treatments system are generally more cost-effective and sustainable.

Energy

Issue

The City of Forest Grove has its own electrical utility through the Forest Grove Light and Power Department. A municipal electrical utility is unique within the Portland urban growth boundary. The Forest Grove Light and Power Department provides reliable cost-competitive electrical service within the city limits and surrounding unincorporated Washington County area. The Light and Power Department provides lighting for streets, parks and parking areas under the jurisdiction of city government. The Light and Power Department also supports local economic development initiatives.

Findings:

Forest Grove Light and Power was established in 1895 and is one of three municipal electrical utilities in the Portland area (Canby and McMinnville). Customers: Forest Grove Light and Power serves approximately 8,600 customers⁹.

The Forest Grove Light and Power Complex is located south of the Forest Grove Town Center on B Street south of 19th Avenue. The complex includes the administrative offices and yard. The Light and Power building is single story and contains approximately 25,300 square feet of space. The building was originally constructed in 1966 and remodeled in 2012.

Vintage Forest Grove Light and Power Building



Contemporary Forest Grove Light and Power Complex

⁹ Oregon Municipal Electrical Utilities Association, 2008



Overview of Electrical Distribution System

Forest Grove is served by high voltage power lines owned by the Bonneville Power Administration. The Thatcher Junction substation is located on the 47 mile 115 kV line from Forest Grove to the Tillamook Substation. The Filbert Substation is located on the 24-mile 115 kV line between the Forest Grove Substation and BPA McMinnville.

Thatcher Junction Substation



Filbert Substation



BPA and Forest Grove Substation



The BPA substation is located adjacent to the Forest Grove substation north of the Portland and Western Railroad line and west of Oak Street in north-central Forest Grove.

Relationship with Bonneville Power Administration

The Bonneville Power Administration is a wholesale provider of electricity to the Forest Grove Light and Power. Approximately 90 percent of the electrical power provided by Forest Grove Light and Power is purchased from the Bonneville Power Administration. The remaining 10 percent comes from two Grant County Washington hydroelectric projects.

The chart below provides a comparison of electricity prices in select cities in 2010. The chart shows that the electricity prices in Forest Grove are very competitive.

Source: Energy Information Administration, 2010

The table below provides a comparison of residential electricity rates in the Forest Grove area. The table shows that Forest Grove offers very competitive rates within the region.

Utility	Base Charge	Service Rate ¹⁰
Forest Grove Light and Power	\$13.26	5.525¢ per kWh
Portland General Electric	\$9.00	7.139¢ per kWh
Western Oregon Electric	\$35.00	1.102¢ per kWh
Canby Utility	\$11.50	5.495¢ per kWh
McMinnville Electric	\$11.63	8.345¢ per kWh
Regional Average	\$16.08	7.45¢ per kWh

Source: City of Forest Grove from Internet search

The table below shows electrical rates for large commercial and industrial service.

Utility	Base Charge	Service Rate ¹¹
Forest Grove Light and Power	\$49.99	3.735¢ per kWh
Portland General Electric	\$20.00 to \$25.00	6.008¢ per kWh
Western Oregon Electric	\$103.50	9.265¢ per kWh
Canby Utility	\$14.00 to \$30.00 ¹²	3.68¢ per kWh
McMinnville Electric	\$52.52	7.653¢ per kWh
Regional Average	\$48.00 to \$52.20	\$6.0682¢ per kWh

Source: City of Forest Grove from Internet search

Substation Master Plan

The substation master plan addresses improved equipment reliability, capacity for reasonable load growth, and identifies a path to accommodate future city service expansion.

Proposed improvements

Year	Actions	Budget
2013-14	Engineer for the replacement of transformers at Forest Grove and Thatcher; purchase the transformer, circuit switcher, and associated equipment for Thatcher substation, purchase and install feeder relays at Filbert substation	\$1,050,000
2014-15	Install the transformer, circuit switcher and associated equipment at Thatcher, purchase the transformers, circuit switchers, and associated equipment for Forest Grove Substations #1 and #2, install 115kV protection upgrades with BPA.	\$2,520,000
2015-16	Install the transformer, circuit switcher and	\$230,000

¹⁰ Blended rates

¹¹ Blended rates

¹² Base charge for general 1-phase and 3-phase service.

	associated equipment for Forest Grove Substation #2.	
2016-17	Install the transformer, circuit switcher and associated equipment for Forest Grove #1	\$205,000
2017-18	Purchase and install circuit switcher and associated equipment for Filbert Substation	\$270,000
Total		\$4,275,000

BPA Fuel Mix Summary

Fuel mix percent summary, June 2013, based on calendar year 2012 data

Type	Percent
Biomass and Waste	0%
Coal	0%
Geothermal	0%
Large Hydroelectric	85%
Natural Gas	0%
Non-Specified Purchases	4%
Nuclear	9%
Small Hydroelectric	1%
Solar	0%
Wind	1%

Aggregate load data indicates that there has been a slight decline in average load from the City over the past 12 years¹³. Daily peak loads have been on a decline during the same interval.

Fiscal Year	MW	Load Factor
2007	54.5	54%
2008	55.3	55%
2009	55.6	51%
2010	60.2	45%
2011	51.2	54%
2012	49.3	57%
2013	51.2	56%
2014	51.4	56%
2015	51.7	56%
2016	51.9	56%
2017	52.2	56%
2018	52.5	56%
2019	52.7	56%
2020	53.0	56%
2021	53.2	56%
2022	53.5	56%
2023	53.8	56%
2024	54.0	56%

¹³ Source: City of Forest Grove Light and Power Substation Master Plan, July 2013

2025	54.3	56%
2026	54.6	56%
2027	54.9	56%
2028	55.1	56%
2029	55.4	56%
2030	55.7	56%
2031	56.0	56%
2032	56.2	56%
2033	56.5	56%

Alternative approaches to substation capacity included:

- Purchase three new large transformers
- Purchase three smaller transformers
- Purchase three smaller transformers now and add a 2nd transformer at the Filbert substation or the Thatcher substation in the future as load requires. Each alternative provides capacity for significant future load growth.

	Existing Substation Equipment	Purchase Three 24 MVA	Purchase Three 15 MVA	Add Future 15 MVA
Base Capacity	51	87	60	75
Summer SC Peak Rating	67	118	84	112
Winter SC Peak Rating	87	153	109	146

The Light and Power Department has determined that the preferred approach is to purchase smaller transformers for the upgrades with the understanding that future load develop, added capacity can be installed at the Filbert Substation, Thatcher Substation and/or a new substation.

System Reliability

The Filbert Substation is located on the 24-mile 115kV line between BPA Forest Grove and BPA McMinnville. The Thatcher Junction Substation is located on the 47-mile 115 kV line from Forest Grove to the Tillamook Substation. It is not uncommon to have winter season storm related outages to the Thatcher Junction Substation as BPA tests and restores the 115 kV line from Forest Grove to Tillamook. Outages to the Filbert Substation are rare. System reliability could be improved through the installation of 115 kV lines from the Forest Grove Substation to both the Thatcher Substation and Filbert Substation to avoid being susceptible to outages on the BPA lines. Preliminary cost estimates for the 115 kV switching station alone (not including replacement and relocation of transformers) was in excess of \$2,000,000. The 115 kV transmission line is estimated to cost approximately \$700,000 per mile. The line to the Thatcher Junction tap would cost approximately \$1,300,000. The line to the Filbert Substation tap would cost about \$600,000. Therefore, total cost is approximately \$3,430,000.

An alternative to constructing the new 115 kV system is to approach BPA about upgrading protection on the Forest Grove to Tillamook line by upgrading the existing BPA 115 kV automatic switch with a circuit breaker and associated protective relaying. This would allow for clearing faults toward Tillamook without interrupting service to the Thatcher Junction Substation. Alternatively, either of the automatic switches at the Thatcher tap or Timber tap could be upgraded to a remotely-controlled circuit switcher with protective relaying located at the existing BPA Forest Grove Substation with control of the circuit switcher provided by fiber optic communication line. This approach could isolate the Thatcher substation from approximately 80% of the line exposure.

Land Use Impact

The Forest Grove Light and Power District is larger than the City's planning area and there are undeveloped and underdeveloped portions of the City. The possible impact of unexpected load growth is mitigated by both the Thatcher and Filbert Substations having adequate land and being arranged so that a second transformer and additional feeder capacity can be readily added. This allows capacity to be expanded as load requires. The preferred approach to additional capacity is adding transformers at Filbert and Thatcher rather than installing additional capacity at this time. This approach allows adding capacity when and if needed. If additional capacity is needed to serve a new high-density load (industrial) it would be appropriate to build a fourth substation to serve the expanded service area. Growth north of the City could be fed by a new substation and served by a new tap to the BPA Forest Grove – Tillamook 115kV line. Should there be significant load growth and development in the urban reserve area, the City would need to acquire land for a new substation.

Goals

- Provide quality electrical service provided to Light and Power customers.
- Maintain the high satisfaction rating from customers based on the Citizen's Survey of City Services
- Emphasize preventative maintenance and equipment replacement programs including upgrading underground cable installations, replacement of obsolete and dated substation equipment and the expansion and upgrading of the distribution system.
- Encourage energy conservation and efficient use of energy resources.
- Encourage local sustainability efforts by promoting renewable energy sources.
- Provide electrical service to all energy user classes at the least possible cost.
- Maintain an equitable balance between rates charged among energy user classes.
- Evaluate City properties to determine feasibility of installing a future solar generation power facility
- Incorporate findings and recommendations from the Electrical System Master Plan.
- Reduce local reliance on petroleum and natural gas as a source of energy.
- Implement a long-range land use concept that reduces the need to travel by vehicles using fossil fuels.

- Provide an affordable and secure energy supply that increases the development and use of renewable, least toxic and less carbon-intensive sources¹⁴.

Policies

1. Maintain an adequate FIRM power supply to serve anticipated growth consistent with the land use designations shown on the Forest Grove Comprehensive Plan map.
2. Obtain and maintain a 20 percent margin between the FIRM power supply and system load to allow for such contingency events as supply equipment failure, extreme weather events and unanticipated load growth.
3. Participate with other agencies and utilities in the evaluation and construction of additional power resources which show promise of becoming economically feasible.
4. Participated with other agencies and utilities in the development of sustainable energy resources.
5. Develop and implement programs to assist customers to reduce electrical energy use.
6. Periodically update the long range distribution system plan.
7. Periodically perform a cost of service study and use the results of the study along with accepted utility practices to adjust electric rates.
8. Utilize industry accepted best management practices for the operations and enhancement of the electrical utility
9. Continue participation in the National Arbor Day Foundation Tree Line USA program to reduce conflicts between trees and overhead power lines.
10. All new development shall be served by underground electrical utilities
11. Adopt a Capital Improvement Program for electrical system needs based on budgetary constraints.
12. Work with partners to reduce fossil fuel consumption and increase use of renewable energy resources.
13. Reduce vehicle miles traveled
14. Monitor and actively participate in requests for new natural gas pipelines near the Forest Grove planning area.

