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Volume I Comprehensive Plan

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Comprehensive Plan	Background and	Statewide Planning	<u>Transportation</u>	Community Plans
	Supporting Materials	Goal 5 Inventories	System Plan	

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Comprehensive Plan

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Comprehensive Plan Volume I

Cover Page (pdf), Cover Page (Word)

Table of Contents (pdf), Table of Contents (Word)

<u>Forward (pdf)</u>, <u>Forward (Word)</u> - Beaverton's Land Use History, Preface, Introduction, Goals of the City of Beaverton

Chapter 1 (Comprehensive Plan Amendment Procedures Element)

Ordinance 4136 Effective 12/28/2000

Chapter 1 (pdf) 130 кь, Chapter 1 (Word) 204 кь

Chapter 2 (Public Involvement Element)

Ordinance 4136 Effective 12/28/2000

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Chapter 3 (Land Use Element)

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Chapter 4 (Housing Element)

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COMPREHENSIVE PLAN FOR THE CITY OF BEAVERTON VOLUME I: CITY OF BEAVERTON COMPREHENSIVE PLAN



COMPREHENSIVE PLAN FOR THE CITY OF BEAVERTON

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BEAVERTON CREEK STATION COMMUNITY
MERLO STATION COMMUNITY
SOUTH TEKTRONIX STATION COMMUNITY
MURRAY SCHOLLS TOWN CENTER

FOREWORD

OREGON'S LAND USE PLANNING PROGRAM

Local governments depend on state government for the power to plan and implement plans and policies. In 1919 Oregon passed legislation enabling cities to plan for growth through zoning, as long as the zoning ordinance was a "well-considered plan," established planning commissions, and required planning commission approval of subdivision plats. Soon thereafter, many cities and counties developed zoning and subdivision ordinances, which, became the foundation on which many jurisdictions' exercised their planning function.

The state's role in planning continued to be limited to authorizing local control until it became apparent that local systems were not adequate to respond to the complex pressures and trends created by the population boom following World War II. Oregon's population increased nearly 40 percent between 1950 and 1970, with 80 percent of the growth occurring in the Willamette Valley. Uncontrolled growth carries associated costs that are not immediately apparent. Incrementally, however, the cost was becoming clear to the public in increased water and air pollution; loss of prime, productive farmland to subdivisions; pockets of "leap-frog" development requiring expensive urban services; and increased commercial strips along the coast.

With concern over the loss of farmland and forests (traditionally Oregon's largest industries) as the initial impetus, the Oregon Legislature in 1969 grappled with growth management, environmental preservation, and the economics of providing public services on a regional and statewide basis. Its efforts resulted in passage of Senate Bill 10, which mandated that all cities and counties to adopt comprehensive land use plans and zoning regulations. In addition, the first ten statewide planning standards were established (see Appendix for listing of statewide planning goals). However, development of local land use plans and implementing regulations by each jurisdiction throughout the state did not begin in earnest until 1973 when additional legislation was passed to implement the 1969 mandate.

The Oregon Land Use Act of 1973 established the framework needed to implement statewide land use planning. The essentials of the Act are summarized below:

Established the Land Conservation and Development Commission (LCDC) and directed it to develop statewide goals.

Created the Department of Land Conservation and Development (DLCD) to administer the statewide goals and review local comprehensive plans for compliance with these goals.

Required all cities and counties to prepare and adopt comprehensive plans consistent with the statewide goals and to enact zoning, subdivision, and other regulatory ordinances to implement the adopted plans.

Introduction i

Required state agency plans and actions to conform to the LCDC goals and to city and county comprehensive plans.

Required widespread opportunities for citizen involvement in the planning process at local and statewide levels.

Allowed for appeals from local decisions alleged to violate statewide goals.

Provided funding to jurisdictions to carry out mandated planning responsibilities.

LCDC ultimately adopted 19 statewide planning goals. The first 14 were adopted by the Commission on December 27, 1974. The last five were adopted between 1975 and 1976. The goals are general standards for land use planning. Planning remains the responsibility of city and county governments, but must be consistent with these statewide standards. All of the statewide goals, except the Willamette River Greenway (15), are accompanied by "guidelines," which are suggestions about how a local government might comply with the state standards. The goals are mandatory; guidelines are not.

Over the years each city and county in Oregon has submitted its comprehensive plan and implementing land use regulations for review and acknowledgement by LCDC, which means that the submittal has been deemed to be in compliance with the statewide goals. After acknowledgment, further amendments to the comprehensive plan and implementing regulations are reviewed by the Commission, but on a less formal basis. Subsequent formal review by LCDC is called "periodic review" and occurs every four to seven years.

LCDC has enforcement power relating to a jurisdiction's compliance with the Land Use Act (ORS 197) and the statewide goals. Each city or county is responsible for assuring that its land use actions conform with the local comprehensive plan. Procedural and substantive grounds for appeal of a local land use decision are set out in the ORS 197. Any appeals of local land use decisions go directly to the Land Use Board of Appeals (LUBA), which was created in 1979 specifically for this purpose. Appeal of a LUBA decision is to the Oregon Court of Appeals. Appeals of land use decisions by LCDC are also filed at LUBA.

In brief, the state enacted legislation which enabled the preparation, adoption and administration of statewide land use goals and guidelines; but the local jurisdictions carry out the law to implement the plans by establishing comprehensive plans and land use regulations that are consistent with the statewide program. Methods for citizen involvement have been established at both the state and local level, including appeal procedures. Planning is a dynamic process that is constantly undergoing review and refinement for the betterment of the citizens of Oregon.

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Beaverton's Land Use History

City of Beaverton incorporated February 10, 1893.

City Council directed the mayor to appoint a City Planning Commission ("in as much as there are many things concerning the present development of Beaverton that need to be arranged and planned for...") on September 11, 1944. Ordinance (ORD) 219

City Council sent a resolution to the Planning Commission in April 1945 to investigate a zoning ordinance and recommend zoning district boundaries. In December of that year, the Council held a public hearing on a proposed zoning ordinance.

City Council adopted Beaverton's first zoning ordinance (ORD 226) on January 7, 1946.

Ordinance 226 was repealed and replaced with ORD 550 in January 1960.

City Council adopted the Beaverton Area General Plan on December 18, 1972.

City Council repealed ORD 550 and adopted a new zoning code (ORD 2050), which was designed to implement the goals and policies of the General Plan, on October 20, 1978. The zoning ordinance, ORD 2050, also called the "Development Code", exists today in its amended form.

The Beaverton Area General Plan (comprehensive plan) was acknowledged by the LCDC on March 20, 1981.

The first Periodic Review of the comprehensive plan was approved by LCDC on December 4, 1987.

In 1995 the City began it's second Periodic Review of the comprehensive plan.

PREFACE

This is Volume I of a two volume document, which comprises the Comprehensive Plan. Volume I consists of the Comprehensive Plan. Volume II consists of the background and supporting documents.

The Plan was prepared in cooperation with Washington County, School District 48, and the Tualatin Hills Park and Recreation District. In addition, assisting in the development of this Comprehensive Plan were innumerable residents whose valuable contributions at each step lent assurance that this Plan represents the community's long-term goals.

INTRODUCTION

The Comprehensive Plan is the official long-range land use policy document for the City of Beaverton. It provides a framework for the decision making process and is a means of directing community efforts towards sound future growth, better understanding between public and private efforts, and a more beautiful and livable community. The Plan seeks to capture the essence of the community's vision of its future, translating it into a form that will allow effective implementation.

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Beaverton's Comprehensive Plan only pertains to lands within the City limits. In addition, to satisfy Statewide Goal 2 requirement regarding coordination within the Regional Urban Growth Boundary, Beaverton and Washington County entered into an Urban Planning Area Agreement (UPAA) in 1986 and amended the agreement in 1988. The UPAA establishes: (1) a specific urban planning area that includes land outside the City affecting City planning interests; (2) a process for coordinating planning and development in the urban planning area; and, (3) a process to amend the UPAA. Included in this agreement is a method for transferring the County's Plan and zoning land use designations to the City following annexations.

In the broadest sense, planning seeks to guide future development of an area within a framework of goals and objectives that are consistent with the physical characteristics, attitudes, and resources of the community. Without some overall frame of reference or goals, the results can be disorder, confusion, pollution, waste and congestion. Since change is a constant, the choice is not whether it should occur but rather how and where.

The basic aim of the Comprehensive Plan is to organize and coordinate complex interrelationships between people, land, resources, and facilities in such a way as to protect the future health, safety, welfare, and convenience of the citizens. The strength of such a plan lies in its comprehensive approach to the problems of urban growth. It deals with the many public and private uses of land, setting forth relationships and recommendations in graphic and descriptive form as a document to serve as a guide for future growth and change.

The Comprehensive Plan also provides a basis for coordinated action by enabling various public and private interests to undertake specific projects with a consistent understanding of community goals and objectives. The Plan functions as a working frame of reference for government officials and administrators by establishing community policies and by specifying methods and standards for implementation of these policies. Public facilities, such as schools, parks, highways, civic areas, libraries and fire stations are planned and a program for land acquisition and construction can be prepared in advance of need so that services will be available when and where they are needed.

These same community policies serve individual property owners and private interest groups as a means of evaluating their individual decisions in light of community objectives. Clearly stated objectives allow individuals to determine how their interests can best be served in a manner consistent with the Plan. They are assured by the Plan that once they commit their investment to the land, there will be a reasonable continuity of land policies to protect their interests.

The Plan also provides a guide to the various private and public utilities charged with the responsibility of providing services to the community. Future service demands can be anticipated and facilities planned so that development can take place in the most economical and timely manner.

Each individual and organization participates in some way in the planning process. The community planning process is the continuing effort to coordinate short-range and long-range private and public actions toward the fulfillment of generally accepted overall community goals. The Comprehensive Plan provides the foundation for the planning process by establishing long-

Introduction iv

range goals and objectives and by providing, through its various elements, an integrated view of future public and private development patterns in the community. It is an important tool to help the City identify problems and to take steps necessary to solve them before the cost of desirable solutions is beyond the community's economic capabilities to achieve.

The planning process is in itself a means of constantly evaluating the Comprehensive Plan. It is essential that the Plan be adaptable, but this must not be interpreted to permit piecemeal amendments that disregard the basic relationships established by the original effort. Proposed changes must be carefully considered in terms of possible overall effects on the entire community. Accommodation of a proposed development that appears very desirable on the surface may, under a thorough investigation with reference to the Plan, prove costly to both the future public interests and to committed private investments. Adherence to the policies developed in the Plan provides a means of protecting existing public and private investments and values.

The Comprehensive Plan is not a zoning plan and no existing zoning rights are changed by the Plan. However, zoning is one of the important legislative tools available to help implement the Plan. Any changes in zoning that occur are subject to a public hearing and a specific decision by the governing body. The greatest single problem between the Plan and zoning activity is timing. Some areas suggested in the Plan for different kinds of land uses can only be justified at some time in the future when sufficient population growth has occurred to warrant the development. All zone changes should be considered in relation to the Comprehensive Plan, and this serves as one of the continuing means of evaluating the Plan. If zone changes are contemplated that are contrary to the Plan, the community should first amend the policies and concepts in the Plan before a change of zone is made. This process ensures that each petition for rezoning is considered in light of the best interests of the entire community.

The Plan recommends appropriate uses for various areas and attempts to provide a maximum range of choice within the limits of the Plan's goals and objectives. If there is to be choice, various areas must be guarded against intrusion of other uses that would limit or destroy the privacy of homes or the proper and economic functioning of areas of commerce or other special values. If there is to be choice that justifies a long-term investment in homes or businesses, areas must be set aside for different types of uses.

The Plan must be implemented if it is to be of value to the community. The Plan is a vital instrument of civic betterment that hinges on the involvement of both public and private sectors of the community in its realization. It involves extensive daily contact with public groups and individual citizens, the administration of appropriate codes and ordinances influencing development, capital improvement programming for the expenditure of local governmental funds, and the continuing refinement of the Plan in special circumstances, such as the downtown, parks and recreation, or community appearance. The efforts applied in the continuing planning process extend the Plan from the present to the future accomplishment of its goals and objectives. The Comprehensive Plan provides the basic guidelines that chart a course for change with some assurance the result will be improvement.

Introduction

To facilitate use of the Plan, as much as possible, related topics have been arranged into Elements, e.g., Public Involvement Element, Land Use Element, Economy Element, Housing Element, Public Services Element. Within each Element information has been arranged in a consistent format beginning with a discussion of findings and assumptions to provide the context for the stated Objectives, Policies and Recommended Programs. The overall Goals of the City are stated at the end of this introduction. For the purposes of this Comprehensive Plan document, these categories are defined as follows:

GOAL A broad, general statement that describes a desired aim for the

community.

OBJECTIVE A target towards which the community directs effort in striving to meet a

goal.

POLICY A statement that provides a consistent direction or course of action to

guide and determine present and future decisions moving the community

towards attainment of its goals and objectives.

RECOMMENDED A statement that describes optional plans, ideas,

PROGRAM procedures, or activities which may facilitate achievement of community

goals and objectives.

The goals and objectives set forth in this Plan represent a City response to community needs. The goals present a broad view of community values and attitudes toward land use. This framework provides direction and cohesion towards development of objectives and policies for each of the elements. Although each goal can stand alone, there is synergy among them. All the objectives, policies, and recommended programs have been weighted against these interrelated concepts.

It is recognized that this Plan is based on goals that may not be easily attained. Their pursuit will require sustained commitment, cooperation, and support of the people within the community.

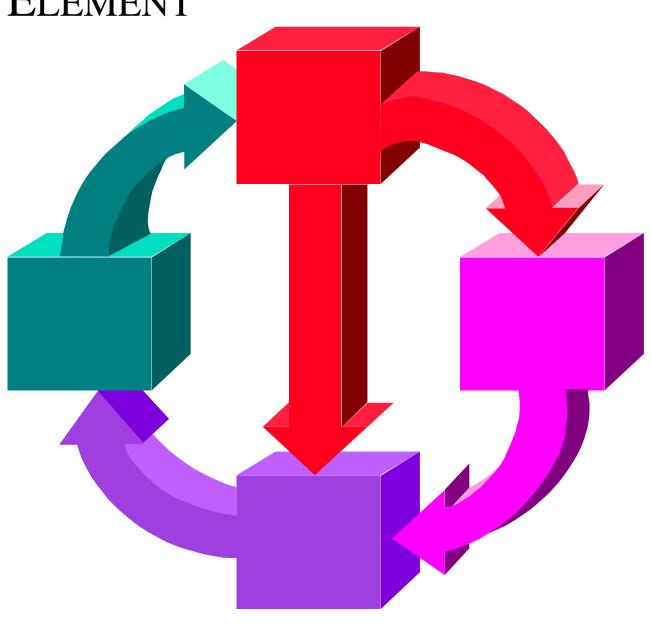
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GOALS OF THE CITY OF BEAVERTON

- 1. Retain Beaverton as an outstanding City.
- 2. Provide a sound basis for urbanization by establishing proper relationships between residential, commercial, industrial and open land uses.
- 3. Encourage growth by orderly expansion outward from existing areas of development and thereby avoid unnecessary tax burdens usually associated with scattered, unrelated development.
- 4. Recognize and respect the natural beauty and resources in the area so that the benefits of each can be enjoyed without detriment to the other.
- 5. Significantly improve the appearance of the community as one means of developing an individual and distinctive identity for Beaverton within the metropolitan area.
- 6. Provide a safe, coordinated, and economical transportation and circulation system to bring about the best relationships between places where people live, work, shop and seek recreation.
- 7. Retain and enhance the character and quality of established areas and revitalize, rehabilitate or redevelop those established areas where such improvements are needed.
- 8. Continually strive for excellence in all private developments and public services within the constraints of economic reality. Economic reality should not be interpreted as maximum profit for minimum investment or as maximum local budgets for maximum services.
- 9. Encourage and promote innovations in development techniques in order to obtain maximum livability and excellence in planning and design for all new developments.
- 10. Continually explore, within the limits of the public health, safety, and general welfare, innovations in development of regulations in order to promote maximum livability for the people of the community.
- 11. Encourage the development of the downtown as the regional employment and commercial center for the suburban southwest market area of the Portland metropolitan area.

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CHAPTER ONE: COMPREHENSIVE PLAN AMENDMENT PROCEDURES ELEMENT



COMPREHENSIVE PLAN AMENDMENT PROCEDURES

1.1 QUARTERLY REVIEW.

Amendments may be initiated by City Council, the Planning Commission, the Mayor or any other person or groups of persons. Amendment requests may be submitted to the Commission by the Planning Director at any time. Amendment requests will be processed as a package of amendments on a quarterly basis. The Planning Commission and City Council reserve the right to accept, reject, alter or modify any specific request for amendment in accordance with the City's policies and procedures, and in such a manner as will be most beneficial to the citizens of Beaverton. Only those requests for comprehensive plan amendments accepted by the Planning Commission prior to the fifteenth day of January, April, July and October will be processed during the quarter year which begins with that month.

The Planning Commission may enlarge or reduce the geographic area of proposed map amendments, investigate alternative land use designations to those requested, or combine the request with other similar requests for comprehensive study and determination. The Planning Commission, may establish subcommittees, or in response to direction from the Mayor or City Council, create citizen committees or task forces to aid and assist them in arriving at recommendations on plan amendments.

The Council may allow an amendment to proceed under an accelerated amendment process and order a suspension of the quarterly cycle when the quarterly cycle will inhibit the timely consideration of City initiated amendments which would have the effect of:

- 1. protecting the public health, safety or welfare, or
- 2. complying with federal or state judicial or legislative actions or mandates, or the requirements of other regional or local units of government, which have jurisdiction on a matter affecting the Plan, or
- 3. providing substantial public benefits, which could otherwise be lost under the adopted quarterly review procedure due to special conditions or circumstances.

Staff and/or the Planning Commission may recommend to the Council a suspension of the quarterly policy and procedure when it can be found the proposed amendment falls within at least one of the above three criteria. In no circumstances can mandatory procedures established by statute or ordinance be suspended. The Planning Director may recommend that the Commission or Council postpone other plan amendment studies to process other amendments in an accelerated process.

1.2 PERIODIC REVIEW

The Council, from time to time, may amend the Plan during periodic review update, or when public need or changed circumstances or conditions warrant an amendment. Proposed amendments to the Plan may be initiated by the Council, Commission, Mayor or other interested

persons according to the adopted policy and procedure established in Section 1.3 Amendment Procedures.

Periodic Review amendments are subject to a Land Conservation and Development Commission (LCDC) approved work program and are processed outside the quarterly review procedure established under Section 1.1.

1.3 AMENDMENT PROCEDURES

Comprehensive Plan Amendments fall into four general categories: Legislative, Quasi-Judicial, Annexation Related, and Historic Landmark and District Designations.

Legislative Amendments are amendments to the comprehensive plan text or map of a generalized nature initiated either by the City or by an applicant. Legislative amendments include additions or deletions of text or land use map categories.

Quasi-Judicial Amendments are amendments to a designation as it applies to specific parcels, interests or situations. This type of amendment is typically a privately initiated amendment coupled with a corresponding zone change.

Annexation Related Map Amendments. The acknowledged Washington County-Beaverton Urban Planning Area Agreement (UPAA) governs the assignment of Comprehensive Plan and zoning designations to land annexed into the City. The UPAA requires the City to assign particular City Comprehensive Plan and zoning designations or the most similar Plan and zoning designations to the annexed property based upon the Washington County designation. The County Comprehensive Plan and zoning designation remains in effect under provisions of State Statutes until the City acts to implement its own Comprehensive Plan and zoning map designations in the annexed territory. For that reason the act of annexation itself is deemed a political or governance decision separate and distinct from the decision to implement this plan (and the Development Code) as to those properties that have been annexed.

The following describes the various processes for review of annexation related Comprehensive Plan map amendments. Annexation related zone map amendments will be considered concurrently with Comprehensive Plan map amendments, but are subject to procedures described in the Development Code (Ord. 2050).

• NON-DISCRETIONARY ANNEXATION RELATED MAP AMENDMENTS: In most cases the UPAA is specific and leaves no discretion about which City Comprehensive Plan designation and zoning district to assign. The chart contained in Exhibit "B" of the UPAA describes a one-to-one relationship between County and City designations and the parcel(s) is not subject to any special policies contained in the Washington County Community Plan. In these cases where no discretion is involved the Comprehensive Plan designation and zoning district will be assigned by the City Council with no public hearing being required in accordance with the notice procedures in 1.3.4.3.(c). These decisions are made under land use standards that do not require interpretation or the exercise of policy or legal judgement and, therefore, are not land use decisions as defined by Oregon Statutes. Sinces these are not land use decisions the criteria in section 1.3.1 do not apply.