¹⁴ ICLEI, Local Governments for Sustainability, Star Community Index, Sustainability Goals and Guiding Principles.

Capital Improvement Program

Project	Description	Cost
Substation Upgrades	Replacement of substation transformers, battery banks and protective equipment. The Forest Grove substation is anticipated to be completely rebuilt with a revised physical layout to provide a better connection to the upgraded BPA 115 kV yard, make better use of the property available, and to provide an improved grounding system. With completion of this project, the Forest Grove substation capacity will be greatly increased, and major equipment will have been replaced with newer technology able to provide a higher level of service.	\$5,823,000
Distribution System and Additions Upgrades	Purchase of equipment for monitoring substation operations. Improvements to the distribution system will improve electric reliability to the 24 th Avenue industrial area and provide better coordination protective devices in the electrical distribution system.	\$415,000

Natural Gas and Petroleum

The City of Forest Grove is located within the Northwest Natural gas service area. According to the State of Oregon Energy Assurance Plan (2012), Oregon imports 100% of its natural gas. Two natural gas pipelines currently serve Oregon: The Williams Company Pipeline and the Gas Transmission Northwest Pipeline owned by the TransCanada Corporation. Northwest Natural serves approximately 80% of Oregon's retail customers including Portland, the Willamette Valley and coast. Northwest Natural receives gas from the Williams pipeline. The Williams Pipeline brings natural gas from British Columbia and the Rocky Mountain region. Northwest natural owns underground gas storage facilities in Mist and LNG storage facilities in Newport and Portland. Northwest natural also has contracts to use LNG storage facilities at Plymouth, Washington and underground storage at Jackson Prairie, Washington.

Oregon does not have petroleum resources or refinement facilities¹⁵. Therefore, Oregon must import 100% of its petroleum needs from outside the state. More than 80% of Oregon's petroleum originates in the Alaska North Slope oil fields. Another source of petroleum for Oregon is the Western Canada Sedimentary Basin. Less than five percent comes from the lower-48 continental United States, Mexico, Indonesia, or the Middle East.

Oil refineries located near the Puget Sound in Washington provide more than 90% of Oregon's refined petroleum products¹⁶. Only minor amounts arrive on ship from California, and the Pacific Rim countries of Indonesia, South Korea or Japan.

¹⁵ Oregon Energy Assurance Plan (2012)

¹⁶ Oregon Energy Assurance Plan (2012)

Public Safety

Issue:

As a full service city the City of Forest Grove is committed to providing high quality public safety services. This includes fire and police protection.

Findings:

Analysis of Fire Department Constraints and Capabilities

The Forest Grove Fire Department has a defined fire fighting capability which provides the community with a basic level of fire protection. It should be recognized that this level of protection fluctuates daily as a result of calls for service, availability of personnel, and availability of mutual aid. The level of service is also affected by the budget allocation to the Fire Department by the City Council and ability to leverage grant opportunities.

The ability to respond to calls for service is also affected by the community's land use pattern since the extent of the developed urban area affects response time. The transportation system needed to serve the land use pattern also affects level of service and response times. The Water Master Plan identifies specific areas where fire flow should be improved. Deficient fire flow and is a potential impediment to development.

As the community grows an additional fire station may be needed to serve the northwest area to reduce response times and better serve newly developed areas. This portion of the planning area is characterized by sloping topography and is forested. This poses a potential risk for fire related to the wildland/urban interface. Development standards could decrease the fire risk related to the wildland/urban interface. In general, the fire risk in the Forest Grove planning area is manageable.

Critical Facilities

The Forest Grove Fire Department identified the following critical facilities serving the City:

City and Government Facilities

- Forest Grove City Hall
- Forest Grove Community Auditorium
- Forest Grove Library
- Forest Grove Police Department
- Forest Grove Fire Station
- Forest Grove Fire Station - Gales Creek Community

Utilities

- Forest Grove Public Works Operations
- Forest Grove Light and Power
- Forest Grove Water Treatment Plant
- Frontier Communications Switch Center (College Way)
- Waste Management B Street Transfer Station

Schools

- Tom McCall Upper Elementary School
- Central School Office
- Taylor Way Annex Learning Center
- Joseph Gale Elementary School
- Harvey Clarke Elementary School
- Forest Grove High School
- Forest Grove Community Charter School
- Neil Armstrong Middle School
- St. Francis Catholic Private School
- Westside Christian School (E Street and Pacific Avenue)
- Pacific University

Medical and Assisted Living Facilities

- Forest Grove Community Hospital
- Jennings McCall Center
- The Grove Assisted Living
- Gardens of the Grove
- The Elms
- Marquis Care
- Marquis Vintage Suites
- Beehive Assisted Living
- Hawthorne House Alzheimer's Care
- Wynwood of Forest Grove
- Forest Grove Rehabilitation
- Quince Street Senior Apartments
- The Homestead Senior Community

Analysis of Police Department Constraints and Capabilities

The Forest Grove Police Department provides law enforcement patrol, investigative services, crime prevention and community outreach. As of 2011, the Forest Grove Police Department employs 29 sworn officers including a chief, two captains, four sergeants, two detectives, and 19 patrol officers including on school resource officer, one transit officer and one motor officer. The Police Department also employs two non-sworn part-time community service officers, a support unit supervisor, an evidence technician, and two records specialists. A volunteer chaplain also serves the members of the department and the community.

The Forest Grove Police Department participates with several interagency teams include the Crash Analysis Reconstruction Team, Tactical Negotiations Team, Washington County Elder Abuse Multidisciplinary Team, and Washington County Child Abuse Multidisciplinary Team.

The Forest Grove Police Department processed 22,710 calls for service in 2011. Department personnel investigated 2,568 separate cases. Dispatched calls include those reported to the Washington County Consolidated Dispatch Agency (WCCCA) or through the Forest Grove Records Division.

In 1999, the City of Forest Grove had a population of 16,275 while employing 25 sworn police officers. In 2009, the estimated population of Forest Grove was 21,500 while employing 29 sworn police officers.

The City of Forest Grove Police Department budget is primarily comprised of General Fund revenue. Approximately 11% of the Police Department budget comes from other state funds, department services and inter-agency agreements. For Fiscal Year 2011/2013, approximately 88% of the Police Department Budget was for personnel services and 12% for materials and services.

The total budget for the Police Department in 2012-2013 was approximately \$4,428,000. This is up from approximately \$3.5 million in 2007-2008. The City of Forest Grove has approximately 1.35 sworn officers per 1,000 persons.

Police Protection and Urban Growth

The City's land use pattern and transportation system directly impacts the ability to provide timely response for calls for service. A compact city, served by a network of arterial and collector streets, supports consistent response times throughout the City. The northwest part of the Forest Grove planning area is primarily designated for lower density single family residential development. Direct transportation routes serving planned neighborhoods are necessary to ensure adequate levels of service as the community grow over time. Additional officers will be needed to maintain service levels as population increases over time.

General Public Safety Goals

1. Provide a high level of public safety services including police and fire protection commensurate with development in the community.
2. Support the Public Safety Advisory Commission in their efforts to create livable neighborhoods through adequate public safety funding
3. Continue and enhance partnerships with public agencies and private organizations committed to public safety.
4. Recognize that land use and transportation policies influence emergency response needs.

General Public Safety Policies

1. Provide adequate funding so all areas of the City's planning area receive police, fire and emergency services.
2. Coordinate plan review with public safety and emergency services providers to ensure public safety needs are met.
3. Review transportation improvements to ensure that public safety needs are met.

Fire Department Goals

1. Continue implementation of the Fire Department's strategic plan. Strategic goals include:
 - a. Develop and maintain the highest possible level of service delivery
 - b. Maintain long-term strategic planning
 - c. Expand community outreach to meet the community's vision
 - d. Utilize available technology to enhance service delivery and efficiency
 - e. Develop and maintain strategic partnerships
 - f. Enhance internal relations, communications and employee development.
2. Continue development of the City's emergency operations plan to meet federal and state National Incident Management System standards.
3. Enhance and improve the community's risk reduction program through fire prevention classes, Community Emergency Response Team (CERT) training, and other community outreach efforts.
4. Work with neighboring departments and develop public and private partnerships to enhance emergency service delivery in the region.

Fire Department Policies

1. As part of the strategic planning process, the Fire Department will develop a more accurate response-time measurement program.
2. The Fire Department will maintain the emergency operations plan for the City and continue partnerships with neighboring agencies.
3. The Fire Department will continue to improve the community risk reduction program to increase effectiveness.

Police Department Goals

1. Promote relationships with the community through neighborhood watch, safety fairs and community events.
2. Apply for and obtain specific traffic safety grants
3. Identify opportunities for a new location for the Police Department including sites for a satellite facility to reduce response times and maximize service delivery.

Police Department Vision Statement

- To be the best law enforcement agency in Washington County in terms of professional reputation.
 - Professional representation on regional investigative teams
 - Professional working relationships with other law enforcement agencies

- Positive working relationships with stakeholders
- To be a career destination for law enforcement professionals – sworn and civilian.
 - Be a learning organization promoting professional development
 - Targeting recruitments consistent with department mission and values
- To be an allied partner agency with regional stakeholders – promoting the interests of Forest Grove in furtherance of City goals.
 - Policy development and review in concert with city goals
 - Coordinated training with other law enforcement agencies
- For Forest Grove Police Department employees to be proud of their affiliation with the department, city, and community.
 - Promoting spirit de corps through employee involvement
 - Maintaining accountability and responsibility
 - Rewarding behavior consistent with departmental mission and goals
- To be fully capable of meeting all reasonable investigative, crime prevention, patrol, and traffic needs of the citizenry as growth impacts the community.
 - Forecasted budgeting reflecting the needs of the community
 - Stewardship and accountability of all entrusted public funds.

Administrative Facilities and Services

Issue

As a full service city, the residents of Forest Grove expect cost-effective and efficient delivery of public services meeting their day-to-day needs. As the City grows over the next 20 years new ways of providing municipal service will be required to meet the demands of a growing community.

The Comprehensive Plan addresses administrative facilities and services since municipal operations have a land use component. For instance, acquisition of land and construction new facilities such as fire stations and police substations may be needed to serve a growing community. Conversely, consolidating administrative offices to efficiently provide municipal services could reduce land use needs. When new or remodeled facilities are needed, however, thoughtful design could further the City's sustainability and energy efficiency goals which is a fundamental principle of the Comprehensive Plan.