EXPLANATORY NOTE: The above are not land use decisions under Oregon Law because they are simply assigning a designation required by the acknowledged UPAA. ORS 197.015(10)(b) states that a Land Use Decision... "Does not include a decision of a local government: Which is made under land use standards which do not require interpretation or the exercise of policy or legal judgement".

EXPLANATORY NOTE: ORS 197.175(1) states that cities..."shall exercise their planning and zoning responsibilities...in accordance with ORS Chapters 195, 196, and 197 and the goals approved under ORS Chapters 195, 196, and 197." With regard to applying Comprehensive Plan and zoning designations when the UPAA is specific and leaves no discretion, the State Planning Goals were addressed at the time that the County adopted the land use designation for a property and again when the City and County adopted the UPAA.

- A public hearing will be required in those cases where the UPAA is not specific and requires discretion about which City Comprehensive Plan designation and zoning district to assign or when the County's Community Plan has special policy applicable to the parcel. The Planning Commission will hold the public hearing unless State law requires that the related annexation is subject to a public hearing before City Council. In that case the Comprehensive Plan Map amendment hearing will be conducted by the City Council concurrently with the annexation hearing and the Planning Commission hearing is dispensed with. The most similar designation will be applied as required by the UPAA.
- DISCRETIONARY QUASI-JUDICIAL MAP AMENDMENT: Most discretionary annexation related amendments will follow the quasi-judicial procedures specified in 1.3.4.3(a).

- DISCRETIONARY LEGISLATIVE MAP AMENDMENTS: Map amendments affecting a large area, a substantial number of ownerships or the application of several different plan designations may be processed legislatively as specified in 1.3.4.3(b). The Community Development Director or his or her designee will determine on a case-by-case basis whether to use the quasi-judicial or legislative process.
- No neighborhood review meeting is required for annextion related amendments because these amendments merely assign the City Comprehensive Plan and zoning district designation that is most similar to the existing Washington County designation in compliance with the UPAA.

Historic Landmark and District Designation Amendments are Comprehensive Plan Amendments that are evaluated based upon the criteria for amendment identified in 1.3.2 below. Comprehensive Plan Amendments within this category may be staff initiated through Periodic Review or may be initiated by the property owner or by the Historic Resources Review Committee. Historic Landmark and District Designations shall be recommended to the Planning Commission following a public hearing by the Historic Resource Review Committee (HRCC). Historic Landmark designation will satisfy the Notice Requirements for Quasi-Judicial Comprehensive Plan Amendments under 1.3.3.2. Historic District Designation will satisfy the Notice Requirements for Legislative Comprehensive Plan Amendments under 1.3.3.1. Where conflicts may exist between this element and Section 243 of Ordinance 2050 this Element shall control.

1.3.1 AMENDMENT CRITERIA.

The adoption by the City Council and Planning Commission of any amendment to the Plan, except non-discretionary annexation related map amendments, shall be supported by findings of fact, based on the record, that demonstrate the criteria of this Section, or Section 1.3.2, if applicable, have been met. The City Council and Planning Commission may adopt by reference facts, findings, reasons, and conclusions proposed by the City staff or others. Affirmative findings relative to all of the following criteria are the minimum required for a Plan amendment (non-discretionary annexation related map amendments need not comply with Plan criteria because they are not land use decisions under Oregon Statutes and are those stipulated by Exhibit "B" of the Urban Planning Area Agreement):

- 1.3.1.1 The proposed amendment is consistent and compatible with the Statewide Planning Goals; and
- 1.3.1.2 The proposed amendment is consistent and compatible with Metro Regional Urban Growth Goals and Objectives and the Metro Regional Framework Plan; and
- 1.3.1.3 The proposed amendment is consistent and compatible with the Comprehensive Plan and other applicable local plans; and
- 1.3.1.4 Potential effects of the proposed amendment have been evaluated and will not be detrimental to quality of life, including the economy, environment, public

- health, safety or welfare; and
- 1.3.1.5 The benefits of the proposed amendment will offset potential adverse impacts on surrounding areas, public facilities and services; and
- 1.3.1.6 There is a demonstrated public need, which will be satisfied by the amendment as compared with other properties with the same designation as the proposed amendment.

1.3.2 HISTORIC LANDMARK AND DISTRICT DESIGNATION CRITERIA.

The adoption by the City Council and Planning Commission of any amendment to the Plan relating to designation of historic resources shall be supported by findings of fact, based on the record, that demonstrate the criteria of this Section have been met. The City Council and Planning Commission may adopt by reference facts, findings, reasons, and conclusions proposed by the City staff or others. The HRRC, Planning Commission and City Council shall consider the following criteria and find that the proposal meets at least one factor in addition to 1.3.2.1:

- 1.3.2.1 Conforms with the purposes of the Beaverton Comprehensive Plan; and
- 1.3.2.2 The proposed landmark or district is associated with natural history, historic people, or with important events in national, state or local history; or
- 1.3.2.3 The proposed landmark or district embodies the distinguishing characteristics of an architecture inherently valuable for a study of a period, style, or method of construction; or
- 1.3.2.4 The proposed landmark is a notable work of a master builder, designer or architect; or
- 1.3.2.5 The proposed Landmark or District would serve one or more of the following purposes:
 - A. To preserve, enhance and perpetuate landmarks and districts which represent or reflect elements of the City's cultural, social, economic, political and architectural history;
 - B. To safeguard the City's historic, aesthetic and cultural heritage as embodied and reflected in said landmarks and districts;
 - C. To complement any National Register properties or Historic Districts;
 - D. To stabilize and improve property values in such districts;
 - E. To foster civic pride in the beauty and accomplishments of the past;
 - F. To protect and enhance the City's attractions to tourists and visitors and the support and stimulus to business and industry thereby provided;
 - G. To strengthen the economy of the City; and

H. To promote the use of historic districts and landmarks for the education, pleasure, energy conservation, housing and public welfare of the City's current and future citizens.

1.3.3 QUASI-JUDICIAL COMPREHENSIVE PLAN AMENDMENT NEIGHBORHOOD REVIEW MEETING

- 1.3.3.1 Staff will advise the applicant to arrange a neighborhood information meeting. Staff will provide guidance documents relating to the Comprehensive Plan Amendment to the NAC and the applicant for distribution at the meeting. The application will be deemed incomplete until such time as the provisions of this section have been met.
- 1.3.3.2 The applicant will provide notice to the NAC and property owners within 500 feet, and post a sign on the property indicating the date, time and location of the meeting. Notice will be postmarked not less than 20 calendar days prior to the meeting.
- 1.3.3.3 The applicant will conduct the Neighborhood Review Meeting to introduce the proposal and to document neighborhood comments.
- 1.3.3.4 The applicant will send a copy of the meeting notes to the NAC chair by certified mail.
- 1.3.3.5 The applicant will demonstrate compliance with this section by submitting the following information with the application:
 - A. A copy of the notice sent to the NAC and surrounding property owners;
 - B. A copy of the mailing list including the property owners and the NAC representatives;
 - C. A copy of the information contained on the posted sign;
 - D. Notes of the meeting which include the meeting date and time, the name and address of attendees, and the oral and written comments received; and
 - E. A certified mail receipt indicating mailing of the meeting notes to the NAC Chair.

1.3.4 NOTICE REQUIREMENTS

The failure of a person entitled to notice as provided in this section to receive notice shall not invalidate such proceedings if the City can demonstrate by affidavit that such notice was given.

1.3.4.1 Legislative Amendments.

Notice for Legislative Amendments shall be as follows:

A. By mailing the required inter-agency DLCD notice to DLCD, the Beaverton

- Neighborhood Office and the Chair of the Committee for Citizen Involvement (CCI) at least forty-five (45) calendar days prior to the Planning Commission hearing.
- B. By publication of a notice in a newspaper of general circulation within the City, giving the time, date, place, and purpose of the hearing; and
- C. By posting notice in three conspicuous public places in the City; and
- D. By such other notice as the Planning Commission or City Council may deem in the public interest.
- E. All hearing notices required by this section shall be given not less than thirty (30) calendar days prior to the date of the hearing.

1.3.4.2 Quasi-Judicial Amendments

Notice for Quasi-Judicial Amendments shall be as follows:

- A. By mailing the required inter-agency DLCD notice to DLCD, the Beaverton Neighborhood Office and the CCI Chair at least forty-five (45) calendar days prior to the Planning Commission hearing.
- B. By publication of a notice in a newspaper of general circulation within the City, giving time, date, place and purpose of the hearing; and
- C. By posting notice in three (3) conspicuous public places in the City, stating the property is subject to an application for a Plan amendment and the telephone number of the City department to call for further information; and
- D. By mailing notice to property owners included in the proposed change and within an area enclosed by lines parallel to and 500 feet from the exterior boundary of the property for which the change is contemplated; and
- E. By posting the property, stating a land use decision will be made about the property and giving the Community Development Department phone number. Signs shall be of sufficient number, size and location so as to be visible to a passing motorist; and
- F. By such other notice as the Planning Commission or City Council may deem in the public interest.
- G. All hearing notices required by this section shall be given not less than thirty (30) calendar days prior to the date of the hearing.

1.3.4.3 Annexation Related Map Amendments

- a) Notice for hearings on discretionary Quasi-Judicial Annexation Related Map Amendments shall be as follows:
 - A. By mailing the required inter-agency DLCD notice to DLCD, Metro, the Beaverton Neighborhood Office and the Chair of the Committee for Citizen Involvement (CCI) at least forty-five (45) calendar days prior to the initial hearing; and
 - B. By publication of a notice in a newspaper of general circulation within the City, giving the time, date, place, and purpose of the hearing; and
 - C. By posting notice in three conspicuous public places in the City, stating the

- property is subject to an application for a Plan amendment and the telephone number of the City department to call for further information; and
- D. By mailing notice to the NAC, the CPO, property owners and residents included in the proposed change and within an area enclosed by lines parallel to and 500 feet from the exterior boundary of the property for which the change is contemplated; and
- E. By such other notice as the Planning Commission or City Council may deem in the public interest; and
- F. All hearing notices required by B. through D. of this subsection (a) shall be given not less than twenty (20) calendar days prior to the date of the hearing and staff reports shall be available in this time frame.
- b) Notice for hearing on discretionary Legislative Annexation Related Map Amendments shall be as follows:
 - A. By mailing the required inter-agency DLCD notice to DLCD, Metro, the Beaverton Neighborhood Office and the Chair of the Committee for Citizen Involvement (CCI) at least forty-five (45) calendar days prior to the hearing; and
 - B. By publication of a notice in a newspaper of general circulation within the City, giving the time, date, place, and purpose of the hearing; and
 - C. By mailing notice to the NAC, the CPO and owners of record of the subject property on the most recent property tax assessment roll; and
 - D. By posting notice in three conspicuous public places in the City, stating the property is subject to an application for a Plan amendment and the telephone number of the City department to call for further information; and
 - E. By such other notice as the Planning Commission or City Council may deem in the public interest; and
 - F. All hearing notices required by B. through D. of this subsection (b) shall be given not less than twenty (20) calendar days prior to the date of the hearing and staff reports shall be available in this time frame.
- c) Notice for Non-Discretionary Annexation Related Map Amendments shall be as follows:
 - A. By publication of a notice in a newspaper of general circulation within the City, giving the time, date, place, and purpose of the City Council agenda item; and
 - B. By mailing notice to the Beaverton Neighborhood Office, Chair of the Committee for Citizen Involvement (CCI), NAC, CPO and owners of record of the subject property on the most recent proerpty tax assessment roll; and
 - C. By such other notice as the City Council may deem in the public interest; and
 - D. All notices required by A. through C. of this subsection (c) shall be given not less than twenty (20) calendar days prior to the date the item initially appears on the City Council agenda. Staff reports must be available at the time notice is provided.
 - E. Within five working days after the final decision on a Non-Discretionary

Annexation Related Map Amendment, notice of the decision shall be mailed to the owner of record, DLCD, Metro, the Beaverton Neighborhood Office and the Chairperson of the Committee for Citizen Involvement (CCI).

EXPLANATORY NOTE: When feasible the notice for annexations and the related map changes shall be combined.

- 1.3.4.4 The mailed Notice required by this section shall:
 - A. Explain the nature of the application and the use or uses which could be authorized;
 - B. List the applicable criteria from the Comprehensive Plan and State Law that apply to the application at issue;
 - C. Set forth the street address or other easily understood geographical reference to the subject property;
 - D. State the date, time and location of the hearing;
 - E. State that failure of an issue to be raised in a hearing, in person or by letter, or failure to provide statements or evidence sufficient to afford the Planning Commission an opportunity to respond to the issue precludes appeal to the City Council and Oregon State Land Use Board of Appeals on that issue;
 - F. Include the name and phone number of the City staff person assigned to the application from whom additional information may be obtained;
 - G. State that a copy of the application, all documents and evidence submitted by or on behalf of the applicant and applicable criteria are available for inspection at no cost and will be provided at reasonable cost;
 - H. State that a copy of the staff report will be available for inspection at no cost at least thirty days prior to the hearing and will be provided at reasonable cost; and
 - I. Include a general explanation of the requirements for submission of testimony and procedure for conduct of the hearing.

1.3.5 STAFF REPORTS

Comprehensive Plan Amendment staff reports will be available thirty (30) calendar days prior to the Planning Commission public hearing. Similarly, Comprehensive Plan Amendment staff reports prepared for CPA public hearings scheduled by City Council will be available to the public thirty (30) calendar days prior to the hearing. Comprehensive Plan Amendment staff reports for annexation related map amendments will be available at least twenty (20) clendar days prior to their first public hearing or agenda date.

1.3.6 FINAL ADOPTION AND APPEALS

Before the City Council may adopt any amendment to the Comprehensive Plan, the following procedures shall be followed:

1.3.6.1. After notice is given as provided in section 1.3.4 the Planning Commission shall hold a public hearing.

1.3.6.2. Following the conclusion of deliberations the Planning Commission shall forward a recommendation to City Council to approve, approve with modifications or deny the amendment request based on the plan amendment criteria and the evidence and testimony in the record. The Planning Commission shall adopt a final order, either immediately after making its recommendation or at a public meeting within a reasonable time after making the recommendation.

The final order will consist of a brief statement explaining the criteria and standards considered relevant, stating the facts relied upon in rendering the recommendation, and explaining the justification for the recommendation based on the criteria and facts set forth. The Planning Commission's final order is a recommendation, which is forwarded to the City Council for final action.

- 1.3.6.3 Notice of the Planning Commission's recommendation shall be sent to the applicant, other persons whose names appear on the application, and to all persons who testified either orally or in writing before the Planning Commission, as applicable. The notice of decision shall:
 - A. Include the CPA Application number, date, and brief summary of the final decision:
 - B. Include the name and address of the applicant;
 - C. Include, if applicable, an easily understood geographic reference to the subject property and map;
 - D. State that a copy of the final order is available for review, and that a copy can be obtained at cost; and
 - E. State that the decision is a recommendation, which will be forwarded to the Council for final decision, and that, unless appealed by filing a written Notice of Intent to Appeal with the City Recorder within ten (10) calendar days of the date of the Planning Commission's final order, that the Council will make a final decision based on the record and recommendation of the Planning Commission.
 - F. The notice shall include the requirements for filing a Notice of Intent to Appeal contained in 1.3.6.4.B, together with the name, address and phone number of the City Recorder.

1.3.6.4. Notice of Intent to Appeal

A. The Planning Commission decision may be appealed to the City Council only by the applicant, a person whose name appears on the application, or any person who appeared before the Planning Commission either orally or in writing. An appeal shall be made by filing a Notice of Intent to Appeal with the City Recorder within ten (10) calendar days of the date of the Planning Commission's final written order.

- B. A notice of Intent to Appeal shall be in writing and shall contain:
 - i) A reference to the CPA application number and date of the Planning Commission decision;
 - ii) A statement that demonstrates the appellant is the applicant or their representative, a person whose name appears on the application, or a person who appeared before the Planning Commission either orally or in writing;
 - iii) The name, address, and signature of the appellant or the appellant's representative;
 - iv) An appeal fee, as established by Council resolution; if more than one person files an appeal on a specific decision, the appeals shall be consolidated and the appeal fee shall be divided equally among the multiple appellants; and
 - v) A discussion of the specific issues raised for Council's consideration and specific reasons why the appellant contends that the Planning Commission's findings and/or recommendation is incorrect or not in conformance with applicable criteria.

C. The City Recorder shall reject the appeal if it

- i) is not filed within the ten (10) day appeal period set forth in subsection A of this section,
- ii) is not filed in the form required by subsection B of this section, or
- iii) does not include the filing fee required by subsection B of this section.

If the City Recorder rejects the appeal, the City Recorder will so notify the appellant by letter. This letter shall include a brief explanation of the reason why the City Recorder rejects the appeal. A decision of the City Recorder to reject an appeal pursuant to this section is a final City decision as of the date of the letter and is not subject to appeal to the City Council. The appellant shall be allowed to correct a failure to comply with subsection B of this section if the correction can be made and is made within the 10 day appeal period provided in subsection A of this section.

D. If a Notice of Intent to Appeal is not filed, or is rejected, the Planning Commission's final order will be submitted for approval as a consent item at a subsequent public meeting of the City Council.

Following approval by the City Council of the Planning Commission's order the Council will, if the application is approved, adopt an ordinance as provided by the Charter for the City of Beaverton.

If the application is denied, the City Council will adopt a final order which sets forth its decision together with any reasons therefor. The Council's final order or the ordinance is the final decision of the City on the application. Notice of the decision shall be given as provided in 1.3.6.8.

E. Notwithstanding the provisions of this section and in the absence of a properly and timely filed Notice of Intent to Appeal the Planning Commission decision, the Council on its own motion, may order a public hearing at the Council level at any time prior to adopting a Council final order or ordinance. This Council hearing may be on the record or de novo at the discretion of the Council.

1.3.6.5 Notice of Appeal Hearing

A. Written notice of the appeal hearing before the City Council will be sent by regular mail no later than thirty (30) days prior to the date of the hearing to the appellant, the applicant, if different from the appellant, persons whose names appear on the application, and all persons who testified either orally or in writing before the Planning Commission.

B. Notice of the hearing shall:

- i) Reference the CPA file number or numbers and the appeal number;
- ii) Set forth the street address or other easily understood geographical reference to the subject property, if applicable;
- iii) State the date, time and location of the hearing;
- iv) State that an appeal has been filed, set forth the name of the appellant or appellants and contain a brief description of the reasons for appeal;
- v) State that Council review is confined to the issues raised by the appellant with sufficient specificity to enable the Council to respond. This portion of the notice will be deleted if the City Council on its own motion calls for a public hearing on the matter and directs that such hearing will be de novo.
- vi) Include the name and phone number of the City staff person assigned to the application from whom additional information may be obtained;
- vii) State that a copy of the Planning Commission's written order, the application, all documents and evidence contained in the record, and the applicable criteria are available for inspection at no cost and can be provided at reasonable cost; and
- viii) Include a general explanation of the requirements for submission of testimony and the procedure for conduct of the hearing.

1.3.6.6 Preparation of the Record; Staff Report; Transcript

- A. Following receipt of a Notice of Intent to Appeal filed in compliance with 1.3.6.4, the Community Development Department Director shall prepare a record for Council review containing:
 - i) All staff reports and memoranda prepared regarding the application that were presented to the Planning Commission;
 - ii) Minutes of the Planning Commission proceedings at which the application was considered;
 - iii) All written testimony and all exhibits, maps documents or other written materials presented to and or rejected by the Planning Commission during the proceedings on the application; and

- iv) the Planning Commission's Final written order.
- B. The Community Development Department Director shall prepare a staff report on the appeal explaining the basis for the Planning Commission's decision as relates to the reason for appeal set forth in the Notice of Intent to Appeal, and such other matters relating to the appeal as the Director deems appropriate.
- C. Transcript. A verbatim transcript of the Planning Commission proceedings is not required. Any person who appeared before the hearing body on the application may prepare a certified verbatim transcript of all or part of the Planning Commission's proceedings at that person's own expense. The Community Development Department Director may prepare a certified verbatim transcript of all or part of the Planning Commission's proceedings at the City's expense.
- D. A certified transcript prepared pursuant to this subsection shall be considered to be part of the record of the Planning Commission's proceedings, and, if offered, shall be accepted into evidence and considered by the City Council.