Findings

City services are scattered among several buildings including

- City Hall;
- Engineering Department;
- Public Works Building;
- Parks and Recreation Building;
- Library;
- Police Department;
- Fire Department;
- Light and Power Building;
- Corporate Yard; and
- Community Auditorium

City Hall/Administrative Offices

The Forest Grove City Hall is located at 1924 Council Street in the Forest Grove Town Center. Built in 1928, it originally housed all municipal departments except Light and Power. As the City grew, the original City Hall became too small to accommodate all administrative offices and city departments. In 1957, the City Hall was remodeled and the Fire Department was relocated. This relieved some of the pressure for additional administrative offices until the late-1970s.

In 1976, the City of Forest Grove was awarded a federal Economic Development Administration grant to renovate the fire station and build a new facility for the Police Department and community library and remodel City Hall into administrative offices. The remodel was completed in 1980.

City Hall currently houses the office of the City Manager, Administrative Services Department including finance, utility billing, and information services, and Community Development Department (Planning and Building Services). The Public Works Engineering Division is located adjacent to City Hall in a separate building.

The physical layout, including size and location of the administrative offices, directly impacts the ability to provide cost-effective and efficient municipal services for the community. Effective delivery of public services requires interaction among staff members and the general public. The current configuration of City Hall does not provide adequate space for meeting with the public and interaction among staff members collaborating on projects such as planning and engineering staff.

Engineering Division Office

The Engineering building is located at 1928 Council Street near City Hall. The building is a single story structure approximately 3,900 square feet area. The building has a concrete exterior wall, shares a brick masonry party wall with the building to the north and has wood roof structure. The building requires accessibility improvements to meet requirements of the Americans with Disabilities Act.

The Engineering Division office is only accessible to city staff located at City Hall through an exterior entrance. The City Engineering staff works closely with Planning and Administrative Services staff on a variety of projects. Being physically separated from City Hall creates administrative inefficiencies that could be improved through consolidation of offices.

Police Department

The police station is a single story 12,900 square foot building with a partial basement and small mechanical mezzanine. The building was originally constructed in 1977 and appears to be largely unmodified. The building is constructed at the same time and is connected to the library to the east. The police station and library share a basement level mechanical room. The roof was replaced in 1996. ADA accessibility is provided at the north (public) entrance. Restrooms and door hardware throughout the building do not meet ADA requirements. A facilities assessment prepared for the City in 2009 by SERA Architects concludes that the current building configuration and building elements creates overlapping circulation paths and non-secure spaces which are not well suited for the current police operations.

Public Works Office

The Public Works Office is a single story building approximately 8,600 square feet in area. The building is located at 2551 23rd Avenue and was originally constructed in 1990. The building is divided into two sections, the western office portion and a high bay vehicle service shop to the east. The building has a split-face CMU exterior bearing wall with a stick frame wood interior. The Public Works storage building is a single story prefabricated metal 5,100 square foot structure built in 1990.

Parks and Recreation Office

The Parks and Recreation Office/Public Works Storage building is a 9,100 square foot building likely constructed in the early 1940s. The building is divided into two sections. The south section is a two story office/storage section and north section is a large high bay space used for vehicle storage and some repair functions. The exterior wall is constructed of bearing CMU with large wood bowstring trusses carried on wood pilaster as the roof structure.

Aquatics Center

The Aquatics Center is located at 2300 Sunset Drive. The aquatic center building houses the community pool and associated facilities and the office of the Parks and Recreation Director. The building's footprint is approximately 21,800 square feet in area. The first outdoor pool opened in 1943. The indoor building was built in 1968 and renovated in 2001.

Light and Power Building

The Light and Power building is located at 1818 B Street. The building is a single story 25,300 square foot structure with a small mezzanine. The building was originally constructed in 1966 and remodeled in 2012. The building is divided into two spaces. The eastern portion houses the utility offices and conference room. The western portion includes a storage mezzanine. The building has concrete tilt up walls with wood glu-lam structure with tongue and groove decking exposed in the interior.

Community Auditorium

The Community Auditorium is located at 1915 Main Street near City Hall. The Community Auditorium was constructed in 2002 and is approximately 5,200 square feet in area. The Community Auditorium provides meeting space for the City Council, boards and commission, and municipal court. The Community Auditorium is also used for general community events sponsored by public and private organizations.

Water Treatment Plant

The Water Treatment Plant is located at 501 Watercrest Road.

Sewage Treatment Plant

The sewage treatment plant is located at 1345 Fern Hill Road.

Administrative Services Goals

1. Provide cost-effective and efficient delivery of public services
2. Retain City administrative services in the Forest Grove Town Center
3. Consolidate administrative functions to provide, cost-effective, efficient, and accessible municipal services.

4. Provide for staffing levels commensurate with the level of service desired

Administrative Services Policies

1. Seek funding for adequate governmental facilities to accommodate needed administrative services.
2. Reduce the cost of providing public services by integrating technological advances in delivery systems.
3. Program administrative services and staffing on an annual basis tailored to the needs and financial capabilities of the community
4. Continue the system of user fees which reflects the true cost of providing municipal services and recognize that city services shall not be provided to non-residents on a subsidized basis by city property tax payers.
5. Adopt a capital improvement program and schedule for all City capital improvement needs based on budgetary constraints.
6. Meet minimum Leadership in Energy and Environmental Design (LEED) standards for new municipal buildings.
7. Employ technology where appropriate to encourage delivery of public services and information electronically.
8. Establish and enhance partnerships to share physical resources among neighboring cities and other public service providers.
9. Make ADA accessibility improvements to the Engineering office.

Land Use Impacts

The Master Plan zone described in the Forest Grove Development Code is a tool to promote and facilitate the coordinated development of larger-scale institutional facilities through adoption of a master plan. Government complex is one type of use appropriate for the master plan zone designation. The master plan zone provides an opportunity to look at city administrative needs comprehensively to meet current and future needs in an efficient and cost-effective manner.

Constraints

Funding is the biggest identified constraint to addressing current and future administrative facility needs. Other constraints to maximizing efficiency include the age and condition of administrative facilities and location.

Library

It is the mission of the Forest Grove Library to provide the community with ready access to a broad spectrum of materials in a variety of media that record our knowledge, ideas, and culture. All members of the Forest Grove Library staff, Library Commission and City Council support, protect, and facilitate every person's rights to access library resources.

In December 1908, the Forest Grove City Council established the first public library for the City of Forest Grove. The library occupied part of a stationery store on the corner of what is now 21st Avenue and College Way. Mrs. A.F. Rogers later bought the building occupied by the library and gave it to the City. The library was named the Rogers City Library in her honor.

Lack of space was a problem addressed when the City was awarded a federal grant in 1976 for construction of a municipal service center at Pacific Avenue between Ash and Birch Streets that would include a new library building. The building is approximately 24,700 square feet in area. The new library was renamed the Forest Grove City Library and was dedicated on October 4, 1978. The library has been renovated over the years. The library remains on Pacific Avenue today.

The Forest Grove Library is a member of the Washington County Cooperative Library Services (WCCLS). Through this arrangement, Washington County residents receive tax payer supported access to all public libraries in Washington County. Member libraries receive funding based on an adopted reimbursement agreement supported by revenues from Washington County, including a County-wide levy. Other services received from this membership include: access to the county-wide library catalog, daily courier service among member libraries, database subscriptions services, and a reciprocal borrowing agreement with Multnomah, Clackamas, Fort Vancouver and Hood River Library Systems.

The Forest Grove Library receives approximately 72% of its funding for operations from the WCCLS. Other revenue supporting library operations include various fees, charges and fines which comprise about 3% of the library's budget. The remaining 25% of the library's operating budget comes from the City's General Fund. The library also receives support for one-time purchases from the Friends of the Library, the Library Foundation, and periodic donations.

Library operations are supported by 11.3 full time equivalent positions this includes a Library Director, two service supervisors, 2.55 adult/youth services librarians, 5.50 library associate/assistants, and a quarter time volunteer coordinator.

To meet growing demand a satellite library facility could better serve the northwest area of Forest Grove and anchor a neighborhood mixed-use development area serving this part of the City.

Performance Measures

- Access to Facility and Collections (Calendar Year 2011)
 - Library Visits = 222,822 persons came into the library
 - Library Cards Issued = 1,704 new registrations
 - Items checked out = 411,944
 - Volunteer assistance provided = 6,010 hours
- Reference Assistance
 - Reference questions answered = 15,176
 - Hold and Interlibrary loan requests = 278,888
- Programming for All Ages (Calendar Year 2011)
 - Children's programs presented = 186 programs/6,022 persons attending
 - Adult programs presented = 79 programs/1,013 people attending.

Constraints

Given the high level of support from the City's General Fund the library is vulnerable to service reductions due to competition for limited resources. The Library has been successful with recruiting volunteers to help paid library staff.

Library Goals

1. Provide and maintain high quality public library facilities and services. (87-7)
2. Provide public library services that are responsive to the needs of the community
3. Provide the most effective service possible
4. Provide an adequate number of books and other library materials to support the library program
5. Provide adequate, sustained financial support for the public library program
6. Continue the partnership with WCCLS
7. Retain the main library branch in the Forest Grove Town Center
8. Residents consider libraries the "front porches" of their communities by creating a welcoming environment for residents and recognizing that libraries contribute to building communities. [From WCCLS Long Range Service Plan, 2010 to 2020.]
9. Residents will have opportunities to explore cultural diversity through the library. [From WCCLS Long Range Service Plan, 2010 to 2020]

Library Policies

1. Assure services to all age levels and to minority groups and the handicapped through development of the city libraries collection, technology, services and through cooperation with other libraries.
2. Establish procedures to receive adequate input from the community (87-7)
3. Arrange library-oriented programs for cultural enrichment of the community.
4. Monitor effectiveness of services by accepted professional standards
5. Set annual service standards in preparation of budget and periodically review performance toward these standards

6. Participate with other public libraries, schools and other institutions to avoid needless duplication of services and minimize the need to expand facilities.
7. Cooperate with museums, libraries and other institutions to preserve materials related to local history.
8. Cooperate with other city departments and City Council in seeking reliable revenue source for city operations.
9. Service patrons outside the city limits and cooperate with other libraries and other library systems
10. Adopt and implement procedures to collect and report results of certain output measures including:
 - a. Circulation per capita
 - b. In-library use per capita
 - c. Library visits per capita
 - d. Program visits per capita
 - e. Reference transactions per capita
 - f. Reference fill rate
 - g. Title, subject and author fill rate
 - h. Registration as a percentage of population (87-7)
11. Adopt and abide by a Mission Statement (see beginning of narrative)
12. The Forest Grove Library has adopted and will adhere to the Library Bill of Rights as written by the American Library Association.

Health Services

Issue:

Hospitals are considered essential facilities for purposes of transportation and emergency response planning. With an expected increase in population within Forest Grove the City must plan for new healthcare facilities with providers of healthcare services. Land must be designated on the Comprehensive Plan map to ensure opportunities for an adequate level of health services to the population.

Findings:

The City is served by a variety of healthcare providers including:

- Forest Grove Community Hospital (Tuality Healthcare)
- Forest Grove High School Clinic
- Virginia Garcia Clinic (Cornelius)
- Pacific University Optometry Clinic
- Maple Street Clinic
- Mountain View Medical Center
- Geneva Health Center (Urgent Aid)
- Washington County Department of Health and Human Services
- Offices of Private Practitioners

The Forest Grove Community Hospital has been part of the City of Forest Grove since 1962. Several clinics, care facilities and senior living centers have located near the hospital. Forest Grove Hospital became part of Tuality Healthcare in 1982 and many services previously offered in Forest Grove including surgery and obstetrics were transitioned to Tuality's main hospital in Hillsboro. The existing hospital property in Forest Grove is approximately 191,000 square feet in area developed with a building approximately 42,800 square feet in area. Today, the Forest Grove Community Hospital employs approximately 173 people (100 full time equivalent positions) and primarily provides emergency and geriatric care services. In addition to the Tuality Hospital in Hillsboro there is a Kaiser Permanente hospital in Hillsboro that opened in 2013. A future east-west transportation connection north of Forest Grove providing direct access to Hillsboro would improve access to the Kaiser Permanente Hospital. Other hospital facilities serving the general area are located in southwest Portland and McMinnville.

Forest Grove Hospital



Forest Grove is home to several assisted living facilities providing residence to over 600 persons. Assisted living facilities in Forest Grove include:

- Jennings McCall Center (2300 Masonic Way)
- Marquis Care (3300 19th Avenue)
- Elms Residential Center (2030 Elm Street)
- Wynwood of Forest Grove (3110 19th Avenue)

- Grove Assisted Living (2112 Oak Street)
- Camelot Care Center (3900 Pacific Avenue)
- Gardens at the Grove (2112 Oak Street)
- Forest Grove Beehive (2122 Hawthorne Street)
- Hawthorne House (2635 21st Avenue)

Many of the assisted living facilities are located near the Forest Grove Community Hospital.

Several small scale residential care homes also exist in Forest Grove providing care for persons with disabilities. Group living for five or fewer residents is permitted by right within residential zones. Group living with six or more residents requires conditional use approval within residential zones. Conditional uses are subject to review because they may have adverse effects on the environment, overburden public services, or create nuisances. The conditional use review process provides an opportunity to allow the use when there are minimal impacts, to allow the use but impose conditions to address identified concerns, or to deny the use if concerns cannot be resolved.

Group living is permitted outright within the City's Community Commercial zone.

Analysis of Land Use Impacts

Forest Grove has a large elderly population influencing the demand for healthcare services in the community. This demand will continue as the population ages. Adequate sites must be designated to accommodate the expansion needs or new assisted care facilities serving current and future residents. The City has an adequate reserve of land designated as residential multiple family or commercial that could accommodate assisted living facilities.

Constraints

The most significant constraint to health services in the community is the reliance on the Tualatin Valley Highway as the only major east-west transportation link to Hillsboro. Hillsboro is home to the main Tuality Healthcare campus. Significant traffic delays or road closure could affect the ability to provide necessary emergency services in a timely manner. Construction of an alternative east-west connection, such as the extension of Evergreen Road west could provide improved access to the Kaiser-Permanente hospital in Hillsboro.

Health Services Goals

1. Provide opportunities through City land use and development policy to ensure the health service needs of the entire community are met locally.
2. Establish and maintain a local health system that monitors and improves community health and provides equal access to affordable, quality health services¹⁷.

¹⁷ ICLEI, Star Community Index

3. Promote good health and reduced healthcare costs through land development and transportation policies by encouraging active transportation (walking and bicycling) and recreational opportunities.
4. Use the Master Plan Zone to comprehensively review healthcare campus proposals.
5. Encourage “aging in place” through land use and building codes.
6. Promote community food security and equitable physical and economic access to safe, nutritious, and culturally appropriate food at all times for every resident across a community and provide opportunities for residents to grow their own food¹⁸.

Health Service Policies

1. Work with the owner of the Forest Grove Community Hospital to implement the Forest Grove Healthcare Master Plan.
2. Designate sufficient and suitable land on the Forest Grove Comprehensive Plan Map for public and private institutional uses including hospitals, clinics and assisted care facilities. Hospitals and clinics are appropriate uses within institutional development districts. Hospitals and associated medical facilities should be planned in advance through the City’s Master Plan Zone process. Assisted care facilities are appropriate within commercial areas and land designated for high density multiple family housing as a conditional use.
3. Designate sufficient and suitable land on the Forest Grove Comprehensive Plan Map for professional offices including physicians, dentists, optometrists and healthcare providers. Such uses are appropriate for commercial and mixed-use development districts.
4. Provide opportunities for active transportation in land development and transportation regulations.

¹⁸ ICLEI, Star Community Index, Opportunities for residents to grow their own food is both a sustainability issue and land use issue appropriate for the Comprehensive Plan.

Solid Waste and Recycling

Solid waste and recycling is an issue of regional significance. As such, Metro has the primary responsibility for solid waste planning and management within the Portland region. Municipal solid waste ordinances, regulations, and contracts are required to conform to the regional solid waste management plan. Key issues addressed in the Metro Solid Waste Management Plan include:

- Reducing the amount and toxicity of waste generated and disposed
- Advancing sustainable practices throughout the region's solid waste operations
- Ensuring the disposal system continues to serve the best interests of the region.

Local Responsibilities

Cities and counties are responsible for regulating and managing solid waste and recycling collection within jurisdictional boundaries and reviewing collection rates and service standards. Local solid waste collection and recycling is provided by a local company through franchise agreement with the City.

A regional solid waste transfer station is located in Forest Grove on B Street. Loads of solid waste are consolidated for transfer to landfills. The Forest Grove transfer station is privately owned. The annual throughput at the Forest Grove transfer station is 168,000 tons per year in 2006 (Metro SWMP). The Hillsboro Landfill the closest landfill to Forest Grove. The Hillsboro Landfill is a limited-purpose facility that is permitted by DEQ to take only dry waste and some special waste. In 2007, Metro estimated the reserve capacity at the Hillsboro landfill at 6 million tons.

Regional Solid Waste Management Vision

The Regional Solid Waste Management Plan envisions a significant evolution in today's comprehensive solid waste management practices, to a future where waste is viewed as an inefficient use of resources. Through cooperation and shared responsibility among producers, consumers, and government, the region will contribute to the sustainable use of natural resources to enhance our community, economy and environment for current and future generations.

Regional Solid Waste Management Values

The Regional Solid Waste Management Plan identifies the following values:

1. Resource Conservation

- Protecting the environmental quality of the region by conserving resources and reducing toxic and solid waste to ensure adequate resources for future generations.

2. Public Health and Safety

- Ensuring solid waste management operations, eradicating illegal dumps and reducing toxic substances to maintain quality of life for the region's residents.

3. Shared Responsibility

- Promoting a shift away from managing products after they have become waste to instead include manufacturers and users in bearing or avoiding the costs associated with product management and disposal.

4. Life-long Learning

- Raising awareness among all age groups of ways to conserve resources and reduces impacts on the environment.

5. Coordination and Cooperation

- Addressing regional issues and developing regional programs in partnership with local government, the private sector, citizens and other key parties.

6. Performance

- Emphasizing outcomes in programs and services to maximize efficiency and effectiveness.

7. Access

- Providing residential and commercial customers with access to information and a range of collection and facility service operations.

Regional Policies

1. System Performance

The regional solid waste system will perform in a manner that is environmentally sound; regionally balanced; cost-effective; adaptable to change; technologically feasible; and acceptable to the public.

2. Preferred Practices

Solid waste management practices will be guided by the following hierarchy:

1. Reduce the amount of solid waste generated;
2. Reuse material for its originally intended purpose;
3. Recycle or compost material that cannot be reduced or reused;

4. Recover energy from material that cannot be reduced, reused, recycled or composted so long as the energy recovery facility preserves the quality of air, water and land resources; and
5. Landfill solid waste that cannot be reduced, reused, recycled, composted or from which energy cannot be recovered.

Solid Waste and Recycling Goals

1. The City of Forest Grove administration and operations will lead by example by promoting recycling and reuse throughout the organization.
2. Develop and implement performance measures to track outcomes with respect to local solid waste management programs.
3. Encourage the reuse of building materials through public policies and actions when buildings and building sites are redeveloped.
4. Minimize waste and optimally recycle material resources to protect natural systems by reducing resource extraction, greenhouse gas emissions, and air and water pollution¹⁹.
5. Ensure that new commercial and multiple-family residential construction incorporates functional and adequate space for on-site storage and efficient collection of solid waste prior to pick-up and removal by haulers.

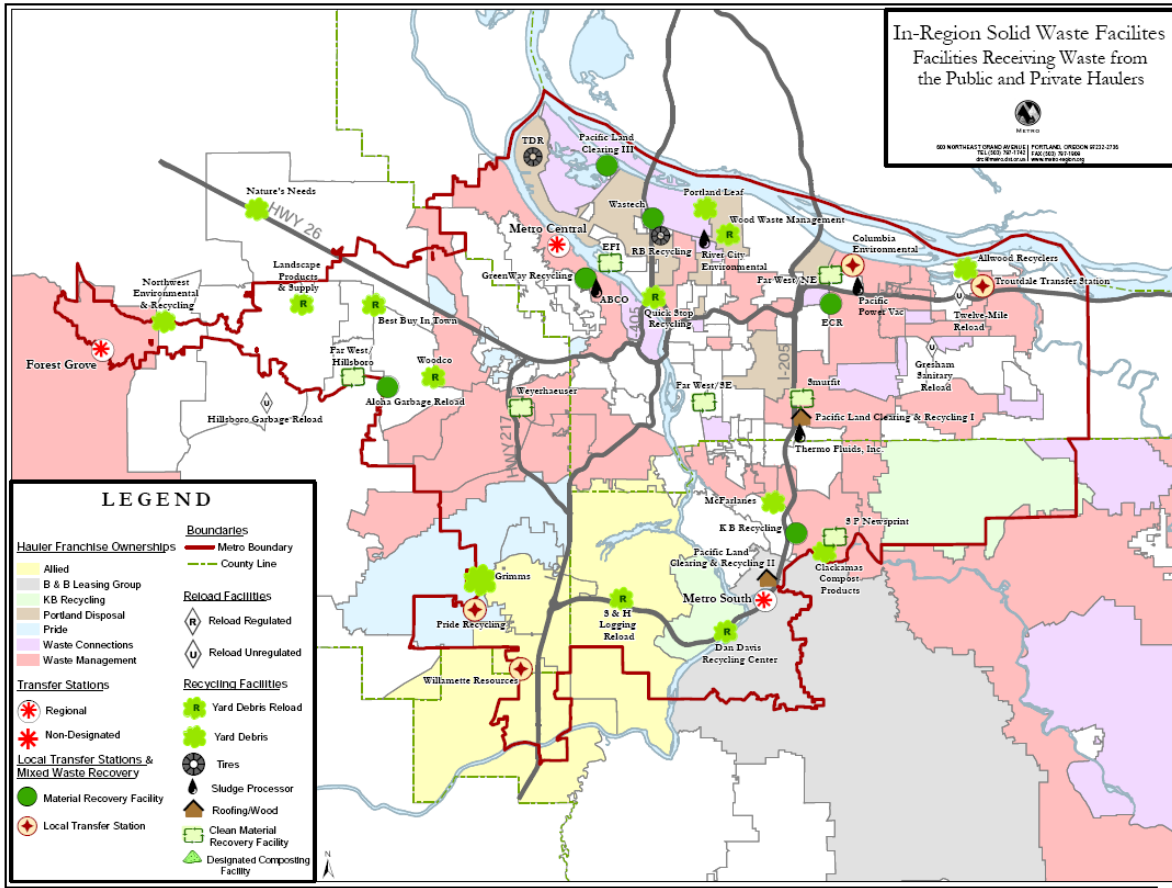
Solid Waste and Recycling Policies

1. Acknowledge that solid waste management and recycling is a regional issue requiring coordination between the City of Forest Grove and Metro
2. Commit to long term sustainability of natural resources by recognizing the link between solid waste reduction and reuse of materials, and recycling.
3. Adopt standards in the Development Code of solid waste and recycling storage.