1.3.6.7 Scope of Review

- A. Except as provided in subsection B of this section,
 - i) City Council review shall be limited to the evidence in the record before the Planning Commission. Evidence means facts, documents, data or other information offered to demonstrate compliance or noncompliance with the standards believed by the proponent to be relevant to the decision. No new evidence may be presented at the hearing before the Council and no person may testify before the Council unless that person appeared either orally or in writing before the Planning Commission. No issue may be raised on appeal to the Council that was not raised before the Planning Commission with sufficient specificity to enable the Planning Commission and the parties to respond.
 - ii) The Council may take official notice of and may consider in determining the matter any material which may be judicially noticed pursuant to the Oregon Rules of Evidence, ORS 40.060 to 40.090, including an ordinance, comprehensive plan, resolution, order, written policy or other enactment of the City.
 - iii) The Council may reopen the record and consider new evidence if such a request is made prior to or at the Council hearing by the appellant or any person who testified before the Planning Commission, and the requesting party demonstrates:
 - 1) That the hearing body committed a procedural error that prejudiced the requesting party's substantial rights and that reopening the record is the only alternative to remanding the application to the Planning Commission to correct the error; or
 - 2) That new evidence material to the decision on appeal exists and could

not have been presented to the Planning Commission. A requesting party may only qualify for this exception if he or she demonstrates that the new evidence concerns an unanticipated event which occurred after the close of the hearing before the Planning Commission. This exception shall be strictly construed by the Council in order to ensure that all relevant evidence and testimony is submitted to the Planning Commission.

B. De Novo Hearing.

In the event that no appeal is properly and timely filed and the City Council by motion decides to consider the Comprehensive Plan Amendment, the Council may conduct a de novo public hearing or it may review the matter on the record as described in subsection A of this section. A transcript is not required, however, if all or part of a transcript is offered, then it shall be allowed at the de novo hearing.

C. Preliminary Decision.

At the conclusion of deliberations, the Council shall make a preliminary oral decision. The Council may affirm, reverse or modify the Planning Commission's recommendation in whole or in part, or may remand the decision back to the Planning Commission for additional consideration. The preliminary oral decision is not a final decision. At any time prior to adoption of the final order pursuant to subsection D of this section, the Council may modify its decision based upon the record or may reopen the hearing.

D. Final Order.

The Council shall adopt a final order either immediately after making its preliminary oral decision or at a public meeting within a reasonable time after making the preliminary oral decision. The final written order shall consist of a brief statement explaining the criteria and standards considered relevant, stating the facts relied on in rendering the decision, explaining the justification for the decision based upon the criteria and facts set forth and, if the plan amendment is approved, an ordinance which adopts the proposed amendment. The written order is the final decision on the application and the date of the order for purposes of appeal is the date on which it is adopted by the Council.

1.3.6.8 Notice of Decision.

A notice of decision shall be prepared not later than five (5) working days after the final decision. The Plan amendment, findings and notice of decision shall be mailed to the DLCD not later than five (5) working days after the final decision.

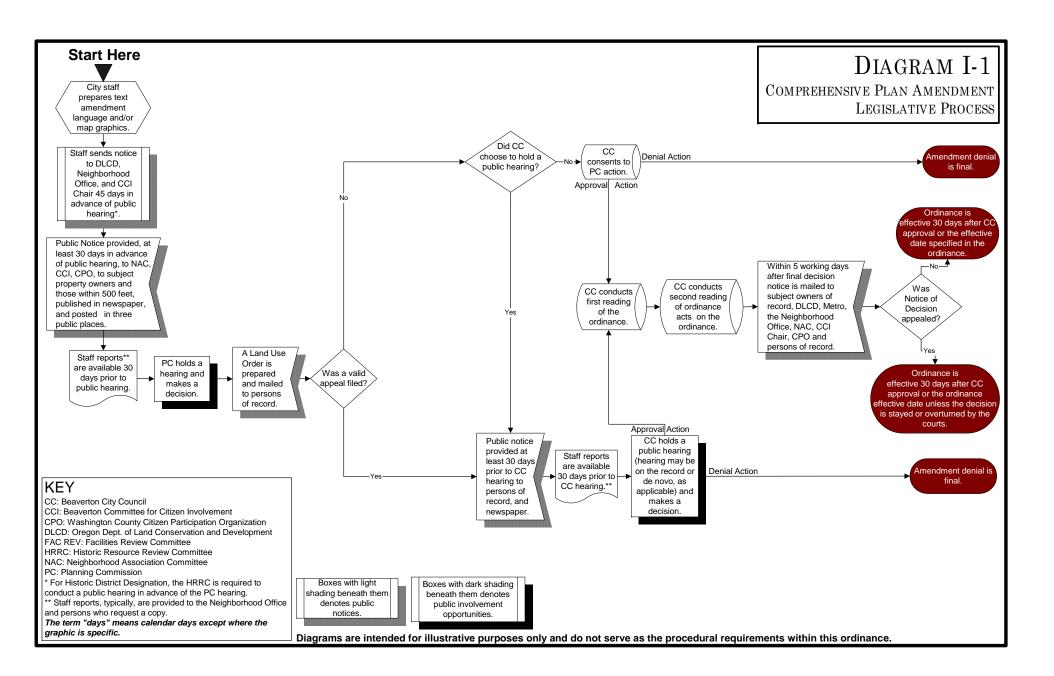
A. In addition, the notice of decision shall be sent by regular mail to:

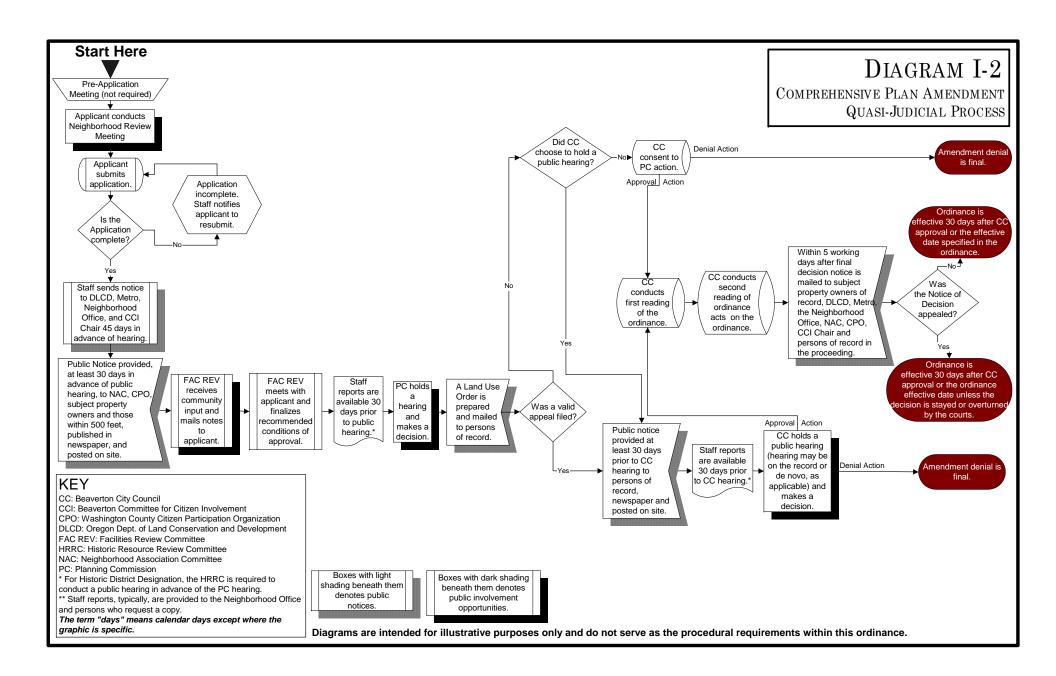
- i) persons who participated in the proceedings leading to adoption of the amendment; and
- ii) persons who requested, in writing, to receive the notice of decision.

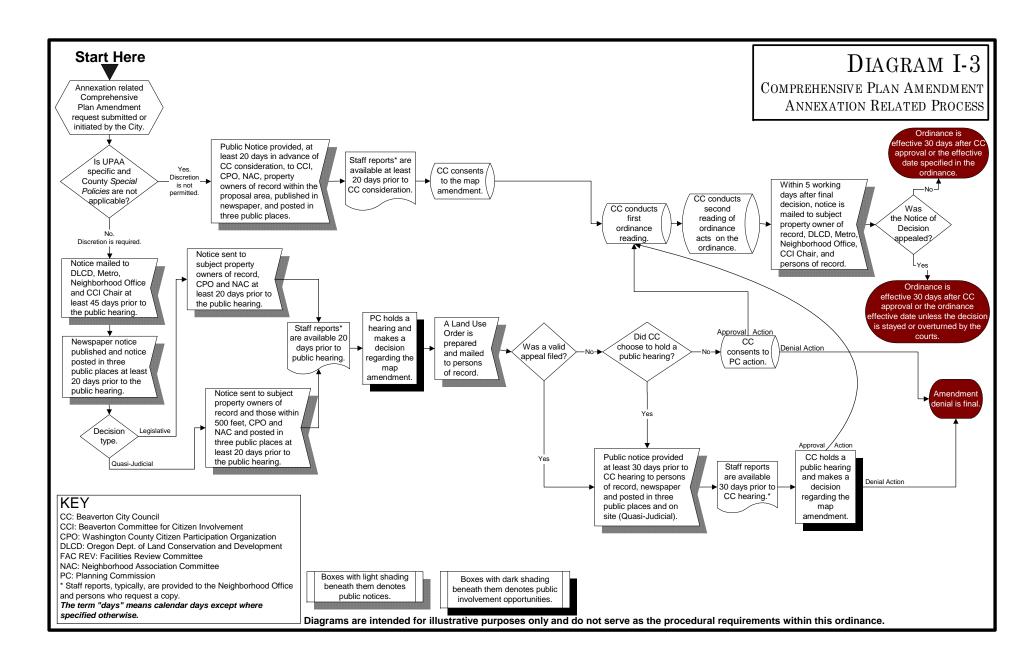
B. The notice of decision shall:

- i) include the CPA and appeal number, date and brief summary of the final decision;
- ii) include the name and address of the applicant;
- iii) include an easily understood geographical reference to the subject property and a map, if applicable;
- iv) State that the decision is available for review, and that a copy can be obtained at cost; and
- v) State that the decision may be appealed by filing a written Notice of Intent to Appeal with the Oregon State Land Use Board of Appeals (LUBA) within 21 days of the date of the final decision in accordance with ORS 197.830(8).

The following diagrams, Diagram IA through IC, are intended for illustrative purposes only and are not adopted as procedural requirements within this ordinance. Thus, periodic updates to Diagrams IA through IC will not require a Comprehensive Plan Amendment.







1.3.7 APPLICATION FEES

In order to defray expenses incurred in connection with the processing of applications, the City has established a reasonable fee to be paid to the City upon the filing of an application for a Plan amendment. Fees for privately initiated Plan amendments requiring extraordinary staff time or expertise beyond the scope of the average process may be subject to an additional project management fee as established by Council Resolution 3285.

CHAPTER TWO: PUBLIC INVOLVEMENT ELEMENT



PUBLIC INVOLVEMENT

2.1 OVERVIEW

Engaging the public early and often in the decision-making process is critical to the success of any planning effort, especially in relation to land use and transportation issues. In addition, numerous state and federal laws, as well as local policies, require public review and feedback at critical points in public policy development. For example, the federal Intermodal Surface Transportation Efficiency Act of 1991 underscores the need for public involvement, calling on planning agencies to provide the public, affected public and private agencies, and other interested parties "with a reasonable opportunity to comment" on plans and programs.

2.2 Public Involvement Goals

Oregon's Statewide Planning Goal 1 charges the governing body with preparing and adopting a comprehensive program for public involvement that clearly defines the procedures by which the general public can become involved in the planning process:

Goal 1 Citizen Involvement:

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process. (Department of Land Conservation and Development, adopted 1974, amended 1988)

The City of Beaverton's commitment to ensuring an optimum level of public participation is reflected in its public involvement goals:

City Council Goal: Enhance citizen involvement and participation.

<u>Comprehensive Plan Public Involvement Goal</u>: The Commission, Council, and other decision making bodies shall use their best efforts to involve the public in the planning process.

In response to these goals, the City has developed a Public Involvement program aimed at expanding opportunities for public involvement throughout the planning process.

2.2 PUBLIC INVOLVEMENT PROGRAM

In order to encourage public participation it is critical that issues important to different groups be identified and addressed early in the planning process. The need and desired level for public participation should be determined in the early stages of any planning activity.

Public participation provides information and assistance to staff and policy makers in dealing with issues of interest to the public. When the community and its decision makers work from a common base of information, an active, rather than reactive program can evolve. Such a program will provide information more suitable to the public's needs.

2.3 Public Involvement Program Objectives

To involve a cross section of the community in the community planning process.

To ensure effective two-way communication between the City and the public.

To provide an opportunity for the public to be involved in all phases of the planning process (e.g., scoping, analysis, plan preparation, adoption, implementation, and monitoring).

To ensure that technical information is presented in an understandable form.

To ensure that the public will receive a response from policy makers.

To ensure appropriate funding for the public involvement program.

2.4 PROGRAM IMPLEMENTATION

2.4.1 CITY-WIDE PUBLIC INVOLVEMENT OUTREACH MECHANISMS

Several existing mechanisms ensure city-wide public involvement in Beaverton's planning process. The City's primary outreach mechanisms are through:

The Committee for Citizen Involvement, an advisory committee to the City Council:

The Neighborhood Program Office;

The Neighborhood Association Committees;

Specific committees and special interest groups;

Your City, a newsletter published six times per year, subject to continued funding, that is designed to keep the public informed and invite participation;

Periodic news releases in area newspapers;

Contact with the local media;

Public workshops and focus groups; and

Public hearings.

Each public involvement opportunity is tailored to meet the needs and conditions of the outreach effort, and techniques are often combined.

2.4.2 Public Involvement in City Decision Making Processes

The City's formal decision making processes include several opportunities for public involvement. The public is invited to present their views at the various City board and committee meetings, including but not limited to City Council, Planning Commission, Traffic Commission, Board of Design Review, Historic Resources Review Committee and Facilities Review Committee. Public notices, complete with the hearing date, time, location, and hearing body, are mailed out at least twenty (20) calendar days prior to the date of the hearing, with thirty (30) calendar days notice given for Comprehensive Plan Amendments. Notices of public hearings are primarily published in the advertisement section of *The Valley Times*. On occasion, public hearing notices are published in *The Oregonian*.

Final agendas are posted at least seven calendar days in advance of the meeting at City Hall, located at 4755 S.W. Griffith Drive, the Beaverton post office on SW Betts and Farmington Road, and the Beaverton Library at Allen and Hall Boulevards. Agendas and meeting notices are available upon request from the City. Documents containing the proposals to be considered at the public hearings are available at the Planning Counter of the Community Development Department seven (7) calendar days in advance of the hearing. When the plan amendment affects a specific parcel or group of parcels, the site in question is also posted with a notice of a pending land use public hearing and a telephone number to call for further information.

The public is encouraged to provide staff with written comments or copies of presentations, particularly if the statement is too long to be presented in its entirety at a meeting. Individuals unable to attend meetings can submit concerns and ideas in writing to the Community Development Department office. Copies of all materials submitted prior to distribution to the appropriate decision making body are included in documentation provided for the hearing on the matter.

All meetings are held in locations accessible to persons with disabilities. Listening devices or other auxiliary aids, sign language interpreters for people with hearing impairments and readers for people with visual impairments are provided if requested at least three working days (72 hours) prior to the meeting.

The City also conducts public meetings, workshops and focus groups on particular issues to solicit input and involvement in various planning issues. Adopted plans are also available to the public at the Community Development Department and the Beaverton Library.

2.4.3 CITY-SPONSORED PUBLIC GROUPS

2.4.3.1. Committee for Citizen Involvement (CCI)

Council Resolution 2058 (1978) established the CCI, defining its responsibilities as an advisory committee to the City Council. Ordinance 3557 established membership of CCI as five at large members appointed by the Mayor and confirmed by the Council and one member from each recognized neighborhood association. The CCI's role is to assure the community has a continuous opportunity to exchange ideas and information with the City, and to monitor and evaluate City programs.

The <u>Citizen Involvement Program</u>, adopted by Resolution 2229 (1980), established a formalized public participation program for CCI and provided a method by which the committee and other members of the community could communicate their opinions, inquiries or complaints about City departments, committees or the Council.

The program also provides for a newsletter (the *CCI Herald*) and calendar of City meetings, information flyers, community meetings, and funding for these activities as well as staff support and public hearing notices.

2.4.3.2 Neighborhood Association Committees (NACs)

Procedures by which residents can form Neighborhood Associations (Ordinance 3120) have been adopted by the City. Additions or deletions of Neighborhood Associations do not require a Comprehensive Plan Amendment. As the City expands, new NACs will be formed in accordance with the provisions of Ordinance 3120. Figure II-1 shows a graphic representation of the general boundaries for the existing NACs. Currently there are twelve neighborhood association committees in Beaverton:

South Beaverton	Greenway	Neighbors Southwest	Vose
West Beaverton	Five Oaks	Denney Whitford	Raleigh West
Central Beaverton	Highland	Sexton Mountain	Triple Creek

NACs provide a forum to identify, discuss and offer solutions to neighborhood concerns such as traffic, safety, land use, and economic development. Supported by the Neighborhood Program Office, Beaverton's NACs are organized by volunteers, meet regularly, and participate in the public comment process. Monthly agendas and minutes are mailed to active participants. Neighborhood and city-wide issues are usually the main agenda topics.

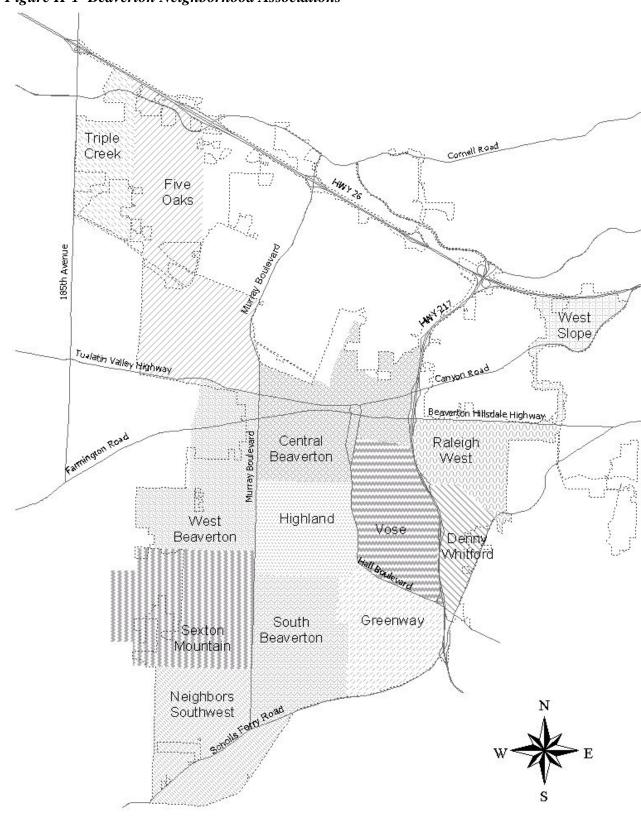


Figure II-1 Beaverton Neighborhood Associations

2.4.3.3. Citizen's Participation Organizations (CPOs)

Washington County CPOs bordering the City limits are also involved in City planning issues through their newsletters and processes. Each CPO's newsletter details issues of county, city and region-wide interest to its readers. Often, public hearing notices and articles of interest concerning Beaverton issues are included.

2.4.3.4. Other Public Boards and Commissions

The public may also attend and serve on City boards, commissions, and task forces. Appointments are usually made by the Mayor, the term is usually one year, and special experience is not necessary. Such boards currently include:

B.I.K.E. Task Force Citizens with Disabilities Advisory Committee Development Liaison Committee Planning Commission Traffic Commission Historic Resources Review Committee Board of Design Review Code Review Advisory Committee

2.4.4 Publications and Mail Notification

"Your City" newsletter is published and distributed city-wide, it provides information on current issues to the residents of Beaverton. Published approximately six times per year, subject to available funding, "Your City" includes notification of regularly scheduled Board, Commission and Neighborhood Association meetings and hearings, articles of interest to residents, and educational opportunities relating to planning and other community issues. Specific mailings, public notices, flyers, surveys and questionnaires, as well as cable broadcasts and other media, are used by the City to obtain input and provide information.

In addition, if information relates to a specific development proposal, such as for a Design Review Type I, II, III, Administrative or Quasi-Judicial decision, formal notice is provided in accordance with the Beaverton Development Code (ORD 2050).

2.5 OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Many City planning processes incorporate specific public involvement procedures, which are identified in the City of Beaverton Development Code, Ordinance 2050.

In addition to the City's public participation processes, Metro requires transportation plans and programs to conform with its adopted Local Public Involvement Policy. This policy defines procedures and includes a certification process for projects proposed for federal funding through Metro.

Early public participation is critical to identifying needs and issues, evaluating alternatives, and developing, implementing, and evaluating projects. Opportunities for public involvement are available during the following development phases of City plans:

2.5.1 COMMENTS AND RESPONSE TO COMMENTS

Comments received while plans are developed, adopted, implemented, and monitored are made part of the public record. At public hearings, comments are recorded and responses are noted.

2.5.2 FINANCIAL SUPPORT

The City is committed to providing financial support for public outreach and public participation processes. Staff and resource needs are determined during work program development for each plan, program, and project. In addition, the City's Neighborhood Program Office staff are available to coordinate outreach and work with City departments to realize the full potential of each public participation effort.

2.5.3 EVALUATION OF THE PUBLIC INVOLVEMENT PROGRAM

At regular intervals, the City's Public Involvement Program is evaluated to ensure its continued effectiveness. Revisions may be made in portions of the program related to long range planning through the Comprehensive Plan Amendment process outlined in this Plan.

2.6 PUBLIC INVOLVEMENT IN COMPREHENSIVE PLAN AMENDMENT PROCESSES

Comprehensive Plan Amendments fall into four general categories: (1) Legislative Amendments to the Comprehensive Plan text, Map or both; (2) Quasi-Judicial Amendments (i.e., parcel specific amendments to the Comprehensive Plan Map resulting from privately initiated actions); (3) Annexation Related Map Amendments; and (4) Historic Landmark or District Designation. Diagrams IA through IC, which appear in Chapter One, illustrate the steps in these amendment processes.

Public participation in Comprehensive Plan Amendments occurs in conformance with the processes described in Chapter One: Comprehensive Plan Amendment Procedures. Sitespecific map amendments also include posted notification of the action pending on the subject property.

In addition to statutorily-required notice and hearing procedures, and where formally recognized neighborhood association committees (NACs) exist, copies of proposed amendments affecting a neighborhood will be sent to association representatives. At the NAC's request, public information presentations on legislative amendments will be given to these groups prior to public hearings. The Planning Commission and City Council will employ a variety of means to provide information and will seek public participation. In addition, the Planning Commission or City Council may request public agencies and other organizations for recommendations on proposed amendments.

At times, amendments are accompanied by other development applications such as zone changes, conditional use permits, or land divisions. Public involvement opportunities for comprehensive plan amendments are shown graphically in Diagrams IA through IC in Chapter One and summarized below:

2.6.1 LEGISLATIVE AMENDMENTS

2.6.1.1 Comprehensive Plan Text Amendment

Comprehensive Plan Text Amendments (CPTAs) alter the language in the Comprehensive Plan but do not alter the Comprehensive Plan Map. CPTAs may be accompanied by Development Code text amendments.

CPTAs follow the process described in Chapter One of the Comprehensive Plan (Ordinance 1800, as amended). Diagram IA in Chapter One illustrates specific procedures and opportunities for public involvement.

Public involvement is accomplished in the CPTA process through the following means:

CPTAs are typically City initiated and include public involvement through advisory committees, Neighborhood Association Committees and public meetings.

CPTAs may be placed on the Facilities Review Committee agenda. If scheduled for the Facilities Review Committee agenda, notice will be provided to NAC chairs at least 15 calendar days in advance of the community input Facilities Review meeting.

A copy of the required inter-agency DLCD notice will be mailed to DLCD, the neighborhood office and the CCI chair 45 days prior to the Planning Commission hearing.

All NAC chairs or their designees are sent notice of the Planning Commission hearing at least 30 calendar days prior to the hearing. The staff report is available at least 30 calendar days prior to the hearing. Public comments at the Planning Commission hearing are entered into the public record. Comments are noted and included in the minutes of the meeting.

At the conclusion of the Planning Commission hearing, the Planning Commission makes a recommendation on the amendment to the City Council. The recommendation may be approval, denial or modification of the request.

The Planning Commission recommendation is acted on by the City Council on the consent agenda usually without a second public hearing. The City Council may choose to hold a public hearing or, if an appeal is filed, a public hearing is scheduled.

The public may provide testimony, both written and oral, at the City Council meeting, if the City Council holds a public hearing on the amendment.

2.6.1.2 Comprehensive Plan Map Amendment

Legislative Comprehensive Plan Map Amendments are those actions that produce a general rule or policy which is applicable to all parcels within a particular designation. An example of this type of comprehensive plan map amendment would be to change certain industrial lands to a different designation with policies applicable to all parcels with that particular designation.

CPMAs follow the process in Chapter One of the Comprehensive Plan (Ordinance 1800, as amended). Diagram IA illustrates specific procedures for these amendments and is shown in Chapter One.

Public involvement is accomplished in this same way as Comprehensive Plan Text Amendments except in the initial stage of staff report development. Prior to Department of Land Conservation and Development notification, staff initiates public meeting(s) with affected parties, takes comments, and, if appropriate, amends the application.

2.6.2 QUASI-JUDICIAL AMENDMENTS

Quasi-Judicial Comprehensive Plan Amendments are amendments to the map that are limited to specific parcels, interests or situations. This type of amendment is typically coupled with a corresponding zone change.

Quasi-judicial development review applications requiring a public hearing may be processed concurrently with the Quasi-Judicial Comprehensive Plan Amendment. If a public hearing is required before the Board of Design Review, then the Planning Commission hearing on the comprehensive plan amendment will precede the Board of Design Review hearing. Specific development review procedures are contained in the City of Beaverton Development Code (Ordinance 2050). Diagram 1B illustrates specific procedures for these amendments and is shown in Chapter 1.

Public involvement is accomplished in this process through the following means:

A neighborhood meeting will be held in accordance with the provisions in Chapter One, Section 1.3.3.

A copy of the required inter-agency DLCD notice will be mailed to DLCD, the neighborhood office and the CCI chair 45 days prior to the Planning Commission hearing.

Property owners and NACs are mailed notice of the community involvement meeting with the Facilities Review Committee at least 15

calendar days prior to the meeting. Comments provided at that meeting, either written or oral will be included in the Comment section of the staff report to the Planning Commission.

Property owners and NAC chairs are mailed notice of the Planning Commission hearing 30 calendar days prior to the hearing. Board of Design Review hearing notice for related applications is mailed pursuant to Ordinance 2050. Public comments at the Planning Commission hearing are entered into the public record. Comments are noted and included in the minutes of the meeting.

At the conclusion of the Planning Commission hearing, the Planning Commission makes a recommendation on the amendment to the City Council. The recommendation may be approval, denial or modification of the request.

The Planning Commission recommendation is acted on by the City Council on the consent agenda usually without a second public hearing. The City Council may choose to hold a public hearing or, if an appeal is filed, a public hearing is scheduled.

The public may provide testimony, both written and oral, at the City Council meeting, if the City Council holds a public hearing.

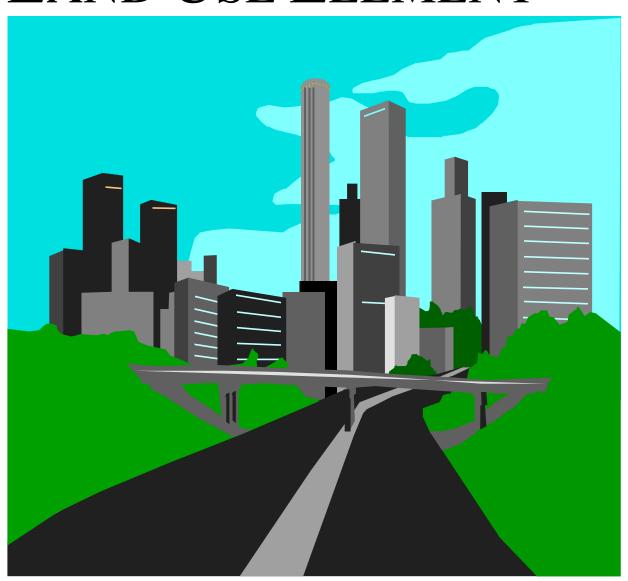
2.6.3 ANNEXATION RELATED MAP AMENDMENTS

Comprehensive Plan Map amendments are required for adoption of appropriate Comprehensive Plan designations for lands annexed into the City of Beaverton. The City has adopted an Urban Planning Area Agreement (UPAA) with Washington County, which identifies City Comprehensive Plan and zoning designation equivalents to those found in the Washington County Comprehensive Plan and Community Development Code. Annexation related map amendments follow the procedures set forth in Chapter One.

2.6.4 HISTORIC LANDMARK AND DISTRICT DESIGNATION AMENDMENTS

Some comprehensive plan amendments are required to designate Historic Landmarks and Historic Districts on the Historic Resources Inventory. The Historic Resources Review Committee (HRRC) shall hold a public hearing on the proposed landmark or district designation. The Planning Commission then holds a hearing on the matter and forwards the recommendation to the City Council. See Chapter One for further processing requirements.

CHAPTER THREE: LAND USE ELEMENT



LAND USES

3.1 OVERVIEW

In the 1970s when the City of Beaverton adopted its first long range "General Plan," the City anticipated moderate growth within its urban service area. At the time, the Plan identified a 49 square mile urban service area that would accommodate 127,000 to 257,000 people. At the close of 1999, the City's population has risen to approximately 68,000 people, increasing by approximately 53% in the last 19 years. Additionally, the 1999 city limits encompasses approximately 16 square miles.

Subsequent to the City's initial planning effort, Metro adopted a series of land use and transportation planning regulations requiring local government action. In order to use the existing regional land supply and resources more efficiently, Metro forecasts the City's fair share of the regional population and employment growth (forecast year 2017) as approximately 21,000 new jobs and 15,000 new housing units. Population and employment targets are based on local government boundaries as of 1996. Maintaining densities and intensities of development established through Washington County planning is important as land annexes to the City as the land subject to incorporation carries a proportionate share of population and employment based on the 1996 jurisdictional boundaries. Planning for the City's targets requires recognition of the requirement to accommodate the targets within the 1996 boundaries. As a result of this regional planning, prominent issues facing the City and the region include efficient provision of public services and efficient use of land while maintaining the resident's concept of livability.

A basic element of any comprehensive plan is prescribing the type, location, and distribution of land uses in the community. In addition, the relationship between land use and urban design is fundamental to quality infill and redevelopment and increased densities. These are the primary issues facing the City of Beaverton in the 20 year planning horizon beginning in the year 2000. As the density of residential and non-residential development increases urban design issues become more important. Consequently, this land use element integrates land use considerations with urban design. In other words, the element integrates the type, location and distribution of land uses with how those uses look and function on the landscape.

Significant differences in the characteristics of existing development patterns can be found in the community. These should be recognized as a factor to be considered when reviewing development proposals. If in any area development has been sufficient to have an established or particular desirable character, it should be identified and maintained. Infill in an established area with an identified character should be designed to be compatible with the area. Compatible characteristics include size, scale and design.

3.2 PLANNING CONTEXT

Within the Portland Metropolitan Area, local governments must comply with both state and regional land use laws. Consistency with the Statewide Planning Goals (referenced in Appendix A), Transportation Planning Rule and other Oregon Administrative Rules (OAR) and Oregon Revised Statutes (ORS) is required. Metro, the elected regional government serving the tricounty area, has adopted a number of planning documents for guiding the region's future growth. In 1995 Metro adopted a future vision titled "Regional Urban Growth Goals and Objectives" and a map titled "2040 Growth Concept". Compiling data from within the region and using the context of the future vision and the map, Metro formulated the Regional Framework Plan (Framework Plan). The Framework Plan highlights programs and provides the basic concepts adopted as directives in the Urban Growth Management Functional Plan (Functional Plan). The city must comply or substantially comply with the directives found within the Functional Plan or justify an exception to the directives. The 2040 Growth Concept provided a general approach to approximately where and how much the urban growth boundary should expand, the mix of uses and range of densities to accommodate projected growth within the boundary.

Specifically, section 3.07.130 of the Functional Plan requires the following:

"For each of the following 2040 Growth Concept design types, city and county comprehensive plans shall be amended to include the boundaries of each area, determined by the city or county consistent with the general locations shown on the 2040 Growth Concept Map:

<u>Regional Centers</u> – Nine regional centers will become the focus of compact development, redevelopment and high-quality transit service and multimodal street networks.

<u>Station Communities</u> – Nodes of development centered approximately one-half mile around a light rail or high capacity transit station that feature a high-quality pedestrian environment.

<u>Town Centers</u> – Local retail and services will be provided in town centers with compact development and transit service.

<u>Main Streets</u> – Neighborhoods will be served by main streets with retail and service developments served by transit.

<u>Corridors</u> – Along good quality transit lines, corridors feature a high-quality pedestrian environment, convenient access to transit, and somewhat higher than current densities.

<u>Employment Areas</u> – Various types of employment and some residential development are encouraged in employment areas with limited commercial uses.

<u>Inner Neighborhood</u> – Residential areas accessible to jobs and neighborhood businesses with smaller lot sizes are inner neighborhoods."

Beaverton's Downtown is designated a Regional Center on the 2040 Growth Concept Map. A portion of southeast Beaverton, adjacent to Highway 217, is part of the Washington Square Regional Center. Generally, the zoning districts allowed within the Beaverton Regional Center Comprehensive Plan designation include Regional Center – East, Regional Center – Old Town, and Regional Center – Transit Oriented. Other zoning districts consistent with the City's goals within the Washington Square Regional Center will be developed. The developments known as Koll Business Center, Marathon Industrial Park and Nimbus Industrial Park are located within the Washington Square Regional Center. Generally, densities in the Regional Center are intended to meet Metro's target of 60 persons per acre.

Station Communities in Beaverton include Beaverton Transit, Beaverton Central, South Tektronix, Beaverton Creek and Merlo. The Sunset and 170th/Elmonica Station Communities are located within Beaverton's urban service area, as is the eastern portion of the Willow Creek Station Community. Beaverton's zoning districts focus on the immediate station, within ½ mile, and the outer perimeter, ½ to 1 mile. These zoning district categories are labeled Station Community and Station Area, respectively. The Development Code specifies two Station Community zoning districts: Station Community – High Density Residential and Station Community – Multiple Use. Two Station Area zoning districts are identified as follows: Station Area – Medium Density Residential and Station Area – Multiple Use. Metro's target density is 45 persons per acre for the Station Community design type.

Beaverton has one Town Center, located in the vicinity of the intersection of Scholls Ferry Road and Murray Boulevard. The Bethany, Raleigh Hills, and Cedar Hills/Cedar Mill town centers are within Beaverton's urban service area. Additionally, the Sunset Transit Center is also designated as a town center. (Many of the design type boundaries overlap on the Growth Concept Map, especially in areas adjacent to light rail stations.) City Town Center zoning districts include Town Center – Multiple Use, Town Center – High Density Residential, and Town Center – Medium Density Residential. The Neighborhood Residential Medium Density (R-4) zoning district is also allowed within the Murray/Scholls Town Center. Densities are intended to reach the Metro target of 40 persons per acre.

Metro designated Main Streets on the 2040 Growth Concept Map including the following areas within Beaverton:

Murray Boulevard intersection with Allen Boulevard, and Hall Boulevard intersection with Allen Boulevard.

Metro also designates Main Streets in the following areas that include both incorporated city areas and unincorporated county areas:

Farmington Road from the Regional Center westerly to the city limits, Allen Boulevard intersection with Scholls Ferry Road, and Cornell Road.

Main Streets allow a mix of commercial and medium to high density residential zoning districts. Main Streets within the City and its environs are currently developed primarily as commercial centers with some moderate and high density residential interspersed. Densities within this land use designation are intended to reach the target of 39 persons per acre as the areas redevelop. Although Metro designates Farmington Road as a Main Street, the City applied the Corridor designation due to the character of development adjacent to Farmington Road within the city limits.

Corridors in Beaverton include Walker Road, Cedar Hills Boulevard, Murray Boulevard, Hall Boulevard, Allen Boulevard, Farmington Road, Canyon Road, Scholls Ferry Road, Beaverton-Hillsdale Highway and Tualatin Valley Highway. Corridor development differs from Main Street development with respect to density and mix of uses. In the long term, Main Streets are intended to provide for an integrated mix of residential and employment opportunities. Whereas, Corridors provide nodes of residential and employment that may be integrated, but more likely reside side by side. The Metro density target for the Corridor design type is 25 persons per acre.

Employment Areas within Beaverton generally include the following areas commonly known as the Twin Oaks Industrial Park and Cornell Oaks Corporate Center. These areas are generally within Beaverton's Industrial zoning districts. The majority of Woodside Corporate Park is within the City's urban service boundary and Science Park in Cedar Mill is in the City's urban service area. Target densities within this design type are 20 persons per acre.

Industrial Areas are generally developed with low density industrial development. Designated Industrial Areas in Beaverton include the developments known as Southern Pacific Industrial Park, Allen Business Park, and Bevest Industrial Park. Generally, the block shown on the Comprehensive Plan Land Use Map as Industrial Areas are designated with Beaverton industrial zoning districts. No new commercial zoning will be allowed in these areas.

Generally, all other areas within the city are designated Inner Neighborhood on the Metro 2040 Growth Concept Map. Areas designated on the Comprehensive Plan Land Use Map as Neighborhood Residential generally comply with the Metro Inner Neighborhood Design Type, providing densities of 14 persons per acre. Within the Neighborhood Residential land use designation, four densities are allowed as follows: Low Density, Standard Density, Medium Density and High Density. In addition, commercial development within the Medium and High Density Neighborhood Residential designations will not, generally, be permitted. Existing capacity for residential development within these land use designations is needed to help meet the Metro growth targets. Development of another nature would lessen the City's compliance with these targets, consequently; conversions of Medium and High Density Neighborhood Residential land to other uses will be limited. Where conversions are desired, it must be demonstrated that the "substantial compliance" with the Metro housing capacity targets can be met with the remaining available land as allocated.

Figure III-1, Comprehensive Plan Land Use Map, appropriately designates land uses in compliance with the Statewide Planning Goals and Metro Functional Plan Title 1 requirements to define boundaries of Metro Design Types.

The Comprehensive Plan text is a policy document guiding land use within the City of Beaverton. As such, a hierarchy of policy language is provided in the following manner:

Goals are brief guiding statements, which describe a desired result.

Policies are statements of the City's general approach to meeting a goal.

Actions direct specific City activities or events, consistent with goals and policies.

Text Boxes provide references to source materials used when developing the goal,

policy or action statement. Text boxes can also clarify the intent of a policy, but are not intended to serve as the policy direction itself. Text

boxes appear with the typeface shown in this sentence.

3.3 COMMUNITY PLAN CONTEXT

To provide Comprehensive Plan policy text specific to geographical areas, a number of Community Plans have been developed. Full understanding of the Community Plans requires review of the Comprehensive Plan for the policy framework, the Community Plan for the geographically specific text, the Beaverton Development Code for permitted uses and development application permit types and processes, and the Beaverton Engineering Design Manual and Standard Drawings for infrastructure standards.

Maps found in the Comprehensive Plan and the Development Code provide the basis for the mapped figures referenced in Community Plans. The Community Plan figures provide an expanded view of selected Comprehensive Plan and Development Code maps with a focus on a specific geographical area of the City. Community Plan figures include views of the Comprehensive Plan Land Use Map, the Transportation Functional Classification Map, the Significant Natural Resources Map, the Historic Resources Map, the Development Code Zoning Map and Major Pedestrian Route Map. Amendments to these figures follow procedures specified within the document in which they are located. Community Plan figures will be administratively updated as amendments to the Comprehensive Plan and Development Code maps are adopted.

3.4 COMMUNITY IDENTITY

Beaverton's eleven general City planning goals are found in the introduction to the Comprehensive Plan. Each Element of the Comprehensive Plan refines those goals, and creates new goals, within the context of state and regional mandates and the topic of that particular element.

The first general goal states "Retain Beaverton as an outstanding City." An outstanding City is a place of quality for people to live and work. Fundamental to the achievement of this goal is the appearance of the community. There is no doubt that the community will continue to grow and change as new people, businesses, and industries establish themselves in the area. A deliberate and continuous effort will be necessary to see that the multitude of decisions made in the process of growth collectively constitute progress toward an attractive, livable community.

3.4.1 Goal: Provide a policy framework for a community designed to establish a positive identity while enhancing livability.