The map below shows the regional solid waste facilities within the Portland region.

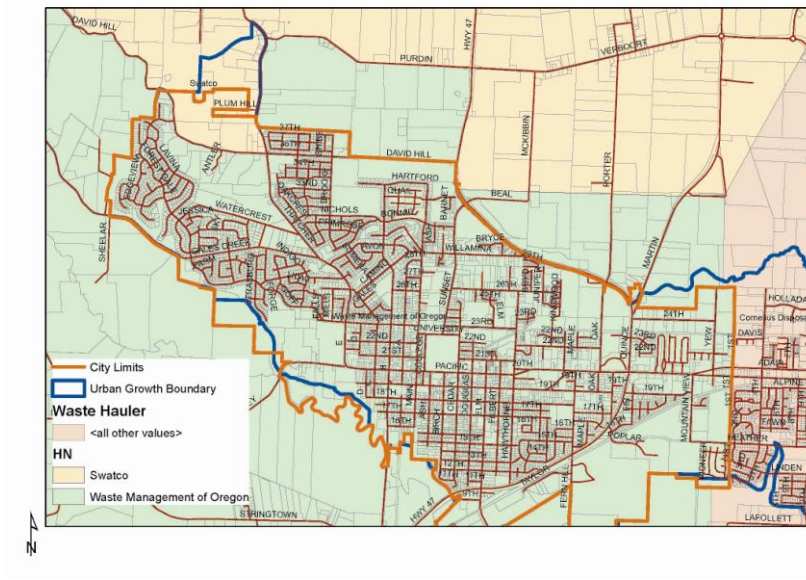
¹⁹ ICLEI, Sustainability Goals & Guiding Principles, October 2010
Draft Public Facilities Element

Regional Solid Waste Facilities



Solid Waste Hauler Boundaries

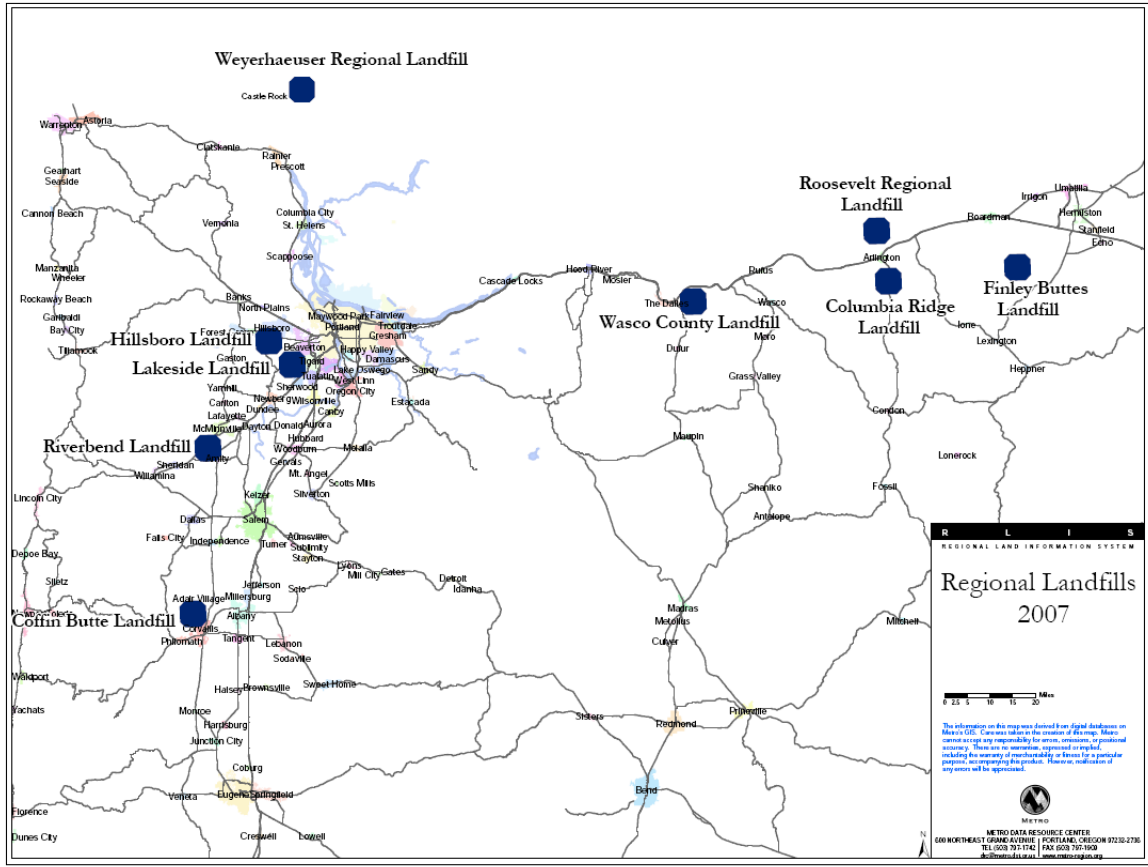
Waste Hauler Boundaries



Forest Grove Solid Waste Transfer Station



Landfills



Communications

Issue

Telecommunications is a critical service supporting local to economic development, response to natural disasters and other emergencies and general quality of life.

Findings

The City of Forest Grove is served by a number of telecommunications providers offer landline and wireless services. The City is also served by two weekly newspapers the Forest Grove News-Times and Forest Grove Leader. The City is also a member of the Washington County Consolidated Communications Agency providing communication services for police, fire and emergency response.

Telecommunications providers in Forest Grove include:

- Frontier Communications (landline telephone, Internet and fiber optic television);
- Comcast (telephone, Internet and cable television);
- Various private wireless/cellular telephone providers; and
- Various private satellite television providers

Constraints

Communication infrastructure has impacted land use throughout the years. This is evident by the location of telephone poles, cell phone towers, wireless internet hubs, traffic cameras, and other devices relaying information. Perhaps the biggest impact resulting from advances in communication over the past twenty-years is the ability to conduct business anywhere at anytime provided adequate support networks are in place. Support networks include server farms, adequate internet bandwidth and reliable, cost-effective electrical service. Forest Grove is well suited to support telecommunication facilities requiring electrical services.

Communications Goals

1. Partner with private and public telecommunications providers to enhance the delivery of communication service within the Forest Grove planning area.
2. Telecommunications facilities should be co-located whenever possible to minimize impacts on the community.
3. Enhance the delivery of emergency communications through efficient use of technology and partnerships with public and semi-public organizations.
4. Recognize that the telecommunications system is a utility that supports economic development by supporting entrepreneurship, business recruitment and business expansion.
5. Foster formal and informal lines of communication with partner agencies including the State of Oregon, Washington County, Forest Grove School District, Metro, and neighboring cities.

6. Establish development and design standards incorporating best practices for wireless communications facilities within the City of Forest Grove.

Communications Policies

1. Use technological advances to cost-effectively and efficiently distribute information about City policies and provide quality customer service.
2. Schedule periodic meetings with partner agencies to share information and encourage collaboration on matters of mutual interest including land use policy.
3. Promote governmental transparency through implementation of a robust communications strategy that fosters public participation in policy development.
4. Require the co-location of telecommunication infrastructure through codes and ordinances.
5. Utilize the Communications annex to Forest Grove Emergency Operations Plan as the basis for emergency communications in the City.
6. Adopt and revise development and design standards for wireless communications facilities reflecting best practices and changes in technology.

Parks

Introduction

This element of the comprehensive plan addresses Statewide Planning Goal 8: Recreational Needs. Goal 8 promotes the recreational needs of current and future residents of the community and visitors.

Forest Grove's moderate climate and location near the Coast Range Mountains provides a setting for some of the best recreational opportunities in Washington County. Many of these recreational opportunities are located within the city. Others are nearby.

Recreational amenities within the city include facilities owned and operated by the City of Forest Grove Parks and Recreation Department, Pacific University, and Oregon Department of Forestry. Recreational opportunities are also provided for use by other organizations such as the Forest Grove School District, Washington County Clean Water Services, local churches and homeowner associations.

The City of Forest Grove Parks and Recreation Department owns and operates the aquatics center as well as ten improved parks. The Parks and Recreation Department also maintains the B Street Trail. Additional information about the facilities is provided below.

The Forest Grove Aquatics Center is located north of the Pacific University campus at Sunset Drive and University Avenue. The aquatics center offers two indoor pools, a spa and a sauna. The center is also home to the Forest Grove Swim Club and the Forest Grove High School swim team and water polo team. In addition, swimming lessons and fitness classes are offered at the facility by the Parks and Recreation Department.

In addition to the Aquatics Center, the Parks and Recreation Department also maintains ten improved parks. The parks are located throughout the city and each offers a variety of recreational opportunities. Below is a description of each park.

Bard Park – Bard Park is located at 2921 22nd Avenue near 22nd Avenue and Kingwood Street. This park is approximately 2.75 acres in area and provides a basketball court, barbeques, picnic tables, playground equipment, shelter and walking path.

Central School Park – The old Central School, located at 18th Avenue and Main Street, includes a small park with play equipment.

Fern Hill Elementary School – Fern Hill Elementary School, located on Heather Street near Mountain View Drive includes open space and a play area.