- a) The City, through its development review process, shall apply urban design standards to guide public and private investment toward creating a positive community identity.
 - **Action 1:** Adopt and apply land use regulations for landscaping, screening and buffering standards for interfaces between differing zones to reduce impacts of lighting and noises to retain a degree of privacy.
 - Action 2: Adopt and apply land use regulations respecting the natural and physical features of the landscape, including but not limited to, natural areas, site design for hillside areas, flood hazards, earthquake hazards and other environmental constraints.
- b) The City's urban design standards shall promote creation of public spaces and a good pedestrian environment.
- c) Existing overhead utilities shall be placed underground in all parts of the community in conjunction with development.
- d) Sign regulations shall limit the size, location, and number of signs throughout the City. Non-conforming signs shall be removed at the time of a change in use. Off-site advertising signs shall be prohibited in all districts of the City.
 - **Action 1:** To ensure fairness, the City shall apply the sign amortization program to annexed properties that had their signs approved by Washington County.
- e) The City shall preserve significant natural resources identified on the City's Statewide Planning Goal 5 Inventories, Volume III of this Plan, through application of regulations requiring the careful siting of development.
- f) Historic buildings, structures, and sites shall be identified on the City's Statewide Planning Goal 5 Inventories, Volume III of this Plan. These resources shall be protected to the extent practicable to preserve community identity and retain important links with the past.
- g) Scenic views and sites shall be identified on the City's Statewide Planning Goal 5 Inventories, Volume III of this Plan, and protected to the extent practicable.
- h) Private, semi-public, and public uses such as churches, non-commercial schools and parks that contribute to the livability of Beaverton shall be permitted or conditionally allowed in most City zoning districts.

- i) Subsequent to their development in another zoning district, quasi-public and public uses should be converted to the Public/Quasi-Public zoning district on a regular basis through a City-initiated process. This will assist the general public in being aware of the location of such developments in their community and respond to the community's investment in public resources. Modifying only the zoning district and not the land use designation provides for future redevelopment opportunities through the zoning process.
- j) Ensure public and private facilities, especially essential public facilities, are available and provided at the time of development to reduce initial and long-range costs to City businesses and residents.

Action 1: On and off-site improvements should add to the character and quality of the area as a place for people to live and work. This includes such measures as utility undergrounding and basic pedestrian improvements such as street trees and sidewalks. Street trees are central to creating neighborhood community; therefore, land use regulations shall be adopted requiring street trees or a fee-in-lieu.

3.4.2 Goal: Proper relationships between residential, commercial, industrial, mixed and public land uses to provide a sound basis for urbanization.

Policies:

- a) The City, through its Planning Commission and City Council, shall establish and apply appropriate land use designations to property within the city limits.
- b) The City shall establish and maintain a Comprehensive Plan Land Use Map (Figure III.1) designating land uses throughout the city.
- c) The City shall apply appropriate City land use designations to annexed areas.

3.5 MIXED USE AREAS

The following goals, policies and actions apply to all mixed use areas. Mixed use areas are conceived as urban neighborhoods containing a variety and intermixing of uses that complement the established surrounding communities. These areas generally integrate compatible land uses vertically, horizontally, or both. A typical vertically integrated development includes retail uses or a mix of retail and office uses on the first floor – with a majority of the wall area fronting the sidewalk in glass. The next floors would include an additional mix of uses such as more office followed by residential dwellings. In some instances the offices are located on the main floor with an internal access to the residential dwelling on the second and third floors. This type of integrated unit has been termed an "Hoffice".

The following Metro design types are Mixed Use Areas: Regional Centers, Town Centers, Station Communities, and Main Streets. The density of development called for in the Metro Urban Growth Management Functional Plan in these areas is greater than other design types. In fact, Beaverton expects to accommodate the majority of its targeted growth within the Mixed

Use Areas. Development within City of Beaverton land use designations of Regional Center, Town Center, Station Community and Main Street must comply with the policy framework set by this section (3.5 Mixed Use Areas).

3.5.1 Goal: Beaverton mixed use areas that develop in accordance with community vision and consistent with the 2040 Regional Growth Concept Map.

Policies:

a) Regulate new development in Regional Centers, Town Centers, Station Communities and Main Streets (see Figure III-1, Comprehensive Plan Land Use Map) to ensure compact urban development.

Action 1: Adopt and apply land use regulations to promote efficient use of land. Land use regulations shall include

- *minimum densities and floor area ratios (FAR),*
- minimum and maximum surface parking ratios, with allowance of shared and onstreet parking to meet minimum requirements,
- maximum setbacks along pedestrian routes, including flexible or zero setbacks, and
- increased building heights.

Action 2: Adopt and apply land use regulations to permit calculation of residential density and FAR on net buildable land. Exclusions to the density and FAR calculations are permitted for lands set aside in an unbuildable tract or dedicated to the public for the following purposes:

- Protected wetlands,
- Natural resource areas.
- Other protected or regulated areas,
- Drainage areas or drainage facilities, and
- Buildable lands devoted to public or private rights-of-way.

Action 3: Identify and develop incentive programs for increased housing densities such as funding programs for multistory parking, combining public open space for use in high density projects, and developing a mitigation bank for wetland impacts.

- b) Allow a mix of complementary land use types, which may include housing, retail, offices, small manufacturing or industry, and civic uses to encourage compact neighborhoods with pedestrian oriented streets in order to promote:
 - Independence of movement, especially for the young and elderly to enable them to conveniently walk, cycle, or ride transit;
 - Safety in commercial areas, through round-the-clock presence of people;
 - Reduction in auto use, especially for shorter trips;
 - Support for those who work at home, through the nearby services and parks;
 - A range of housing choices so that people of varying cultural, demographic, and economic circumstances may find places to live.

Action 1: Adopt and apply land use regulations that allow for and encourage mixed use development.

Action 2: Adopt and apply land use regulations that promote pedestrian-oriented designs including regulations governing the following:

- building orientation and design along pedestrian routes, transit stops and other pedestrian accessways or open spaces actively used by the public;
- landscaping, fencing, screening, buffering pedestrian circulation and access; and
- other appropriate site design measures that enhance the pedestrian environment.
- c) Design streets and adjacent buildings within mixed use land use designations to ensure a setting that is attractive and accessible to multiple transportation modes, including pedestrians, bicyclists, transit riders and motor vehicles.
 - Action 1: Adopt and apply design standards related to building height, massing, siting, and detailing to achieve an appearance, micro-climate, and scale along designated streets to encourage walking.
 - Action 2: Adopt and apply design standards to Major Pedestrian Routes that clearly identify acceptable vehicular movement such as slow speeds and attention to pedestrian traffic.
 - **Action 3:** Designate major pedestrian routes joining employment, retail and residential areas and other pedestrian attractors.
 - Action 4: Develop, adopt, and apply land use regulations that concentrate retail activities along pedestrian oriented streets and prohibit or limit uses generating little pedestrian traffic on ground floor frontages.
- d) Incorporate pedestrian and bicycle connections into an area-wide network of public and private open spaces.
- e) Promote pedestrian safety by designing streets and pedestrian areas that encourage pedestrian use both day and night, reflect local access functions and use land efficiently.
- f) Regulate the design and construction of streets, intersections, and parking facilities to ensure pedestrian safety and convenience.
 - **Action 1:** Adopt and apply land use regulations that exclude parking spaces in structures from maximum parking ratio standards.
 - **Action 2:** Adopt and apply standards to provide attractive street frontages and visual compatibility with surrounding areas by
 - minimizing the placement of parking lots and garages along streets,
 - configuring parking in ways that will not dominate street frontages or public open

- spaces, and
- designing parking areas to accommodate construction of multiple level parking with commercial or office uses dominating the first floor.
- Action 3: Require minimum sidewalk widths to allow for pedestrian movement and use of sidewalks for temporary uses such as outdoor dining, limited commercial display and placement of pedestrian features such as street furniture, lighting and trees.
- g) Promote use of multiple level parking structures with ground floor storefront design to accommodate parking needs while avoiding dispersal of commercial activities and discontinuity of retail activities.
- h) Improve designated pedestrian oriented streets and intersections to stimulate safe, enjoyable walking.
- i) Provide usable open spaces throughout mixed use areas, acknowledging such open spaces will generally be smaller and more intensively developed through open spaces in a more suburban setting.
- j) Prior to development on any portion of a property or group of properties under single ownership a Design Review Application, or a Planned Unit Development and Design Review Application, must be submitted and approved. The application(s) must demonstrate consistency with the policies in the underlying land use designation.
- k) Allow phased development of property through a Planned Unit Development application. Ensure the phasing plan demonstrates compliance with the minimum housing density and commercial floor area ratio requirements.

3.6 REGIONAL CENTER DEVELOPMENT

The Regional Center land use designation is a mixed use designation. Each mixed use designation must comply with the policies and actions set forth in Section 3.5 as well as those promulgated for the individual designation.

3.6.1 Goal: Regional Centers that develop in accordance with community vision and consistent with the 2040 Regional Growth Concept Map.

- a) Regulate new development in Regional Centers to ensure compact urban development and to maximize the public infrastructure investment in light rail.
- b) Apply the Regional Center land use designation generally in the areas identified on the Metro 2040 Regional Growth Concept Map.
- c) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix.

- d) Adopt Community Plans identifying Comprehensive Plan Policies applicable to each regional center to provide community vision.
 - **Action 1:** Identify the Downtown Beaverton Regional Center Community Plan Area as the area generally bordered to the east by Highway 217, to the south by 5th Street, to the west by Hocken and to the north by Center and Hall Streets.
 - Action 2: Identify the Washington Square Regional Center Community Plan Area as the area generally bordered to the east by Highway 217, to the north by Denny Road, to the west by Fanno Creek, and to the south by Scholls Ferry Road. This Regional Center is primarily located in the City of Tigard. Planning for this area continues to involve intergovernmental coordination.

3.7 TOWN CENTER DEVELOPMENT

The Town Center land use designation is a mixed use designation. Each mixed use designation must comply with the policies and actions set forth in Section 3.5 as well as those promulgated for the individual designation.

3.7.1 Goal: Town Centers that develop in accordance with community vision and consistent with the 2040 Regional Growth Concept Map.

- a) Regulate new development in Town Centers to provide an integrated mix of land uses accessible to pedestrians and bicyclists as well as those who drive.
- b) Apply the Town Center land use designation in the general area identified on the Metro 2040 Regional Growth Concept Map.
- c) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix.
- d) Adopt Community Plans identifying Comprehensive Plan Policies applicable to town center areas to provide community vision.
 - Action 1: Identify the Murray Scholls Town Center Community Plan Area as including properties in the general vicinity of the intersection of Murray Boulevard and Scholls Ferry Road, consistent with the Murray Scholls Town Center study conducted in 1998.
 - Action 2: Prepare and adopt a Town Center Community Plan for each unincorporated Town Center area concurrent with or shortly after annexation. If a plan has been adopted by the County it shall be considered by the City in preparing its Community Plan for the area. In the case of incremental annexation, a Town Center Community Plan may be more appropriately adopted upon annexation of greater than 50% of the area designated as a Town Center by the County.

3.8 STATION COMMUNITY DEVELOPMENT

The Station Community land use designation is a mixed use designation. Each mixed use designation must comply with the policies and actions set forth in Section 3.5 as well as those promulgated for the individual designation.

3.8.1 Goal: Station Communities that develop in accordance with community vision and consistent with the 2040 Regional Growth Concept Map.

- a) Regulate new development in Station Communities to maximize the public infrastructure investment in light rail.
- b) Apply the Station Community land use designation generally within one mile of light rail station platforms.
- c) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix.
- d) Adopt Community Plans identifying Comprehensive Plan Policies applicable to Station Community Areas to provide community vision.
 - **Action 1:** Identify the South Tektronix Station Community Plan Areas as the area generally north of the Tualatin Valley Highway, west of Hocken, south of SW Millikan Way and east of SW Murray Boulevard.
 - **Action 2:**Identify the Beaverton Creek Station Community Plan Area as the area bordered by S.W. Jenkins Road to the north, S.W. Murray Boulevard and the railroad spur to the east, S.W. Millikan Boulevard to the south, and S.W. 153rd Drive to the west.
 - **Action 3:**Identify the Merlo Station Community Plan Area as the area in the vicinity of the Merlo Road/158th Avenue intersection.
 - **Action 4:** Identify the Elmonica Station Community Plan Area as the area in the vicinity of the Baseline Road/170th Avenue intersection.
 - **Action 5:** Identify the Willow Creek Station Community Plan Area as the area in the vicinity of the Baseline Road/185th Avenue intersection.
 - Action 6: Prepare and adopt a Station Community Community Plan for each unincorporated Town Center area concurrent with or shortly after annexation. If a plan has been adopted by the County it shall be considered by the City in preparing its Community Plan for the area. In the case of incremental annexation, a Town Center Community Plan may be more appropriately adopted upon annexation of greater than 50% of the area designated as a Town Center by the County.

3.8.2 Goal: Develop Station Communities with sufficient intensities to generate light rail ridership and around-the-clock activity.

Policies:

- a) Regulate new development in Station Communities to provide increased densities and employment to support a high level of transit service.
- b) Within ¼ mile of the light rail station platform and along all major pedestrian routes, require development to provide the highest level of design features for pedestrian activity and public access to the light rail station platform.
- c) Within ¼ mile of the light rail station platform, design the arrangement of parking and streets to accommodate construction of multiple level structures for parking, commercial, residential and mixed uses.

3.9 MAIN STREET DEVELOPMENT

The Main Street land use designation is a mixed use designation. Each mixed use designation must comply with the policies and actions set forth in Section 3.5 as well as those promulgated for the individual designation. Main Streets are intended to develop as cohesive communities with design features promoting an urban scale and pedestrian environment.

3.9.1 Goal: Main Street Areas with a vibrant mix of neighborhood commercial and residential uses in a pedestrian friendly environment that includes wide sidewalks with pedestrian amenities.

Policies:

a) Regulate new development along designated Main Streets to promote transit—supportive development that is relatively dense, mixed in use, and designed for the safety, interest, and convenience of pedestrians.

Action 1: Adopt and apply land use regulations allowing increased building heights along main streets to promote an urban scale.

Main Street regulations should require ground floor windows for commercial development to promote urban character and pedestrian - orientation, according to the Metro 2040 Land Use Code Workbook: A Guide for Updating Local Land Use Codes. The Corvallis Mixed use Residential and Mixed use Commercial districts require 60% glazing. Gresham and Portland require 50%.

Glazing provides security through "eyes on the street" and provides an interesting environment for pedestrians.

Action 2: Adopt and apply land use regulations requiring design of ground floor facades to support pedestrian uses. Examples of supportive ground floor design include, but are not limited to,

- at least 50 % glazing or window displays along the ground floor building frontages facing the main street,
- building entrances facing the main street,
- retail or small office space on the ground floor inviting activity, and
- awnings sheltering the sidewalk area facing the main street.

Action 3: Adopt and apply land use regulations generally requiring street trees planted so that the canopy provides continuous sidewalk coverage at full growth.

The recommended minimum residential density for Main Street development is 15 units per acre according to the <u>Metro 2040 Land Use Code Workbook: A Guide for Updating Local Land Use Codes.</u> Similarly, the Metro Guide recommends minimum commercial floor area ratios of 0.40:1 up to 0.60:1. In areas where lease rates are low, there may be a need to allow shadow plans that demonstrate compliance through future site intensification. Office Commercial zoning, within Main Streets, should provide for 1 to 4 story buildings supplying professional services to the community.

Action 4: Adopt and apply minimum densities and floor area ratios in designated Main Street areas.

Action 5: Adopt and apply modified landscape standards that allow a reduction in the amount of landscaping required for non-residential and mixed use development within Main Streets in exchange for pedestrian amenities.

According to the Metro 2040 Land Use Code Workbook: A Guide for Updating Local Land Use Codes, the extent of landscaping needed in mixed use areas will depend on the type of development proposed. More landscaping may be needed to ensure privacy for residential uses, while less landscaping may be desirable for commercial visibility.

Action 6:Allow limited commercial within residential projects where it can be appropriately integrated.

Hoffice development typically provides an integrated office and housing unit, which is typically attached vertically or horizontally to the office with internal access.

b) Apply the Main Street land use designation to the areas identified in the Metro 2040 Urban Growth Concept Map:

Action 1: Designate the following roads, and appropriate properties along the roads, as Main Streets:

- the intersection of Murray and Allen Boulevards,
- the intersection of Allen and Hall Boulevards, and
- the intersection of Allen Boulevard and Scholls Ferry Road.
- c) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix.

Action 1: Adopt land use regulations in the Development Code providing criteria for rezones in Main Street Areas pursuant to subsection 3.14 Comprehensive Plan and

Within the Main Street land use designation, commercial zoning is intended to provide for the shopping and service needs of the immediate neighborhood and should be readily accessible by foot, bicycle, and automobile. Two types of commercial activity are expected, individual stores, generally not exceeding 10,000 square feet in gross floor area and centers where any individual business should not exceed 15,000 square feet, with the exception of food markets. Residential zoning, within the Main Street land use designation, is intended to provide for single family attached and detached and multi-family developments. Generally, housing density will range from 8 to 43 units per acre. Where possible, residential and commercial uses should be part of an integrated mixed use development.

Zoning District Matrix. Recommended criteria include, but are not limited to, minimum and maximum zoning district sizes, floor area ratios, housing densities, distances to other similar zoning classifications, uses, and schools.

3.10 CORRIDOR DEVELOPMENT

3.10.1 Goal: An attractive mix of commercial and higher density residential uses along major roads through the City that invites pedestrian activity where appropriate.

Policies:

a) Regulate new development in Corridors to provide a mix of commercial and residential uses with pedestrian amenities.

Action 1: Allow limited commercial within residential projects where it can be appropriately integrated.

Hoffice development typically provides an integrated office and housing unit, which is typically attached vertically or horizontally to the office with internal access.

b) Apply the Corridor land use designation consistent with the Metro 2040 Regional Urban Growth Concept Map.

Action 1: Designate the following roads, and appropriate properties along the roads, as Corridors:

- Murray Boulevard,
- Hall Boulevard,
- Canyon Road,
- Farmington Road,
- Cornell Road,
- Scholls Ferry Road,
- *Allen Boulevard*,
- 92^{nd} Avenue,
- Tualatin Valley Highway,
- Beaverton-Hillsdale Highway,
- Walker Road.
- c) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix.
 - Action 1: Adopt land use regulations in the Development Code providing criteria for rezones in compliance with subsection 3.14 Comprehensive Plan and Zoning District Matrix. Recommended criteria include, but are not limited to, minimum and maximum zoning district sizes; minimum floor area ratios and housing densities; minimum distances between other similar zoning classifications, uses, and schools; frontage on specific functional classifications on the Functional Classification of Streets Map (Figure 6.7).
- d) The community shall endeavor to improve the appearance of commercial areas.
 - **Action 1:** Adopt and apply land use regulations that will limit driveway and street access, and provide landscaping along street frontage.

Action 2: Adopt and apply land use regulations that will provide landscaped median strips within the street right-of-way on

the following streets:

- Beaverton-Hillsdale Highway,
- Canyon Road
- Cedar Hills Boulevard.

Action 3: Adopt and apply land use regulations requiring buffering of properties designated Neighborhood Residential (Standard and Low Density) from commercial and higher density Recommended land use regulations include:

- stepping the heights of buildings down to 35 feet within 100 feet of existing single family residences,
- developing a screening and buffering matrix providing required plant landscaping and screening structures, and
- increasing setbacks when adjacent to residential zones.

residential uses to mitigate the impacts of such development on adjacent lower density residential development.

Action 4: Adopt and apply land use standards to limit curb cuts and direct highway access.

e) Commercial facilities shall be allocated in a reasonable amount and in a planned relationship to the people they will serve.

Action 1: Commercial activities requiring a high degree of visibility, extensive land area, extensive outdoor storage, and or display of merchandise, equipment or inventory should be permitted only along frontage to arterials and freeways as shown on the Functional Classification of Streets Map (Figure 6-7).

Within the Corridor land use designation, commercial zoning is intended to provide for a variety of shopping and service needs. Corridor areas include commercial areas requiring extensive outdoor storage and or display of merchandise, equipment or inventory. Because of the high visibility of this type of commercial area, these areas are limited to parcels with frontage along arterials or freeways. Also, commercial areas serving the immediate neighborhood with pedestrian, bicycle and auto accessibility are provided within the Corridor land use designation provided the market area for the commercial district is within a 2-3 mile radius (i.e. neighborhood scale).

Residential development within Corridors is intended to provide for single family attached and detached and multi-family developments. Generally, housing density will range from 8 to 43 units per acre. Where possible, residential and commercial uses should be part of integrated mixed use development.

3.11 EMPLOYMENT AREAS

3.11.1 Goal: Regulate development in Employment Areas to accommodate changing market trends while maintaining the City's employment base.