Forest Glen Park – The lower portion of Forest Glen Park is located at 101 Gales Creek Road near the south end of Lavina Street. This park is approximately 11 acres in area. Basketball courts and trails can be enjoyed at this park. The upper portion of the park is located on Forest Gale Drive near Circle Crest Drive. Areas for outdoor grilling, picnic tables and playground equipment can be enjoyed at Upper Forest Glen Park.

Forest Grove High School – The Forest Grove High School includes facilities for football, baseball, soccer and other sports. The facilities are used principally for high school athletic events.

Hazel Sills Park – Hazel Sills Park is located at 1627 Willamina Avenue. Visitors will find barbeques, picnic tables and playground equipment. This park is approximately one-half acre in area.

Harvey Clarke Elementary School - Harvey Clarke Elementary School, located on B Street at 26th Avenue, includes a small play area and open space.

Joseph Gale Park – Joseph Gale Park is located at 3014 18th Avenue near 18th Avenue and Maple Street. The park is adjacent to Joseph Gale School. Joseph Gale Park provides baseball fields, softball fields, barbeques, picnic tables, playground equipment, and restrooms. The park is approximately 3.6 acres in area.

Knox Ridge Park – Knox Ridge Park is located at 2422 Strasburg Drive at the corner of Strasburg and Kalex Lane. This park offers a playground with a play structure and swings. The park has picnic tables. Knox Ridge Park is approximately 0.4 acres in area.

Lincoln Park – Lincoln Park is a jewel in the Forest Grove park system. Located at 2725 Main Street the park is just north of the Pacific University campus. Lincoln Park serves both the broader community and the university. Amenities at Lincoln Park include baseball fields, softball field, barbeques, picnic shelters, picnic tables, playground equipment, restrooms, a BMX course, a skateboard park, track, soccer field, and walking path. Pacific University football, baseball and softball games are played at Lincoln Park.

Neil Armstrong Middle School – Neil Armstrong Middle School, located on Mountain View Drive north of Heather Street includes open space and sports fields.

Rogers Park – Rogers Park is located at 2421 17th Avenue, at the intersection of 18th Avenue and Elm Street. This park is nestled in Forest Grove. Large, mature oak trees are a defining feature of Rogers Park. Barbeques, a picnic shelter, picnic tables, playground, tennis court, portable restroom and a walking path can be found at Rogers Park. Rogers Park is approximately 3.6 acres in area.

Talisman Park – Talisman Park is located at 1210 Willamina Avenue near Magnolia Way and Willamina Avenue. This park offers barbeques, a picnic shelter, picnic tables, playground equipment, and a walking path. Talisman Park is approximately 2.5 acres in area.

Thatcher Park – Thatcher Park is another jewel in the park system. The park is located at 750 NW David Hill Road. This facility includes baseball fields, a picnic shelter, several picnic tables, playground equipment, restrooms, soccer field, softball fields,

walking path, and an off-leash dog area. A wooded natural area is also located at Thatcher Park. Thatcher Park is approximately 15.4 acres in area.

B Street Trail – The B Street Trail was constructed on a former railroad right-of-way acquired by the City of Forest Grove. The trail parallels B Street from 16th Avenue to Highway 47. The trail provides a connection across Gales Creek and offers outstanding views of the Coast Range foothills. The trail project was funded through a grant from the Oregon Parks and Recreation Department and a donation of a permanent easement for public access and maintenance across property owned by Metro.

Council Creek Regional Trail – The Forest Grove Transportation System Plan and Metro Regional Transportation Plan include the Council Creek Regional Trail. The Council Creek Regional trail is a multi-jurisdictional project with the aim of connecting Hillsboro, Cornelius, and Forest Grove to Banks and the Vernonia to Banks Trail.

Stites Park – The City of Forest Grove owns property north of 26th Avenue between Sunset Drive and Hawthorne Avenue for a future park. This area is currently undeveloped and will be improved to meet neighborhood needs as the area is developed.

Tom McCall Upper Elementary School – Tom McCall Upper Elementary School is located in western Forest Grove north of Pacific Avenue and west of E Street. The school grounds include open space and sports fields and recreational equipment.

Fern Hill Wetlands – The Fern Hill Wetlands is a regional destination located on Fern Hill Road south of Highway 47. The wetlands are owned and maintained by Clean Water Services – the Washington County sewerage agency. The area around the wetlands is undergoing restoration and improvement. The wetlands area includes trails, viewpoints, shelters and restroom facilities. The area provides habitat for migratory birds and other wildlife. The City of Forest Parks Department maintains the restroom and mows the area around the ponds when needed.

The Fern Hill Wetlands area is being developed into a first class recreational facility with interpretative features, landscaping, and trails. The wetlands will be a showcase for environmental stewardship.

Oregon Department of Forestry Arboretum – The Oregon Department of Forestry operates an arboretum in Forest Grove. The arboretum is located near the ODF district office at 801 Gales Creek Road. The arboretum provides a showcase of Oregon's trees and ecosystem. The site includes a picnic shelter and self guided interpretative trails.

Scoggins Valley Park – Scoggins Valley Park, including Henry Hagg Lake, is located between Forest Grove and Gaston on Scoggins Valley Road just west of Highway 47. The lake and surrounding facilities are owned by the US Bureau of Reclamation and maintained and operated by Washington County. Fishing, boating, trails, and several picnic shelters are offered for enjoyment.

Tillamook State Forest – The Tillamook State Forest is located west of Forest Grove in the Coast Range Mountains. Historically, the forest provided employment opportunities for local residents in the tree harvesting and wood products industry. Now the forest provides an abundance of recreational opportunities for local residents including hiking, camping, fishing, a variety of equestrian trails and roads for all terrain vehicles.

Planning

Planning and determining areas for future park sites in advance of development can help prevent the lack of facilities serving the needs of the community. The Parks and Recreation Master Plan provides a framework for planning for the recreational needs of the community.

Park Facility Standards

The National Recreation and Parks Association (NRPA) historically published numerical standards for parks and recreational facilities. Although numerical standards are no longer published, NRPA standards provide a point of reference. In general, park standards are used as a tool to determine park deficiencies in contrast to park adequacy. For purposes of determining Forest Grove’s standards a comparative study was done of eight cities comparable in size to Forest Grove. These cities include Ashland, McMinnville, Oregon City, Roseburg, Troutdale, Tualatin, West Linn and Woodburn.

Existing Facilities

Facility	Average Standard Per 1,000 persons	City	Other	School	Total Acres
Neighborhood Park, Playlots and School Parks	2 acres	13.50		12.15	25.65
Community Parks	3 acres	22.50		45.84	68.34
Regional Parks	7 acres	0.00		-	0.00
Special Use Parks	No Standard	18.60		-	18.60
Recreational Centers	No Standard	1.00		-	1.00
Open Space/Greenways/Natural Areas	10 acres	167.75	66.70	9.25	243.70

The table below shows estimated park land needs based on a City population of 28,000 by the Year 2030. The estimated build-out population within the Forest Grove planning area (urban growth boundary) is approximately 33,500 persons.

Park Need

Facility	Recommended Standard Per 1,000 persons	Total Acres Planning Period	Total Acres Build-Out
Neighborhood Park, Playlots and School Parks	1.5	42.0 Total 16.35 Net	50.3 Total 24.7 Net
Community Parks	4.0	112.0 Total 43.7 Net	134.0 Total 65.66 Net
Regional Parks	No Standard	-	-
Special Use Parks	No Standard	-	-
Recreational Centers	No Standard	-	-
Open Space/Greenways/Natural Areas	13.00	364.0 Total 120.3 Net	435.5 Total 191.8 Net

Neighborhood Parks, Play Lots, Neighborhood School Parks

Based on the 2002 Parks and Recreation Master Plan, the City has 25.65 acres of land in this category. This amounts to 1.28 acres per 1,000 persons as of the year 2010. This is below the preferred standard identified in the Parks and Recreation Master Plan of 1.50 acres per 1,000 persons. Based on the City's projected population of 28,130 persons by 2035 the City will need a total of 42.2 acres of land in this category. Therefore, an additional 16.5 acres of land for neighborhood parks, play lots, or neighborhood school parks is needed.

Community Parks and Community School Parks

Based on the 2002 Parks and Recreation Master Plan, the City has 68.34 acres of land in this category. This amounts to 3.3 acres per 1,000 persons as of the year 2010. This is below the preferred standard identified in the Parks and Recreation Master Plan of 4.0 acres per 1,000 persons. Based on the City's projected population of 28,130 persons by 2035 the City will need a total of 112.5 acres of land in this category. Therefore, an additional 44.2 acres of land for community parks and community school parks is needed.

Open Space/Natural Resource Areas

Based on the 2002 Parks and Recreation Master Plan, the City has 357.3 acres in this category. This amounts to 17.8 acres per 1,000 persons. The preferred standard identified in the Parks and Recreation Master Plan for this category is 13 acres per person. Based on the City's projected population of 28,130 persons by 2035 the City will need a total of 500.7 acres of land in this category. Therefore, an additional 143 acres of land for open space/natural resource areas is needed.

Regional Parks

The City does not have any regional park facilities within its boundaries. No standards have been set for this type of park.

Special Use Parks

Based on the 2002 Parks and Recreation Master Plan, the City has 18.60 acres in this category. This amounts to 0.93 acres per 1,000 persons. Because of the special nature of this facility (Forest Glen Park) no standards have been set for special use parks.

Recreation Centers

Currently the City owns two recreation centers. This includes the senior center and aquatics center. No standards have been assigned in this area.

Common Recreational Areas

Common recreational areas are encouraged for all subdivisions, and are required for all subdivisions of twenty or more lots. Public park dedication can satisfy this requirement.

Goals

1. Serve all ages and abilities
2. Provide safe and convenient access to parks for everyone
3. Create and expand partnerships for recreation facilities and programs
4. Promote a sense of community and preserve the character of Forest Grove
5. Contribute to a strong local economy by using park amenities to attract new residents, businesses and tourists.
6. Provide diversity in facilities and programs

Policies

1. Provide new neighborhood and community parks, additional open space and trails and new recreation facilities to meet the needs of Forest Grove residents as the population grows and resources allow.
2. Construct parks accessible to people with and without disabilities
Connect neighborhoods, schools, parks and greenways with a network of multi-purpose trails that are accessible people with and without disabilities.
3. Continue working with other recreation program and facility providers to increase recreational opportunities to Forest Grove residents through shared resources, partnerships, and joint use agreements.
4. Expand community involvement in maintaining and upgrading parks
5. Recognize that community and neighborhood parks provide a sense of place for community residents
6. Encourage the use of parks for community and neighborhood events
7. Preserve open spaces and green spaces and protect rural surrounding by acquiring land in appropriate locations for passive recreation use while it's available.
8. Promote the development of a downtown community plaza
9. Make parks attractive destinations for visitors and encourage tourism
10. Promote opportunities for relaxing, exercising, exploring and learning through the parks program.