Policies:

a) Regulate new development in Employment Areas to promote a functional and attractive mix of office and light industrial uses within the Campus Industrial zoning district. Allow limited commercial and other non-industrial uses to lessen dependence on the automobile for workday activities of employees in the employment areas, increase the attractiveness of the employment center, and to provide a range of synergistic relationships in the development. Examples of regulatory limits on commercial activity include,

Metro Code Section 3.07.420 requires local governments apply commercial limitations in certain mapped industrial and employment areas.

Development Code regulations limit the amount of commercial activity in Campus Industrial areas.

but are not limited to, size, type, location, and hours of operation.

Action 1: Adopt and apply land use regulations limiting commercial activity in employment areas in compliance with Metro Code Section 3.07.420.

- b) Apply the Employment Area land use designation consistent with the Metro 2040 Urban Growth Concept Map.
- c) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix.

3.12 INDUSTRIAL DEVELOPMENT

3.12.1 Goal: Attractive, compatible industrial, manufacturing, warehouse, and heavy industrial development at locations in the City served by good transportation networks.

- a) Regulate new development in Industrial Areas to maintain economic function while buffering incompatible adjacent uses.
- b) Apply the Industrial Area land use designation consistent with the 2040 Regional Urban Growth Concept Map.
- c) Apply industrial zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix to provide appropriate locations for different types of industrial development.

- d) Promote good design in developing industrial areas to provide a positive contribution to the community environment.
- e) Industrial development shall recognize and respect the character of the surrounding development.
 - **Action 1:** Adopt and apply standards requiring industrial areas to develop a system of bicycle and pedestrian facilities that link to residential areas, to lessen dependence on the automobile for work trips.
- f) Ensure that adequate traffic circulation, off-street parking, and loading and service areas are provided to serve the existing and projected development in industrial areas.

Action1: Adopt and apply standards for adequate traffic circulation, off-street parking and loading areas for industrial development.

3.13 RESIDENTIAL NEIGHBORHOOD DEVELOPMENT

3.13.1 Goal: Provide for the establishment and maintenance of safe, convenient, attractive and healthful places to live.

Policies:

a) Regulate residential development to provide for diverse housing needs by creating opportunities for single and multi-family development of various sizes, types and configurations.

Action 1: Adopt and apply land use regulations requiring buffering of properties designated Neighborhood Residential (Standard and Low Density) from commercial and higher density residential uses to mitigate the impacts of such development on adjacent lower density residential development.

Recommended land use regulations include:

- stepping the heights of buildings down to 35 feet within 100 feet of existing single family residences,
- developing a screening and buffering matrix providing required plant landscaping and screening structures, and
- increasing setbacks when adjacent to residential zones.
- b) Encourage a variety of housing types in residential areas, by permitting or conditionally permitting any housing type (one, two or more, family dwellings) within any zoning district so long as the underlying residential density of the zoning district is met. Accessory dwelling units shall not be considered in the calculation of the underlying housing density.

Action 1: Adopt and apply land use regulations permitting mobile homes in mobile home parks or on individual lots within mobile home subdivision and requiring conformity to the density regulations of the underlying land use designation.

- c) Require Planned Unit Development application procedures for projects proposing two or more families within the Low Density and Standard Density land use designations. Planned Unit Developments encourage flexibility in standards and provide a mechanism for staff to make adequate findings with respect to compatibility in size, scale, and dimension. Exceptions to this requirement are dwellings designed as primary units with an accessory dwelling unit, as specified in the Development Code.
 - Action 1: Adopt and apply regulations ensuring that home occupations are limited in scale within the Low Density and Standard Density Residential Neighborhood land use designations to businesses that do not display outward manifestations of a business. This includes limiting the number of customers visiting the site, signage, and number of employees.
- d) Apply Residential Neighborhood designations (Low Density, Standard Density, Medium Density and High Density) consistent with the Metro 2040 Growth Concept Map and the City's housing target implementing strategy.

Residential Neighborhood Designations	Net Square Feet per Dwelling Unit
Low Density	10,000 - 12,500
Standard Density	5,000 - 8,750
Medium Density	2,000 - 4,999
High Density	1,000 - 1,250

- e) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix.
- f) New Commercial zoning districts are not allowed within Residential Neighborhood Standard and Low Density land use designations. Existing properties with commercial zoning as shown on Figures III-2 through III-5 and listed by tax lot on said maps shall be allowed to continue in perpetuity. Expansion of the district is not allowed, but any use permitted within said district will be allowed subject to City approval through the procedures specified in the Development Code.
- g) Enhance the City's landscape through design measures considering the natural setting of the land and the character of existing residential neighborhoods.
 - **Action 1:** Adopt and apply land use regulations requiring residential development to provide public, semi-public, and/or private open space.
- h) Foster innovation and variety in design to enhance the visual character of the City's landscape. Innovation in design can include designing infill structures to integrate into existing neighborhoods through compatible scale, similar design features, and similar setbacks.

Action 1: Adopt and apply land use regulations that provide flexibility in the Development Code to encourage creative infill and redevelopment solutions where the strict application of typical development standards will not meet the intent of efficient use of the land and preserve existing neighborhoods.

Action 2: Adopt and apply land use regulations to provide design standards for infill and redevelopment within existing neighborhoods.

i) Residential development, in compliance with regional mandates, shall achieve at least 80% of the maximum density allowed in the respective zoning districts as applied through 3.14 Comprehensive Plan and Zoning District Matrix.

For the purposes of density calculation, dwelling unit is defined as the primary dwelling unit. Accessory dwelling units are allowed anywhere a single-family dwelling is permitted. Accessory dwelling units are considered subordinate and accessory to the primary dwelling and are not counted in the density calculation above.

Persons per acre may be calculated using the 1990 US Census Bureau ratio of 2.5 persons per household for Oregon. Generally, Low Density yields approximately 7 to 10 people per acre, Standard Density returns approximately 12 to 20 persons per acre, Medium Density results in a range of 20 to 52 persons per acre and High Density may yield 84 to 107 persons per acre.

LOW DENSITY RESIDENTIAL DEVELOPMENT:

3.13.2 Goal: Retain established large lot zoning in limited areas.

Policies:

- a) Due to regional planning efforts to maintain minimal expansion of the regional Urban Growth Boundary, opportunities to increase land designated low density residential shall be limited.
- b) Existing pockets of low density residential may continue, but expansion of low density residential areas shall not occur.

Regional inner neighborhood residential densities are 14 persons per acre. At maximum development, low density residential development, as specified herein, nets 10 persons per acre. In April 2000, 200 parcels were designated low density residential totaling approximately 89 acres. Overall, this area yields 356 persons fewer than envisioned by the regional model. To limit the City's deficit in its regional share of population, expansion of the low density residential areas must be prohibited.

STANDARD DENSITY RESIDENTIAL DEVELOPMENT:

3.13.3 Goal: Establish Standard Density Residential areas to provide moderate sized lots for typical single family residences with private open space.

Policies:

a) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix to allow a variety of housing choices.

Action 1: In recognition of the urban/suburban character of Beaverton, the City shall eliminate the Residential Agriculture zoning district and apply appropriate zoning consistent with the Comprehensive Plan and Zoning District Matrix (3.14).

MEDIUM DENSITY RESIDENTIAL DEVELOPMENT:

3.13.4 Goal: Establish Medium Density Residential areas to allow for single family attached and detached, and multiple-family developments.

Policies:

- a) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix
- b) Medium Density Residential zoning is located generally in areas with good access to arterial streets, good transit service, commercial service, and public open space, or should be designed in a coordinated manner to provide such amenities in the immediate vicinity.

HIGH DENSITY RESIDENTIAL DEVELOPMENT:

3.13.5 Goal: Establish High Density Residential areas to allow for a variety of housing types.

Policies:

a) Apply zoning districts as shown in subsection 3.14 Comprehensive Plan and Zoning District Matrix in areas with good access to arterial streets, transit service, commercial service, and public open space.

3.14 COMPREHENSIVE PLAN AND ZONING DISTRICT MATRIX

The City's Comprehensive Plan provides the overall planning perspective for the City. Integrating state and regional mandates, the plan provides land use patterns that are further implemented through zoning. The following Matrix prescribes the relationship between the Comprehensive Plan land use designations and zoning districts. Compliance with the Comprehensive Plan is achieved through development application approval consistent with the regulations of the Development Code.

COMPREHENSIVE PLAN AND ZONING DISTRICT MATRIX			
Comprehensive Plan Designation	Zoning District		
Regional Center	RC-E, RC-OT, RC-TO		
Station Community	SC-HDR, SC-MU, SA-MDR, SA-MU		
Town Center	TC-HDR, TC-MU, TC-MDR		
Main Street	Office Commercial, Neighborhood Service, Convenience Service Center, R-1, R-2		
Corridor	General Commercial, Convenience Service Center, Office Commercial, Community Service, Neighborhood Service, R- 1, R-2, R-3.5, R-4, Corridor-Multiple Use		
Employment Areas	Campus Industrial		
Industrial	Industrial Park, Light Industrial, Campus Industrial		
Neighborhood Residential			
(equivalent to Metro's Inner and Outer Neighborhood Design Types)			
Low Density	$R-10^1$		
Standard Density	$R-7, R-5^2$		
Medium Density	R-4, R-3.5, R-2		
High Density	R-1		
Any of the plan designations	Institutional		
cited above			

3.15 URBAN PLANNING AREA AGREEMENT

The Washington County Urban Planning Area Agreement (UPAA), including Exhibits A and B, which is dated October 25, 1998 and was signed by the City on May 15, 1989 and signed by the County on February 10, 1989 is hereby incorporated as section 3.15 of this Land Use Element.

¹ Existing pockets of low density residential may continue, but expansion of low density neighborhood residential areas shall not occur.

² Existing properties with commercial zoning as shown on Figures III-2 through III-5 and listed by tax lot on said maps shall be allowed to continue in perpetuity. Expansion of the district is not allowed, but any use permitted within said district will be allowed subject to City approval through the procedures specified by the Development Code.

WASHINGTON COUNTY - BEAVERTON URBAN PLANNING AREA AGREEMENT

THIS AGREEMENT is entered into this 25th day of Orthogon, 19 18 by WASHINGTON COUNTY, a political subdivision of the State of Oregon, hereinafter referred to as the "COUNTY", and the CITY OF BEAVERTON, an incorporated municipality of the State of Oregon, hereinafter referred to as the "CITY".

WHEREAS, ORS 190.010 provides that units of local government may enter into agreements for the performance of any or all functions and activities that a party to the agreement, its officers or agents, have authority to perform; and

WHEREAS, Statewide Planning Goal #2 (Land Use Planning) requires that City, County, State and Federal agency and special district plans and actions shall be consistent with the comprehensive plans of the cities and counties and regional plans adopted under ORS Chapter 197; and

WHEREAS, the Oregon Land Conservation and Development Commission requires each jurisdiction requesting acknowledgment of compliance to submit an agreement setting forth the means by which comprehensive planning coordination within the Regional Urban Growth Boundary will be implemented; and

WHEREAS, the COUNTY and the CITY, to ensure coordinated and consistent comprehensive plans, consider it mutually advantageous to establish:

- 1. A site-specific Urban Planning Area within the Regional Urban Growth Boundary within which both the COUNTY and the CITY maintain an interest in comprehensive planning;
- 2. A process for coordinating comprehensive planning and development in the Urban Planning Area; and
- 3. A process to amend the Urban Planning Agreement.

NOW THEREFORE, THE COUNTY AND THE CITY AGREE AS FOLLOWS:

I. Location of the Urban Planning Area

The Urban Planning Area mutually defined by the COUNTY and the CITY includes the area designated on Exhibit "A" to this agreement.

II. Coordination of Comprehensive Planning and Development

A. Amendments to or Adoption of a Comprehensive Plan or Implementing Regulation

1. Definitions

Comprehensive Plan means a generalized, coordinated land use map and policy statement of the governing body of a local government that interrelates all functional and natural systems and activities relating to the use of lands, including, but not limited to, sewer and water systems, transportation systems, educational facilities, recreational facilities, and natural resources and air and water quality management programs. "Comprehensive Plan" amendments do not include small tract comprehensive plan map changes.

Implementing Regulation means any local government zoning ordinance, land division ordinance adopted under ORS 92.044 or 92.046 or similar general ordinance establishing standards for implementing a comprehensive plan. "Implementing regulation" does not include small tract zoning map amendments, conditional use permits, individual subdivision, partitioning or planned unit development approval or denials, annexations, variances, building permits and similar administrative-type decisions.

- 2. The County shall provide the CITY with the appropriate opportunity to participate, review and comment on proposed amendments to or adoption of the COUNTY comprehensive plan or implementing regulations. The CITY shall provide the COUNTY with the appropriate opportunity to participate, review and comment on proposed amendments to or adoption of the CITY comprehensive plan or implementing regulations. The following procedures shall be followed by the COUNTY and the CITY to notify and involve one another in the process to amend or adopt a comprehensive plan or implementing regulation:
 - a. The CITY or the COUNTY, whichever has jurisdiction over the proposal, hereinafter the originating agency, shall notify the other agency, hereinafter the responding agency, of the proposed action at the time such planning efforts are initiated, but in no case less than 45 days prior to the final hearing on adoption. The specific method and level of involvement shall be finalized by "Memorandums of Understanding" negotiated and signed by the planning directors of the CITY and

the COUNTY. The "Memorandums of Understanding" shall clearly outline the process by which the responding agency shall participate in the adoption process. If, at the time of being notified of a proposed action, the responding agency determines it does not need to participate in the adoption process, it may waive the requirement to negotiate and sign a "Memorandum of Understanding".

- b. The originating agency shall transmit draft recommendations on any proposed actions to the responding agency for its review and comment before finalizing. Unless otherwise agreed to in a "Memorandum of Understanding", the responding agency shall have ten (10) days after receipt of a draft to submit comments orally or in writing. Lack of response shall be considered "no objection" to the draft.
- c. The originating agency shall respond to the comments made by the responding agency either by a) revising the final recommendations, or b) by letter to the responding agency explaining why the comments cannot be addressed in the final draft.
- d. Comments from the responding agency shall be given consideration as a part of the public record on the proposed action. If after such consideration, the originating agency acts contrary to the position of the responding agency, the responding agency may seek appeal of the action through the appropriate appeals body and procedures.
- e. Upon final adoption of the proposed action by the originating agency, it shall transmit the adopting ordinance to the responding agency as soon as publicly available, or if not adopted by ordinance, whatever other written documentation is available to properly inform the responding agency of the final actions taken.
- B. Development Actions Requiring Individual Notice to Property Owners
 - 1. Definition

<u>Development Action Requiring Notice</u> means an action by a local government which requires notifying by mail the owners of property which could potentially be affected (usually specified as a distance measured in feet) by a proposed development action which directly affects and is applied to a specific parcel or parcels. Such development actions may include, but not be limited to small tract zoning or comprehensive plan map amendments, conditional or special use permits, individual subdivi-

- sions, partitionings or planned unit developments, variances, and other similar actions requiring a hearings process which is quasi-judicial in nature.
- The COUNTY will provide the CITY with the opportunity to review and comment on proposed development actions requiring notice within the designated Urban Planning Area. The CITY will provide the COUNTY with the opportunity to review and comment on proposed development actions requiring notice within the CITY limits that may have an affect on unincorporated portions of the designated Urban Planning Area.
- 3. The following procedures shall be followed by the COUNTY and the CITY to notify one another of proposed development actions:
 - a. The CITY or the COUNTY, whichever has jurisdiction over the proposal, hereinafter the originating agency, shall send by first class mail a copy of the public hearing notice which identifies the proposed development action to the other agency, hereinafter the responding agency, at the earliest opportunity, but no less than ten (10) days prior to the date of the scheduled public hearing. The failure of the responding agency to receive a notice shall not invalidate an action if a good faith attempt was made by the originating agency to notify the responding agency.
 - b. The agency receiving the notice may respond at its discretion. Comments may be submitted in written form or an oral response may be made at the public hearing. Lack of written or oral response shall be considered "no objection" to the proposal.
 - c. If received in a timely manner, the originating agency shall include or attach the comments to the written staff report and respond to any concerns addressed by the responding agency in such report or orally at the hearing.
 - d. Comments from the responding agency shall be given consideration as a part of the public record on the proposed action. If, after such consideration, the originating agency acts contrary to the position of the responding agency, the responding agency may seek appeal of the action through the appropriate appeals body and procedures.

- C. Additional Coordination Requirements
 - The CITY and the COUNTY shall do the following to notify one another of proposed actions by the CITY and COUNTY Planning Commissions, Board of County Commissioners and City Council which may affect the community, but are not subject to the notification and participation requirements contained in subsections A and B above.
 - a. The CITY or the COUNTY, whichever has jurisdiction over the proposed actions, hereinafter the originating agency, shall send by first class mail a copy of all public hearing agendas which contain the proposed actions to the other agency, hereinafter the responding agency, at the earliest opportunity, but no less than three (3) days prior to the date of the scheduled public hearing. The failure of the responding agency to receive an agenda shall not invalidate an action if a good faith attempt was made by the originating agency to notify the responding agency.
 - b. The agency receiving the public hearing agenda may respond at its discretion. Comments may be submitted in written form or an oral response may be made at the public hearing. Lack of written or oral response shall be considered "no objection" to the proposal.
 - c. Comments from the responding agency shall be given consideration as a part of the public record on the proposed action. If, after such consideration, the originating agency acts contrary to the position of the responding agency, the responding agency may seek appeal of the action through the appropriate appeals body and procedures.
- D. The CITY and the COUNTY agree that when annexation to the CITY takes place, the transition in land use designation from one jurisdiction to another should be orderly, logical and based upon a mutually agreed upon plan. Upon annexation, the CITY agrees to convert COUNTY plan and zoning designations to CITY plan and zoning designations which most closely approximate the density, use provisions and standards of the COUNTY designations. Such conversions shall be made according to the tables shown on Exhibit "B" to this Agreement.

II. Special Policies

- A. The CITY recognizes and supports the COUNTY's Community Plans and land use designations and agrees to convert COUNTY land use designations to CITY land use designations upon annexation in accordance with Exhibit "B" of this Agreement. In addition, the COUNTY will advise the CITY of adopted policies which apply to the annexed areas and the CITY shall determine whether CITY adoption is appropriate and act accordingly.
- B. The CITY and the COUNTY shall provide information of comprehensive planning and development actions to the Community Planning Organizations (CPO) through the notice procedures outlined in Section II of this Agreement.
- C. At least one copy of any COUNTY ordinance which proposes to (1) amend the COUNTY comprehensive plan, (2) adopt a new plan, or (3) amend the text of the COUNTY zoning code shall be mailed to the CITY within five (5) days after its introduction.
- D. At least one copy of any COUNTY ordinance which proposes to rezone land within one (1) mile of the corporate limits of the CITY shall be mailed to the CITY within five (5) days after its introduction.
- E. The CITY is responsible for conducting an urban services study within its urban planning area shown on Exhibit "A". This study will identify the area for long-range provision of urban level services and annexation to the CITY. Services to be studied shall include, but not limited to: water, sanitary sewer, storm sewer and transportation facilities; police and fire protection; land use planning and development services. The COUNTY will participate in this process as outlined in a Memorandum of Understanding and will forward the future proposed urban services boundary and policies to the County Planning Commission and Board of Commissioners for consideration as a possible amendment to the COUNTY Comprehensive Plan.
- F. The CITY is responsible for the preparation, adoption and amendment of the public facility plan required by OAR 660-11 within the City limits of Beaverton as of January 1, 1986. The COUNTY is responsible for the preparation, adoption and amendment of the public facility plan required by OAR 660-11 within the unincorporated area of the Urban Planning Area shown on Exhibit "A". The method of coordination and involvement of each jurisdiction in the other's planning process shall be specified in Memorandums of Understanding.

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- As the CITY annexes territory during the time the COUNTY prepares its public facility plan, this territory shall be withdrawn from the COUNTY's direct responsibility for planning and be given to the CITY unless both jurisdictions agree that it is in everyone's interest to continue with COUNTY responsibility.
- G. The CITY and COUNTY shall adopt policy statements in the public facilities plans and/or amend this agreement to identify present and future service providers.
- H. The City of Tigard, City of Beaverton and Washington County have agreed to the following stipulations regarding the connection of Murray Boulevard from Old Scholls Ferry Road to the intersection of SW 121st Avenue and Gaarde Street:
 - 1. The City of Tigard, City of Beaverton and Washington County agree to amend their respective comprehensive plans to reflect the following functional classification and design considerations:
 - a. Designation: Collector
 - b. Number of Travel Lanes: 2 (plus turn lanes at major intersections)
 - c. Bike Lanes: Yes
 - d. Right-of-Way: 60 feet (plus slope easements where necessary)
 - e. Pavement Width: 40 foot minimum
 - f. Access: Limited
 - g. Design Speed: 35 M.P.H.
 - h. Minimum Turning Radius: 350 to 500 feet
 - i. Parking Facilities: None provided on street
 - j. Upon verification of need by traffic analysis, the connection may be planned to eventually accommodate additional lanes at the Murray/Old Scholls Ferry and Murray/New Scholls Ferry intersections.
 - k. The intersection of SW 135th Avenue and Murray Boulevard connection will be designed with Murray Boulevard as a through street with 135th Avenue terminating at the Murray connection with a "T" intersection.
 - The general alignment of the Murray Boulevard connection is illustrated in Exhibit C.

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- Any changes to land use designations in the Murray Boulevard connection area shall be coordinated with all jurisdictions to assure that traffic impacts are adequately analyzed.
- The City of Tigard, City of Beaverton and Washington County shall support improvements to the regional transportation system as outlined in the adopted Regional Transportation Plan (RTP).
- 4. Improvements to SW Gaarde Street between SW 121st Avenue and Pacific Highway 99W should occur coincident with the connection of Murray Boulevard from Walnut/ 135th Avenue to Gaarde Street.
- I. The COUNTY and the CITY will execute a Memorandum of Understanding outlining the methodology for transfering COUNTY records regarding land use activities to the CITY when property is annexed to the CITY. The Memorandum of Understanding shall be drafted and executed by December 31, 1988.
- J. The COUNTY and the CITY will execute a Memorandum of Understanding outlining the respective responsibilities for collection of fees, inspections and drainage maintenance districts on platted subdivisions annexed to the CITY. The Memorandum of Understanding shall be drafted and executed by December 31, 1988.

IV. Amendments to the Urban Planning Area Agreement

- A. The following procedures shall be followed by the CITY and the COUNTY to amend the language of this agreement or the Urban Planning Area Boundary:
 - The CITY or COUNTY, whichever jurisdiction originates the proposal, shall submit a formal request for amendment to the responding agency. In addition, the CITY or the COUNTY shall send a copy of the Request for Amendment to affected Community Planning Organizations (CPO).
 - 2. The formal request shall contain the following:
 - a. A statement describing the amendment.
 - A statement of findings indicating why the proposed amendment is necessary.
 - c. If the request is to amend the planning area boundary, a map which clearly indicates the proposed change and surrounding area.

- 3. Upon receipt of a request for amendment from the originating agency, the responding agency shall schedule a review of the request before the appropriate reviewing body, with said review to be held within 45 days of the date the request is received.
- 4. The CITY and COUNTY shall make good faith efforts to resolve requests to amend this agreement. Upon completion of the review, the reviewing body may approve the request, deny the request, or make a determination that the proposed amendment warrants additional review. If it is determined that additional review is necessary, the following procedures shall be followed by the CITY and COUNTY:
 - a. The CITY and the COUNTY shall agree to initiate a joint study. Such a study shall commence within 30 days of the date it is determined that a proposed amendment creates a disagreement, and shall be completed within 90 days of said date. Methodologies and procedures regulating the conduct of the joint study shall be mutually agreed upon by the CITY and the COUNTY prior to commencing the study.
 - b. Upon completion of the joint study, the study and the recommendations drawn from it shall be included within the record of the review. The agency considering the proposed amendment shall give careful consideration to the study prior to making a final decision.
- B. The parties will jointly review this Agreement every two (2) years to evaluate the effectiveness of the processes set forth herein and to make any amendments. The review process shall commence two (2) years from the date of execution and shall be completed within 60 days. Both parties shall make a good faith effort to resolve inconsistencies that may have developed since the previous review. If, after completion of the 60 day review period inconsistencies still remain, either party may terminate this Agreement.
- V. This Urban Planning Area Agreement repeals and replaces the Urban Planning Area Agreement dated September 9, 1986.

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This Agreement commences on	25 , 19 <u>88</u>
IN WITNESS WHEREOF the parties have execute Agreement on the date set opposite their si	ed this Urban Planning Area ignatures.
CITY OF BEAVERTON By Mayor	Date 5/15/89
WASHINGTON COUNTY By Chairman, Board of County Commissioners	Date
Gam Rychart Recording secretary	Date

CITY OF BEAVERTON URBAN PLANNING AREA

EXHIBIT A
WASHINGTON COUNTY-BEAVERTON URBAN PLANNING AREA AGREEMENT

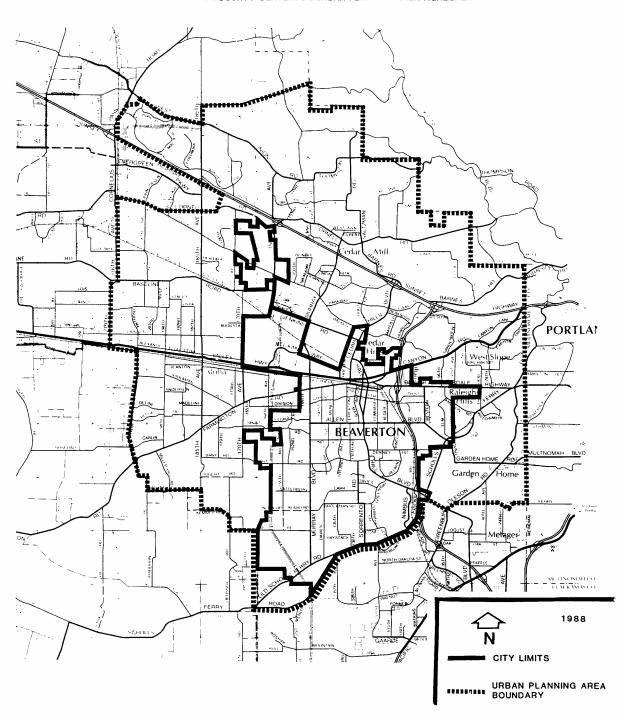
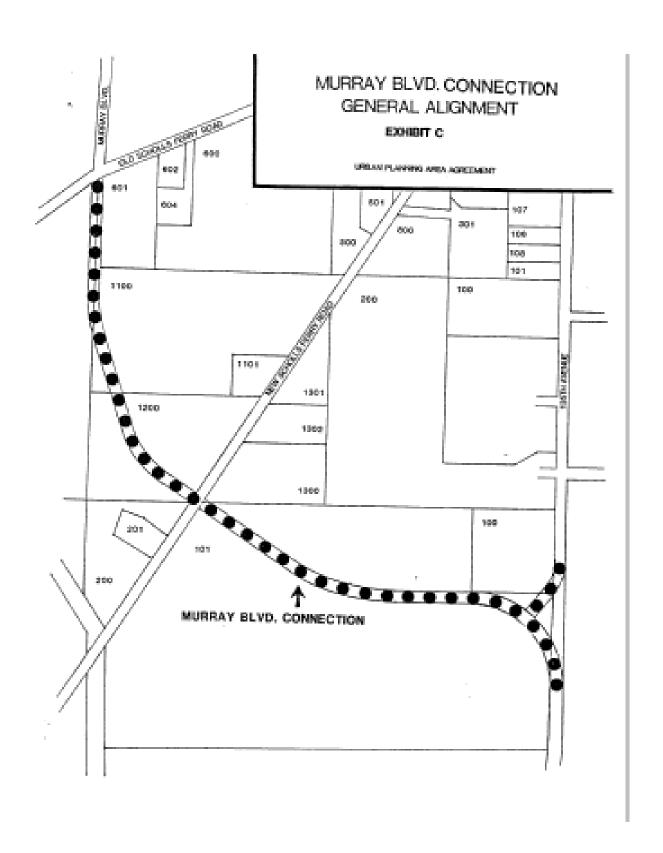


EXHIBIT "B"

CITY-COUNTY LAND USE DESIGNATION EQUIVALENTS

Count	Y	Beaverton*	
Plan/Zoning		Plan	Zoning**
Residential Residential Residential Residential Residential Residential	5 u/ac 6 u/ac 9 u/ac 15 u/ac 24 u/ac 25+ u/ac	Urban Standard Residentia Urban Standard Residentia Urban Standard Residentia Urban Medium Residential Urban Medium Residential Urban High Residential Office Commercial	1 R-5
Neighborhood Com	_	Neighborhood Commercial	N.S.
Community Busine		Community Service Town Center (for property west of Hwy. 217 and sout of Center only)	
General Commerci	al	General Commercial	G.C.
Industrial		Industrial Park Campus Industrial Light Industrial	I.P. C.I. *** L.I.
Institutional		Shown on Plan	Zoned to the most restrictive abutting zone.
Significant Natu	ral Resource	Significant Natural Resource	Not designated on zoning map

- * When partially completed developments such as residential subdivisions, apartment complexes, industrial parks, retail or office centers, etc. are annexed to the CITY after receiving development approval from the COUNTY, the CITY may, at its discretion, continue to apply the COUNTY's development standards relating to setbacks, lot sizes, lot coverage and heights for buildings and accessory structures for any new construction taking place after annexation.
- ** Beaverton's residential densities identified in Exhibit "B" reflect current standards. Amendments to the City's standards shall revise this exhibit upon final approval by the City.
- *** Planning Director shall determine the appropriate industrial designation based upon prevailing industrial land uses and the characteristics of individual activities, i.e., extensive outside storage, non-conforming characteristics, etc.



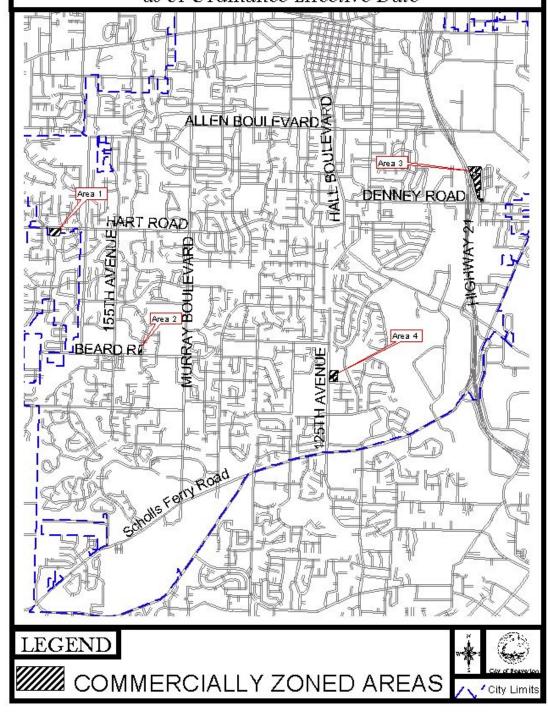
Insert Figure III-1 Here Comprehensive Plan Land Use Map				

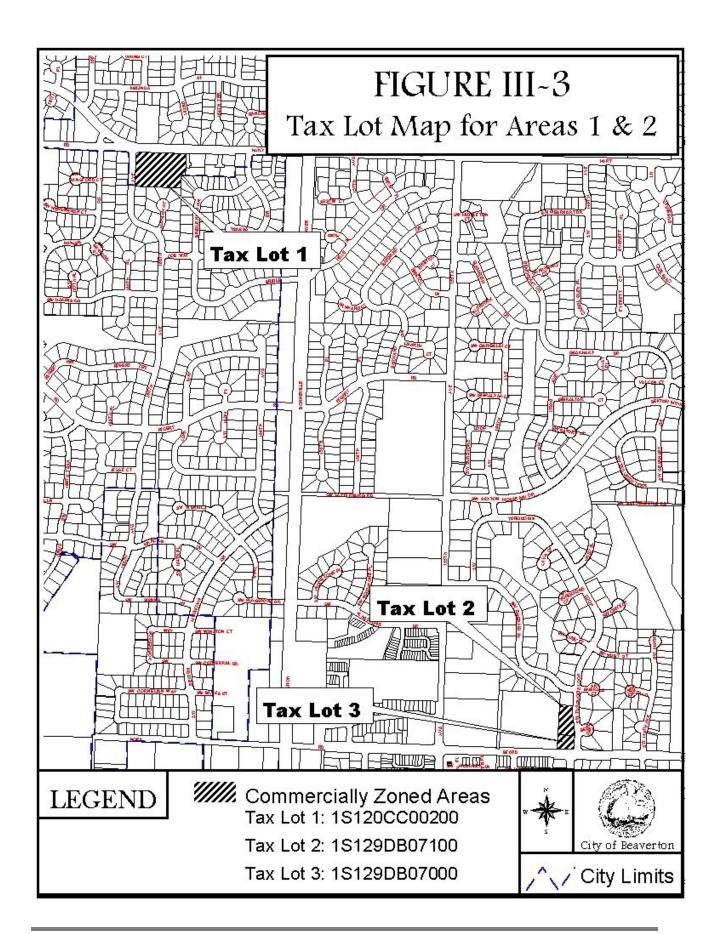
FIGURE III~2

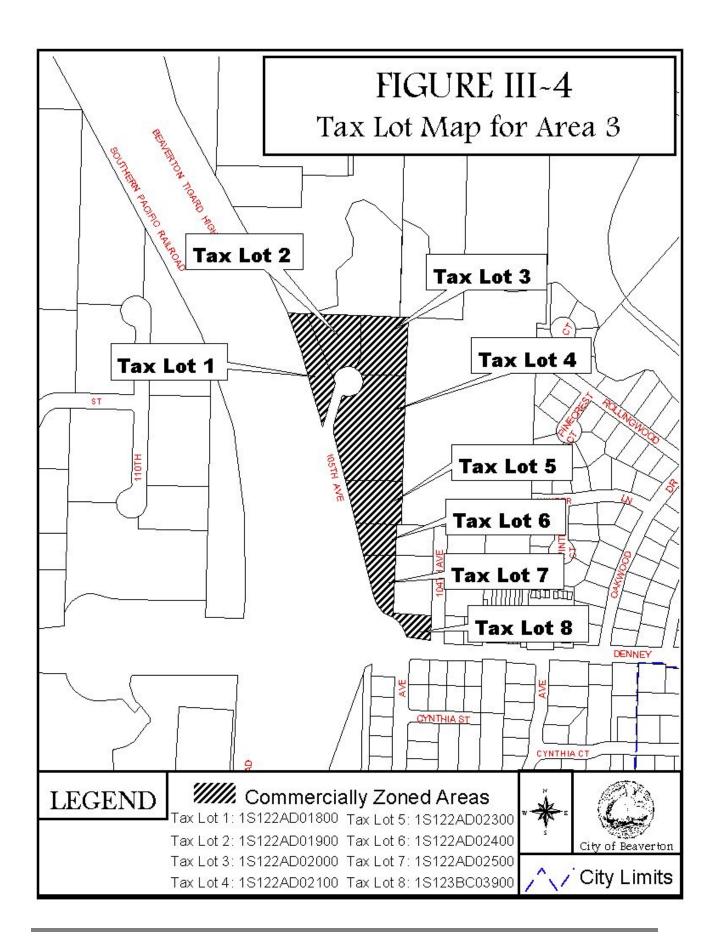
Index Map of

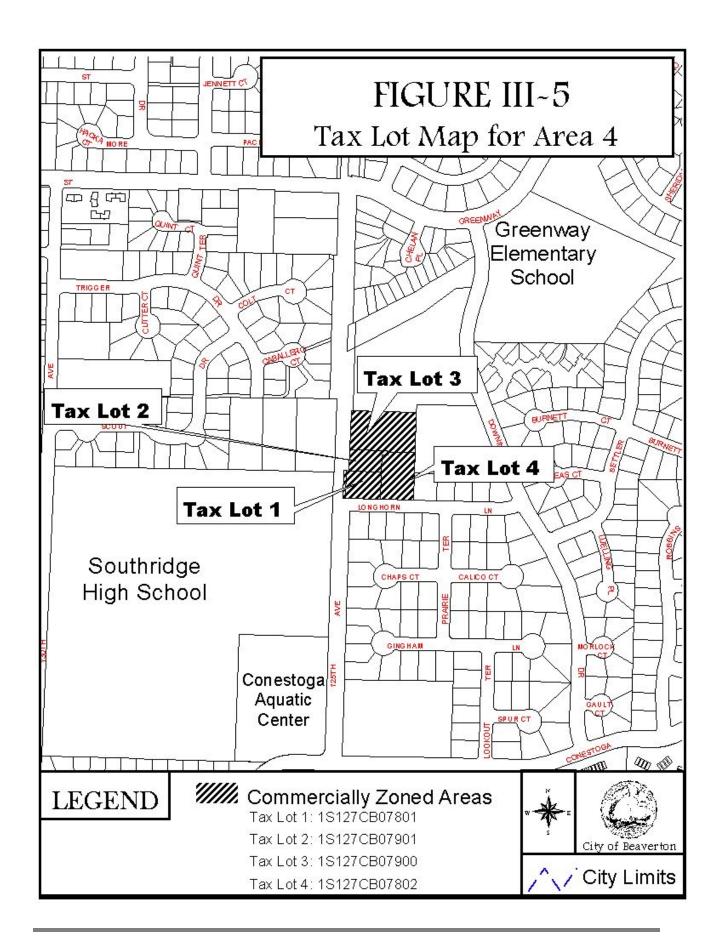
Parcels with Commercial Zoning Districts and

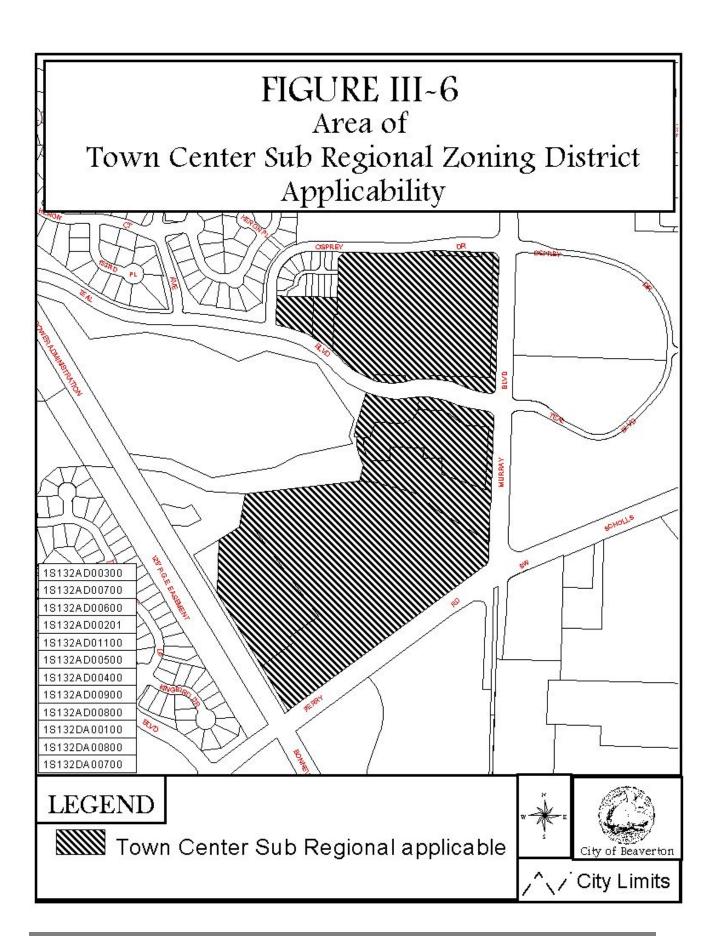
Neighborhood Residential Land Use Designations as of Ordinance Effective Date