Implementation

- Acquire additional land for community park expansion as resources permit
- Seek grant funding for acquisition of park land and improvement to existing park facilities

Cultural Resources

Introduction

As stated in the City's Vision Statement; Forest Grove is a designation that offers visitors and residents a rich heritage preserved by honoring the city's natural, cultural, and historic treasures while also embracing the future. Forest Grove has embraced this heritage a number of ways. First, the Forest Grove City Council established, and continues to support a Historic Landmarks Commission. Second, city residents and property owners have worked together with the local, state and federal governments to establish three National Register Historic Districts in Forest Grove. In addition, the City of Forest Grove received designation as a "Certified Local Government" from the Oregon State Historic Preservation Office. Many properties have agreed to have their properties designated as historic resources on the Register of Historic Places. Property owners have also voluntarily included historic and significant trees on the City's Register of Significant Trees to ensure preservation. Many of the trees on the Register are community landmarks such as several Giant Sequoia and many Oregon White Oak trees. The Oregon White Oak is the official City tree.

Certified Local Government Program

The City of Forest Grove is designated a historic preservation Certified Local Government (CLG) by the Oregon Park and Recreation Department's State Historic Preservation Office. The CLG designation is a federal program administered in Oregon by the Oregon State Historic Preservation Office. The intent of the program is to promote historic preservation at the local level.

Local governments must meet certain qualifications to become "certified" and thereby qualify to receive matching grants from SHPO. The basic certification requirements include:

- Establish a historic preservation commission and appoint interested and qualified residents to serve. To the extent they are available, at least some of the commission members should meet "professional" qualifications in the disciplines of history, architecture, architectural history, archaeology, or related fields.
- Pass a preservation ordinance that outlines how the local government will address historic preservation issues.
- Agree to participate in updating and expanding the state's historic building inventory program. SHPO takes the lead in this effort by maintaining the master database and the files for the statewide inventory and by providing grants to survey additional properties.
- Agree to review and comment on any National Register of Historic Places nominations of properties within the local government boundaries. Nominations are usually submitted by the property owners themselves or other members of the public. SHPO administers the National Register program in Oregon.
- Affirm that it will fulfill its obligation to enforce existing state preservation laws.

Historic Structures

The City's historic resources provide a sense of place that distinguishes Forest Grove. The historic Main Street continues to be a focal point for community residents and visitors alike. The historic Grand Lodge on Pacific Avenue offers a well needed respite for visitors enjoying all that the Forest Grove area has to offer.

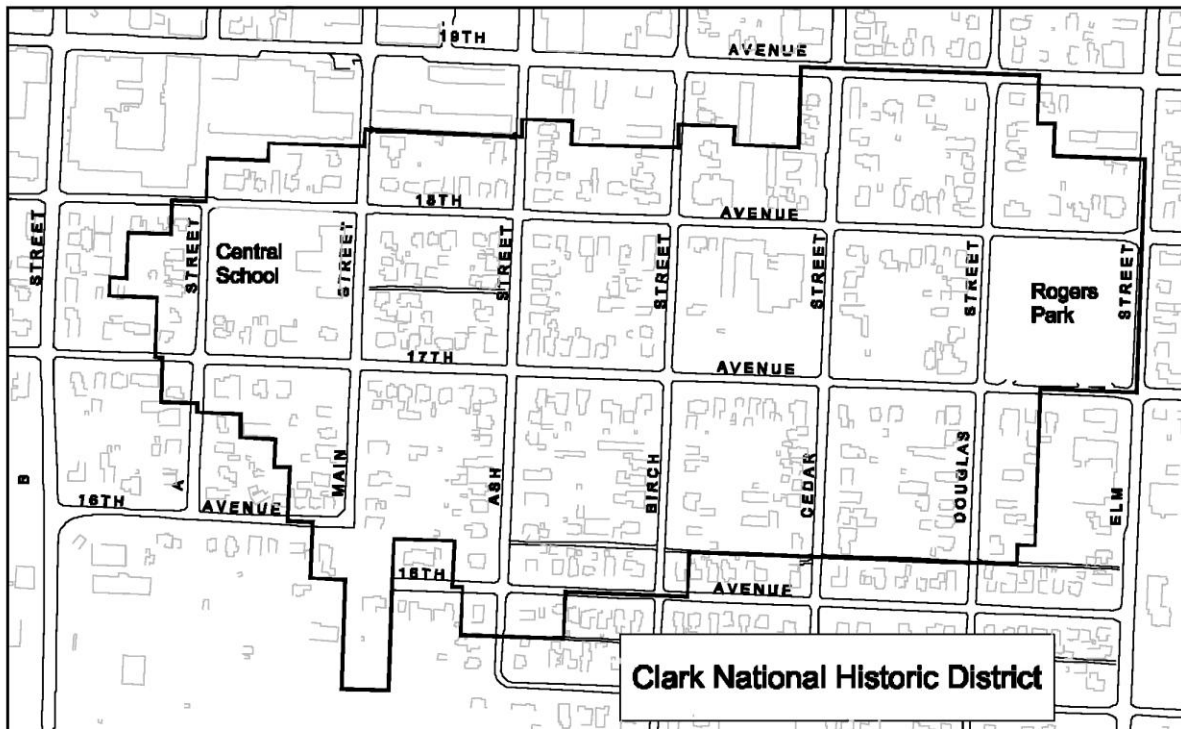
The historic neighborhoods, south of the Forest Grove Town Center, also contribute to the City's sense of place.

The Planning Division maintains the inventory of historic structures in the City. The complete inventory is a background document independent from the Comprehensive Plan.

Historic Districts

Clark Historic District

The Clark Historic District was established in 2002. The Clark Historic District is generally bounded by 18th Avenue and 19th Avenue on the north, Elm Street on the east, 16th Avenue on the south and A Street on the west.



The district is named after Reverend Harvey Clark and his wife Emeline who arrived in the Forest Grove area in 1842. At that time the Forest Grove area was known as the West Tualatin Plains.

Land within the Clark Historic District was originally platted into one-acre lots. Lots were purchased and homes were built for local residents working in various occupations, including doctors, lawyers, merchants, farmers, and railroad employees. This diverse population is reflected in the broad spectrum of architectural styles found within the Clark district.

Historically significant structures in the Clark District include:

- Central School located at 1728 Main Street;
- Smith-Schofield House located at 2011 18th Avenue;
- Congregational Church Parsonage located at 2125 18th Avenue;
- B. Cornelius House located at 2314 19th Avenue;
- C.L. Large House located at 1804 Douglas Street;
- A.C. Hoffman House located at 1703 Main Street;
- Mills House located at 1648 Ash Street;
- I.J. Hoar House located at 1623 Ash Street;
- Thomas Hines House located at 1604 Birch Street; and
- Rasmussen-Price House located at 1653 Birch Street.

Walker-Naylor Historic District

In 2011, the Walker-Naylor district became Forest Grove's third National Historic District. The Walker-Naylor Historic District is generally bounded by 23rd Avenue on the north, 21st Avenue on the south, A Street on the east, C Street on the west and Gales Way on the northwest corner. The map below shows the Walker-Naylor area.

Walker-Naylor Historic District



The Walker-Naylor district includes portions of two early Donation Land Claims. The first was granted to Thomas G. Naylor and the second was granted to Elkanah Walker in 1849. Homes in the district were predominantly built between 1858 and 1959. Very few residences, however, existed in the area until after the Oregon State Legislature granted a charter to the Town of Forest Grove in 1872 and the Walker and Naylor additions to the City were platted in 1873.

From its early history the Walker-Naylor area as desirable place to reside due to close proximity to major transportation routes, the downtown business area and Pacific University. Pacific University strongly influenced the neighborhood's development in the early 1900s with students, their families, and professors seeking out homes in the district.

Historically significant homes in the district include:

- McEldowney House #2 located at 2114 B Street;
- McCurdy House located at 2038 B Street;

- Broderson House located at 2204 A Street;
- Blank House located at 2117 A Street; and
- Crosley House located at 2125 A Street

McCurdy House



**Walker-Naylor Historic District
Street Sign**

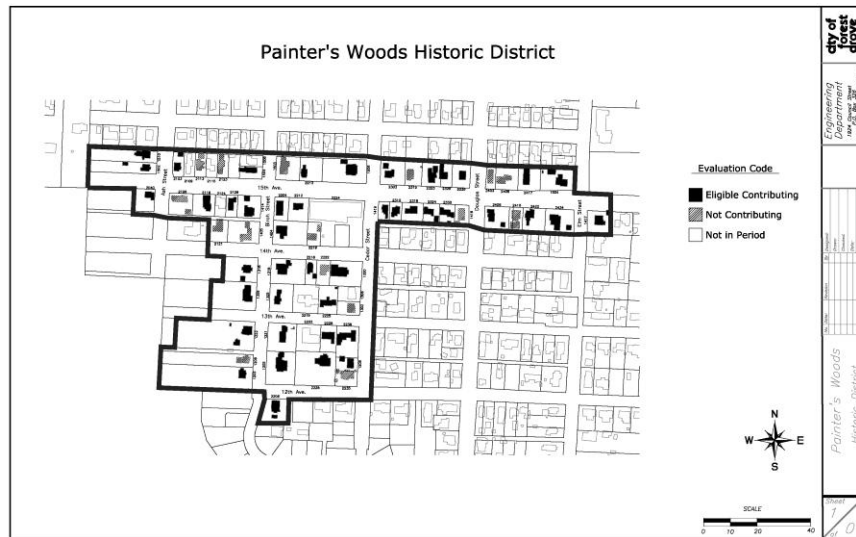


Painters Woods

The Painters Woods historic district was established in 2009. The Painters Woods district is located on land originally purchased by R.M. Painter from Forest Grove co-founder Harvey Clark. The Painters Woods district includes portions of the first subdivisions in Forest Grove including the South Park Addition (1891) and Knobb Hill

Addition (1909). The district is a well-preserved example of residential development in Forest Grove between 1880 and 1948.

The Painters Woods district is located 15th and 12th Avenues running north and south, and between Elm and Ash Streets running east and west.



Unlike the Clark Historic district with large lots, the Painters Woods area included smaller lots (5,000 square feet) designed for residential use. This marked the beginning of Forest Grove's transition from a semi-rural community to a more modern suburban community.

The Painters Woods neighborhood includes examples of Queen Anne, Craftsman, Bungalow, Foursquare, Colonial Revival, English Cottage, Vernacular, World War II era cottage and ranch architectures.

Historically significant structures in the Painters Woods district include:

- Wilson House located at 1305 Birch Street;
- Shultz House located at 2204 15th Avenue;
- Abraham House located at 1320 Cedar Street;
- Miller House located at 1506 Cedar Street;
- Marble House located at 1504 Elm Street;
- Buxton House located at 2206 12th Avenue;
- Macrum House located at 2225 12th Avenue;
- World War II era cottage located at 2324 15th Avenue;
- Bailey House located at 2422 15th Avenue; and
- Watts House located at 2434 15th Avenue.

Other Cultural Resources

Pacific University, founded in 1849, is one of the oldest educational institutions in the western United States. Marsh Hall on the Pacific University campus is listed on the City's historic register.

Pacific University maintains an active presence in Hawaii and as a result many students from Hawaii attend classes in Forest Grove. The University provides a bridge between Hawaiian culture and Forest Grove. The University holds an annual luau which provides a cultural link between Forest Grove and Hawaii that is widely anticipated.

The former Star Theater building on Pacific Avenue in the Forest Grove Town Center is listed on the City's historic register. The Theater in the Grove which occupies the space conducts many live performances and productions.

Washington County Museum showcases the history of Washington County from its agricultural roots. The museum is operated by the Washington County Historical Society and is located in downtown Hillsboro. The museum hosts exhibits and lectures on variety of topics related to the history of the area.

Rice Museum. The Rice Northwest Museum of Rocks and Minerals is another cultural resource in the area. The museum highlights the geological resources. The main building is also listed on the National Register of Historic Places.

Friends of Historic Forest Grove Old Train Station Museum and Library – The Old Train Station in downtown Forest Grove has been renovated by the Friends of Historic Forest Grove. The station now includes a museum and library for research.

Historic Structures

ADDRESS	PROPERTY NAME
1221 BIRCH ST	WILLIAM MCCREEDY HOUSE
1306 BIRCH ST	BURLINGHAM HOUSE
1414 BIRCH ST	TEMPLETON-SCHULTZ HOUSE
1506 CEDAR ST	F.J. MILLER HOUSE
1603 ASH ST	JAMES DEEKS HOUSE
1604 BIRCH ST	THOMAS HINES HOUSE
1619 MAPLE ST	TEMPLETON HOUSE
1621 MAIN ST	LOYAL GRAHAM HOUSE
1623 ASH ST	IVES J. HOAR HOUSE
1631 ASH ST	NICHOLSON-DEEKS HOUSE
1632 MAIN ST	JOHN ABBOTT HOUSE
1651 HAWTHORNE ST	HINMAN HOUSE
1653 BIRCH ST	RASMUSSEN-PRICE HOUSE
1703 MAIN ST	A.G. HOFFMAN HOUSE
1724 21ST AVE	GRIEBELER HOUSE
1736 PACIFIC AVE	EMERSON HOUSE
1803 ASH ST	IRELAND HOUSE
1803 MAIN ST	LOOMIS HOUSE
1804 MAIN ST	HINES HOUSE
1807 ASH ST	W.A. GOODIN HOUSE
1810 PACIFIC AVE	VIA HOUSE
1825 MOUNTAIN VW	PARSONS HOUSE
1839 ASH ST	CHANDLER HOUSE
1904 PACIFIC AVE	CHRISTIAN SCIENCE CHURCH
1923 ELM ST	TUCKER HOUSE
1926 PACIFIC AVE	KNIGHTS OF PYTHIAS BLDG
1933 16TH AVE	MERTZ HOUSE #2
1938 16TH AVE	I.L. SMITH HOUSE
2003 21ST AVE	AMERICAN LEGION BUILDING
2004 MAIN ST	1ST NAT'L BANK OF OREGON BLDG
2008 MAIN ST	HAINES AND BAILEY BLDG
2015 18TH AVE	LAUGHLIN-MARSHALL HOUSE
2016 MAIN ST	NIXON BLDG
2017 21ST AVE	PALACE GARAGE/FG CREAMERY
2018 17TH AVE	SCOTT HOUSE
2018 COLLEGE WAY	GENERAL TELEPHONE BLDG
2019 21ST AVE	OLD ROGER'S CITY LIBRARY
2019 MAIN ST	HOLBROOK LODGE #30
2020 MAIN ST	WOODS AND CAPLES BLDG
2028 PACIFIC AVE	STAR THEATRE/THEATRE IN THE GROVE
2030 MAIN ST	INGLES AND POPE BLDG

2033 18TH AVE	E.A. JEROME HOUSE
2036 MAIN ST	INGLES AND PORTER BLDG
2038 17TH AVE	THORNBURG HOUSE ENGLISH
2038 B ST	MCCURDY HOUSE
2038 MAIN ST	WAGNER BLDG
2039 18TH AVE	AUSTIN-MCNAMER-HUGHES HOUSE
2043 COLLEGE WAY	PACIFIC UNIVERSITY - MARSH HALL
2117 A ST	STEPHEN/PARTHENA BLANK HOUSE
2119 B ST	JEROME PORTER HOUSE
2120 17TH AVE	CHARLES ROE HOUSE
2125 18TH AVE	CONGREGATIONAL CHURCH PARSONAGE
2125 A ST	HARRY CROSLEY HOUSE
2126 17TH AVE	THOMAS ROE HOUSE STEINBACH
2128 15TH AVE	DR. CHARLES HINES HOUSE
2211 A ST	CHARLES WALKER HOUSE
2212 A ST	W.R. TAYLOR HOUSE
2214 PACIFIC AVE	J.W. HUGHES HOUSE (PACIFIC U.)
2225 12TH AVE	I.A. MACRUM HOUSE
2234 B ST	BUXTON HOUSE
2307 18TH AVE	THOMAS HOUSE
2314 19TH AVE	BENJAMIN CORNELIUS HOUSE
2325 A ST	OSCAR BROWN HOUSE #1
2328 18TH AVE	FORTNER HOUSE
2335 A ST	OSCAR BROWN HOUSE #2
2336 GALES WAY	RODLUN HOUSE
2338 17TH AVE	HARRIS-ATKINS HOUSE
240 ELM ST	A.T. SMITH HOUSE
2406 15TH AVE	W.P. SPAULDING HOUSE
2422 15TH AVE	JOHN BAILEY HOUSE
2434 15TH AVE	LAVINA LYON WATTS HOUSE TEEL,
2606 17TH AVE	ROBB-ROBERTS HOUSE
2617 17TH AVE	DANIEL BUMP HOUSE
2620 18TH AVE	HOLLIS HOUSE
3081 SUNSET	A.C. BROWN HOUSE

City Advisory Boards and Commissions

The City Council established ten advisory boards and commission to promote public involvement in decision making. These boards and commissions are identified below:

- Budget Committee
- Planning Commission
- Economic Development Commission
- Historic Landmarks Board
- Community Forestry Commission
- Sustainability Commission
- Parks and Recreation Commission
- Public Safety Advisory Commission
- Library Commission
- Public Arts Commission

The Boards and Commissions provide a variety of services for the City including:

- Historic Landmarks Board which oversees grants for improvements to historic structures and publishes a newsletter related to historic preservation.
- Community Forestry Commission undertakes activities that assist the City in meeting National Arbor Day Foundation Tree City USA requirements and tree planting activities; the Public Arts Commission which allocates funding for public art efforts; the Economic Development Commission which develops marketing materials for business recruitment activities; Library Commission which promotes community outreach efforts related to library activities.
- Planning Commission which reviews and approves certain development proposals and makes recommendation on land use policies.
- Library Commission which undertakes public outreach efforts related to Library programs and services
- Economic Development Commission which develops and reviews marketing materials related to business expansion and recruitment.
- Parks and Recreation Commission which promotes park and recreation programs.
- Public Arts Commission which fosters relationships between organizations and individuals on matters pertaining to art and culture. The Commission supports fund raising efforts and oversees the acquisition of public art.
- Sustainability Commission which helps the City build community connections with the aim of implementing strategies related to community sustainability efforts.
- Budget Committee which reviews and makes recommendations to the City Council on the annual budget.
- Parks and Recreation Commission which promotes public recreation programs that fosters learning and improves public health.

- Public Safety Advisory Commission which promotes safe and livable neighborhoods and builds awareness on service levels and budgetary needs related to police and fire protection.
- Library Commission which conducts community outreach on the variety of services and programs offered by the Forest Grove Library.

(10) A school district that is not a large school district may adopt a school facility plan as described in this section in consultation with an affected city or county.

With an enrollment of nearly 6,000 students, the Forest Grove School District meets the requirements for a large school district as defined under ORS 195.110. Therefore, this section is applicable.

(11) The capacity of a school facility is not the basis for a development moratorium under ORS 197.505 to 197.540.

The capacity of a school facility included in the Forest Grove Comprehensive Plan will not be the basis for a development moratorium under OSR 195.505 to 197.540.

(12) This section does not confer any power to a school district to declare a building moratorium.

The Forest Grove School District does not have the power to declare a building moratorium.

(13) A city or county may deny an application for residential development based on a lack of school capacity if: (a) The issue is raised by the school district; (b) The lack of school capacity is based on a school facility plan formally adopted under this section; and (c) The city or county has considered options to address school capacity.

The City does not intend to use this element of the Forest Grove Comprehensive Plan to deny an application for residential development based on a lack of school capacity.

NOTICE OF FINAL LOCAL DECISION

To: Interested Persons

From: Daniel Riordan, Senior Planner

Date: February 11, 2014

Re: City Council adoption of Order 2014-02 and Order 2014-03 related to Comprehensive Plan Post-Acknowledgment-Plan-Amendments

On January 17, 2014, the Forest Grove City Council, Washington County, approved Ordinance 2014-02 making specific changes to the Forest Grove Comprehensive Plan defined as Post-Acknowledgment-Plan Amendments under Oregon land use law. The adopted changes affect the following chapters of the Plan;

- General Background;
- Citizen Involvement;
- Community Sustainability (new chapter);
- Land Use including the Comprehensive Plan Map;
- Natural Resources and Natural Hazards;
- Schools and Education; and
- Public Facilities and Community Services related to energy.

The City Council considered the following requirements when the Council approved Ordinance 2014-02:

- A. Relevant Oregon Statewide Land Use Planning Goals;
- B. The Metro Regional Framework Plan Goals and Objectives;
- C. The Metro Urban Growth Management Functional Plan Policies; and
- D. Relevant sections of the Forest Grove Comprehensive Plan

The findings of fact and conclusions addressing the requirements identified above are attached to Ordinance 2014-02 for your information.

On February 10, 2014, the City Council also approved Order 2014-03 making additional findings and conclusions supporting the adopted Comprehensive Plan Post-Acknowledgment-Plan-Amendments. These findings are supplemental and in addition to the findings attached to Ordinance 2014-02. The findings adopted as part of Order 2014-03 are attached for your information.

This decision constitutes the final local action on the annexation and zoning matter. An appeal of this zoning decision must be filed with the Oregon Land Use Board of Appeals (LUBA) within twenty-one (21) days from the postmark date of this notice of decision. LUBA may be reached at (503) 373-1265 or www.oregon.gov/LUBA/Pages/index.aspx.

Sincerely,

Daniel Riordan
Senior Planner

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