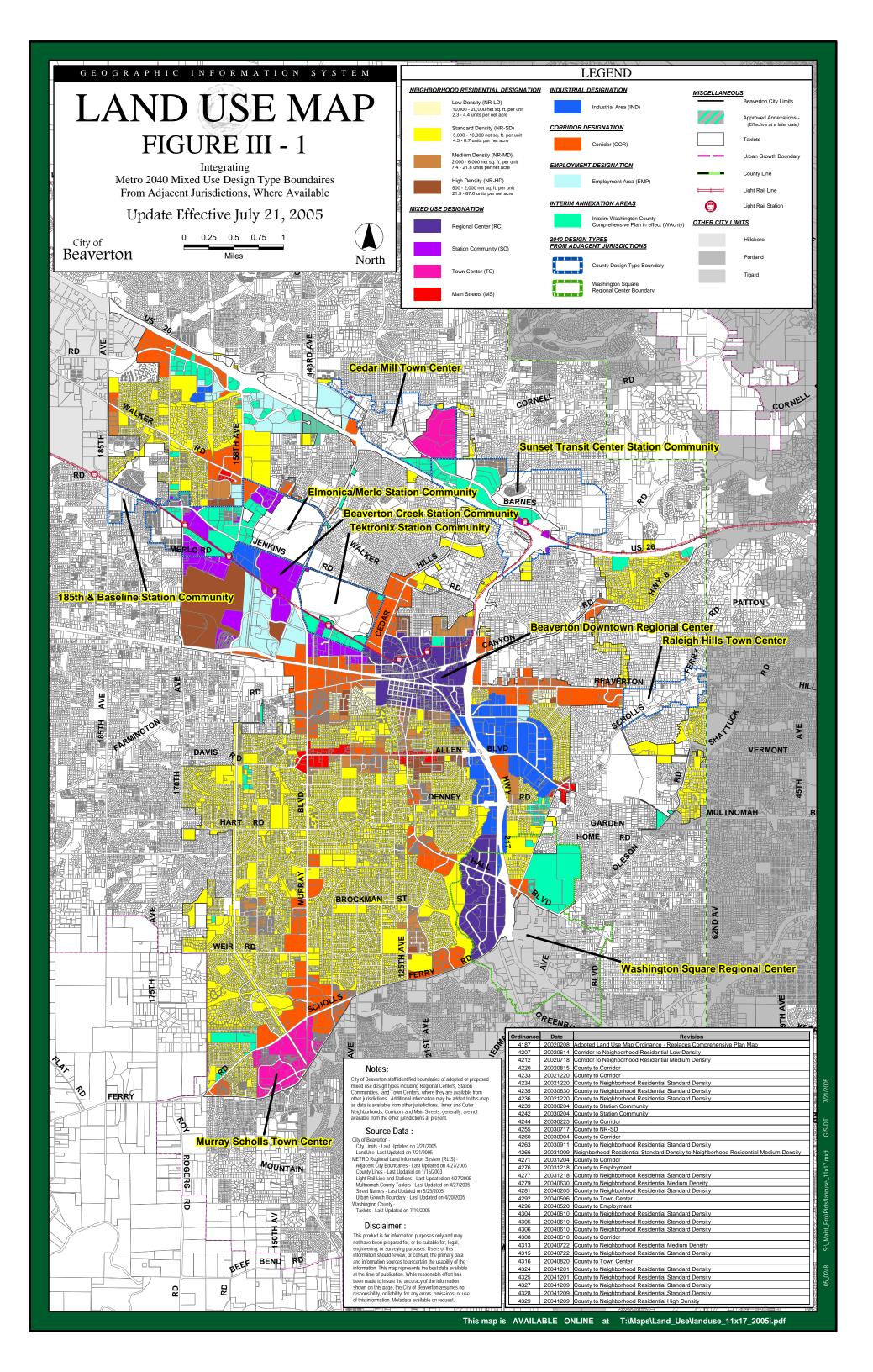












HOUSING

4.1 OVERVIEW

Over the last several decades, Beaverton has undergone many changes in its residential housing makeup. Forty years ago the City's population stood at about 6,000 residents. By the year 2000, that number has increased to almost 70,000 residents. The City's housing market has been subject to various trends over this time span and changed in a variety of ways. Predominant housing characteristics which have occurred in response to this growth become particularly evident when viewing the City's housing trends from the perspective of three indicators – 1) housing supply, 2) mix of housing types, and 3) housing affordability.

1) Housing Supply and Density:

Although the last forty years has seen a tremendous amount of housing production in the City, the rate at which this growth has occurred has not been constant. Examination of how that growth has occurred over time can reveal some interesting patterns. In the year 2000, it is estimated that the City of Beaverton has 32,202 housing units - 15% of which were produced in the 1960s, 21% in the 1970s, and 33% in the 1980s. The steady escalation of growth indicated by these numbers has taken a downturn during the 1990s however to reveal that only 25% of the City's housing units were built during that decade. Further, an examination of the City's building permits data reveals that production of new units has declined from over 2000 issued in fiscal year 1989-90 to just over 200 in fiscal year 1999-00.

Continual production of new housing throughout the City coupled with restrictions imposed by the City's inability to develop outside the Urban Growth Boundary has resulted in a drastic slowdown in growth over the last several years. Although some of this slowdown can be attributed to market fluctuations, a significant measure can also be explained by the fact that while the City's population has increased, the amount of land capable of absorbing the need for new housing has decreased. In essence, the City has nearly depleted its inventory of vacant land. Over the last several years the private market has responded to this trend by modifying their production strategies to focus upon "infill" opportunities while the City has adopted policies designed to increase housing unit densities and maximize the development potential of the land remaining. As a result, development during 1980s was characterized by fewer projects but at much larger scales while the 1990s has seen more projects but at significantly smaller scales.

2) Housing Type:

Back in 1960, housing units in Beaverton were predominately single-family residential, making up approximately 78% of the city's total housing stock. Although much of the housing built in the 1960s catered to residents who commuted to downtown Portland, expansion of the city's consumer base infused the emerging local economy. As a result, the demand for labor needed to staff new businesses expanded the market for multi-family rental housing which grew over the next several decades to occupy a significant segment of the housing market. The supply of multiple-family housing increased further with the emergence

of condominiums which were introduced in the late 1970s. In year 2000, it is estimated that the ratio of single-family to multi-family development stands at 51% to 49%.

In recognition of the fact that Beaverton suffers from a shortage of buildable residential land, the City has begun to examine alternatives associated with housing types that emphasize increasing the density potential for new residential development. Recent policy changes designed to address these factors include the adoption of an R4 zone (allowing for a minimum lot size of 4,000 sq. feet per dwelling unit), the easing of restrictions associated with accessory dwelling units and manufactured housing, adoption of mixed use zones, as well as development code text amendments requiring that all new development achieve a minimum density of 80% of allowable capacity.

3) Housing Affordability:

The affordability of housing has become a topic of great concern over the past decade. The crux of the problem lies in the fact that, throughout the region, wage rates have not been able to keep pace with escalating housing costs. The result is an ever widening affordability gap which has the potential of dislocating area residents. In general, a unit is considered unaffordable when its residents are allocating over 30% of their gross income toward housing costs. However, the population segment considered specifically "at-risk" is identified under Metro's Regional Affordable Housing Strategy (RAHS) as that portion earning below 50% of the area Median Family Income (MFI). According to this document, this population segment not only represents the area of greatest need, but reflects a demographic group regarded as the most vulnerable to losing their housing in a time of personal crisis. Specific groups within this category are particularly affected. These include the elderly on fixed incomes who may find that increasing tax liabilities and maintenance costs exceed their ability to pay for them, single parent households who are overly burdened with extensive childcare costs, and first time homebuyers who may have grown up in an area they can no longer afford to live in.

According to Oregon's Multiple Listing Service the average home price for the Beaverton area was \$175,700 in 1999 – up from \$91,633 in 1990. In essence, Beaverton's housing prices have almost doubled in the past nine years. While a segment of this increase can be attributed to escalating costs in permit fees, transportation impact fees, and system development charges, the bulk of the change derives from an increase in the value of land. Many upwardly mobile residents receive a windfall in equity appreciation from this trend, however, others less able to bear the costs resulting from property tax increases find it increasingly difficult to make ends meet. Ballot Measure 50 (a referendum which has limited the amount of property taxes local governments are able to levy) has alleviated this burden to some extent but in general the problem continues. In the case of renters, costs associated with these tax liabilities are passed on in the form of higher rents. In Beaverton that amounts to a 50% increase from an average rent of \$455 in 1990 to approximately \$700 in 1999.

In January 2000 the City conducted a housing survey in order to determine the breadth of its non-affordability problem. The survey found that approximately 17% of Beaverton's households earned under 50% MFI and 7% under 30% MFI. Of the households earning under 50% MFI, somewhere between 54% and 85% could be classified as living in non-affordable units. Overall, that segment accounts for somewhere between 8% and 12% of Beaverton's

population (the exact number for non-affordability could not be determined by the survey given that the definition varies with family size). These numbers are somewhat misleading in defining the depth of the problem, however, because they do not reflect the region as a whole.

Because some jurisdictions are burdened with a disproportionate share of the region's low-income housing while others are lacking in that market segment, solutions to the affordability problem are generally addressed from a regional need perspective. In June 2000, Metro's Affordable Housing Technical Advisory Committee (H-TAC) released its Regional Affordable Housing Strategy (RAHS). That report identifies Beaverton's share of the regional need as 7.2% or approximately 6,500 units (about 40% - 60% above the City's internal need). From that total it also sets a performance goal of 656 affordable units to be developed over the next five years.

4.2 GOALS AND POLICIES

Through comprehensive planning, the City of Beaverton can help guide the quantity, types, and affordability of its housing. Goal 10 of Oregon's Statewide Planning Goals and Guidelines pertains specifically to housing. It stipulates that in preparing Comprehensive Plans, "Buildable lands for residential use shall be inventoried and plans shall encourage availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type, and density." In conformance with this provision, as well as those specified in Oregon Revised Statute (ORS) section 197.295 -.314, Oregon Administrative Rules (OAR) section 660-007-008, Metro's Urban Growth Management Functional Plan (UGMFP) - Title 1, and Metro's Regional Affordable Housing Strategy (RAHS), the City conducted a buildable lands analysis and various housing needs studies and has adopted the following goals, policies, and actions to address the City's housing needs as they pertain to the availability of housing supply, housing type, and housing affordability as specified below.

4.2.1 HOUSING SUPPLY AND DENSITY

Like every city and county throughout the state, Beaverton is required under ORS 197.296 to provide enough buildable land to accommodate a future housing need extended out to a twenty year planning horizon. In the Portland Metropolitan Area, Metro is the agency charged with regulating supplies of land within the Portland Metropolitan Urban Growth Boundary and therefore is the agency charged with making the determination as to what that supply of land should be for each jurisdiction under its purview. Determination as to whether local jurisdictions are in compliance with state provisions are made through the Title 1 provisions of Metro's Urban Growth Management Functional Plan. In attempting to address the provisions of this plan, the City conducted a Buildable Lands Analysis and determined that Beaverton would be able to accommodate 12,194 of the 13,580 dwelling units projected by Metro to occur over the next twenty years. This put the City's growth capacity at 91% of

what had been targeted by Metro and allowed the City to obtain a standing of substantial compliance under Metro's regulations.

One component of Title 1 was instrumental in permitting the City to achieve this standing. Section 4 of that title required the City to demonstrate that all residential development occurring between 1990 to 1995 had achieved an overall average net density of 80% of what the applicable zone allows for. If the jurisdiction is not able to demonstrate that it has achieved that required density, the provision suggests that the jurisdiction consider adoption of at least two of five measures specified to increase residential densities. In 1996, the City conducted such a study, (Beaverton's Title 1 Density Study), in order to determine if Beaverton's residential development met Metro's 80% density threshold. The City found that past development densities had not met Metro's 80% minimum, exhibiting instead a 63% measure of development density relative to what the zone allowed. This prompted the City to adopt several Plan and Code amendments identified below.

As indicated above, the most fundamental way to accommodate new development where the land supply is limited, as in Beaverton's case, is to increase unit/acre residential densities. In order to control the degree of sprawl that occurs with an expansion of the urban growth boundary, the state requires cities to demonstrate that their use of land is efficient. They encourage local governments to take measures that have the effect of increasing residential densities. In addition to the Metro required Buildable Lands and Title 1 Density studies mentioned above, the City also conducted several comparable studies to determine if the City is making progress in increasing their overall densities.

OAR 660-007-0035 requires that the City provide for an overall residential density of 10 or more dwelling units per net buildable acre. Since its last periodic review in 1988, net development density surpassed this requirement and achieved an overall average density of 11.23 units/acre. Additionally, OAR 660-007-0600 requires that "During each periodic review local government shall prepare findings regarding the cumulative effects of all plan and zone changes affecting residential use." In consideration of the fact that the City of Beaverton was in Periodic Review at the time this element was being adopted, the City conducted an analysis of its rezoning activity occurring since its last Periodic Review. This Analysis of the Cumulative Effects of City Rezoning study found that the City of Beaverton has accrued the increased capacity to accommodate approximately 5,882 additional units on vacant or buildable land as a result of its rezone approvals over a time span of twelve years. Overall, this amounts to a 377% increase in capacity over what had been previously permitted. Therefore, aside from the conclusions drawn from the Metro Title 1 Density Study, where the City demonstrated a shortfall from the 80% capacity measure, Beaverton has made strides to increase its overall residential densities. The following provisions are adopted in order to continue this trend.

4.2.1.1 Goal: Maximize use of buildable residential land in the City.

Policies:

- a) Increase residential capacity in the City to substantially comply with requirements of Title 1 of the Metro Urban Growth Management Functional Plan.
 - **Action 1:** Adopt and apply a Development Code provision to require that net residential development density occur at a minimum of 80% of the maximum density a zone allows for.
 - **Action 2:** Adopt and apply a new zoning designation allowing for a minimum lot size of 4,000 square feet per dwelling unit.
- b) To the extent practical, ease the review process and standards for higher density residential projects.
 - **Action 1:** Amend the City's flexible setback provisions to allow more flexibility in residential design alternatives.
 - Action 2: Consider adopting a two track development review process for higher density development projects proposed outside of established neighborhoods, whereby projects that meet clear and objective design and development standards can be approved administratively. Alternatively, projects whose developers would propose to vary from the standards would be subject to a public hearing process.

4.2.2 AVAILABILITY OF HOUSING TYPES

Statewide Planning Goal 10 (Housing), ORS 197.296 – 314, .480, & .677, and OAR 660-007-0030 all have provisions requiring that jurisdictions assess the availability of, and provide for, a variety of housing types. Specifically, the intent of these provisions is to "...encourage availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type, and density". To satisfy the directives expressed in these provisions, the City of Beaverton conducted a buildable lands analysis and a residential mix and density study. ORS 197.296 requires that local jurisdictions "determine the actual density and actual average mix of housing types of residential development that have occurred within the urban growth boundary since the last periodic review..." Upon examining the results of these studies the City found that for the development occurring between the City's last Periodic Review in 1988 through 12/31/99, over 66% of new development consisted of

multiple family residential units. Broken down into individual types, percentages of units developed were 33.6% single family dwellings, 4.1% townhouses & rowhouses, .9% condominiums, .4% duplexes, and 61% apartments. In total, the City's housing base consists of approximately 50% single family residential (sfr) and 50% multiple family residential (mfr) units with a healthy mix of housing types.

Apart from Beaverton's existing inventory, OAR 660-007-0018 provides that "Sufficient buildable lands shall be designated on the comprehensive plan map to satisfy housing needs by type and density range as determined in the housing needs projection." In attempting to address the requirements of this provision and determine the City's future need, the City also conducted a Housing Types Needs Analysis. This study examined the City's capacity to accommodate future need by first examining which income groups occupy which housing types, by proportion, and then applying those ratios to Metro's 20-year housing need projection. Types included in the model include sfr dwellings, apartments, 2-, 3-, & 4-plex buildings, condominiums, and mobile homes. In identifying which types were associated with each income segment, special consideration was given to that segment of the population under 50% of the median income in order to determine if the City could accommodate Metro's projected affordable housing goal for the City. The study then determined which housing types were permitted in which zones and then proceeded to cross check the need with the buildable lands analysis to derive an estimation of the number of units able to be accommodated in each zone. The study concluded that the City contains adequate buildable land to accommodate housing types associated with each price range and rent level. The map depicting the City's buildable lands is associated with this element as a supporting document labeled Figure 1 in the Housing Inventory section of Comprehensive Plan - Volume 2.

The Housing Type Needs Analysis succeeded in identifying a nexus between income level and housing type. However, three housing types requiring attention were not considered in this study and are therefore be addressed separately below. They include seasonal farmworker housing, manufactured housing, and government assisted housing.

ORS 197.675 requires that every state and local government agency address the health, safety, and welfare needs of seasonal farmworker housing.

Seasonal Farmworker Housing: Activities associated with this group are centered in the western portion of Washington County. No need to develop or maintain housing for farmworkers in Beaverton has been identified Therefore provisions to address the development and maintenance of farmworker housing are not considered to be applicable to the City.

OAR 660-007-0033 provides that "Each local government shall consider the needs for manufactured housing and government assisted housing within the Portland Metropolitan UGB [Urban Growth Boundary] in arriving at an allocation of housing types."

• Manufactured Housing: The City's Development Code allows for manufactured homes in the City's RA, R5, R7, & R10 zones, mobile home parks in the City's R5 zone and conditionally in the City's R2 zone, and manufactured subdivisions in the

City's R5 zone. The City does retain a set of clear and objective criteria relating to the design and placement of manufactured housing without having the effect of discouraging manufactured housing though unreasonable cost or delay. To this extent, the City finds that no further provisions are necessary in order to demonstrate compliance.

Government Assisted Housing: According to the City of Beaverton's year 2000 Housing Survey, approximately 3% of the City's households receive public housing assistance of one sort or another (10% - 15% of which are in non-affordable housing). Washington County's Housing Authority is the agency responsible for administering public housing authority-related programs in Beaverton. The City's has no role in allocating public housing assistance funding. The City can assist the Washington County Housing Authority in a limited capacity, however, by referring qualified households to the agency.

Although the City's Housing Types Needs Analysis indicated that the City of Beaverton does possess enough buildable land to accommodate a mix of needed housing types, the City recognizes the value of accessory dwelling units as a sensible housing type alternative. This housing type has the effect of increasing urban densities with minimal impact to neighborhood character. Further, this housing type is often accessible to lower income and special needs populations. In response to Metro's Title 1 requirements, the City recently updated its Development Code provisions to allow for accessory dwelling units within all zoning districts allowing single family residential uses.

The following provisions reflect the City's intent to allow a variety of needed housing types.

4.2.2.1 Goal: Provide an adequate variety of quality housing types to serve Beaverton's citizenry

Policies:

a) Allow development of a wide variety of housing types in the City.

Action 1: Work in partnership with the Washington County Housing Authority to preserve its portfolio of federally assisted housing at rent levels affordable to extremely and very low-income households.

Action 2: Determine if Development Code restrictions exist that might impede the development of co-housing, halfway houses, or other innovative housing types and, where evident, make amendments to eliminate or reduce those restrictions.

b) Maintain the quality and safety of existing Beaverton housing stock.

Action 1: Investigate the possibility of establishing a Housing Code Enforcement Program to insure that various housing quality and safety standards are met in order assure that low income renters are provided with decent living conditions.

4.2.3 AVAILABILITY OF AFFORDABLE HOUSING

Conventional wisdom among those closest to the affordable housing issue is that the problems associated with the lack of affordable housing must be addressed from a regional perspective. This outlook derives from an acknowledgement that those local governments that bear a disproportionate share of the region's low-income housing are often the least equipped to bear the fiscal impacts that result. Therefore, in a metropolitan region where fiscal resources are unequally distributed among local governments, each local government should play a role in addressing the problem. It is from this premise that Metro developed its Urban Growth Management Functional Plan (UGMFP) Title 7 provisions. This section specifies that "The Metro Council shall adopt a "fair share" strategy for meeting the housing needs of the urban population in cities and counties based on a subregional analysis..." and proceeds to identify specific affordable housing related factors to be considered. Further, it provides that an Affordable Housing Technical Advisory Committee (H-TAC) be convened in order to formulate policy recommendations that may later be incorporated into Metro's UGMFP.

HTAC did produce a Regional Affordable Housing Strategy (RAHS) and in it established both production targets (which the City has used in conducting its housing needs analysis) as well as a set of recommended "tools" which can be used by local governments to encourage the development of affordable housing. In the years 2002, 2003, and 2004, the City formally considered these tools and other strategies for implementation and where appropriate, has incorporated them into them into the policies that follow.

To address the City's need to provide affordable housing, two areas of concern should receive consideration: 1) the retention of the City's existing affordable housing stock and 2) the production of new units.

1) Retention of Existing Housing Stock:

The City should adopt measures to minimize loss of its existing affordable stock. As the value of Beaverton's housing continues to appreciate, additional cost burdens are placed upon City residents. For city residents deemed "at risk" as a result of their low or fixed income status, this prospect has the potential to cause them to move from their place of residence or spend limited income or resources to retain their residence. Typically, residents under these circumstances will alleviate the escalating burden by drawing upon either the equity invested in their home or upon any disposable income they may have in order to cover costs associated with maintaining their housing. As the burden increases however, they may be forced to deprive themselves of some basic living necessities such as heat or divert funds away from costs associated with housing maintenance. Substandard living conditions that may ensue could pose a risk to the resident's health and safety. Low income renters can also be at risk

when they neglect to demand building improvements from their landlords out of fear that their tenant status may be compromised.

The City can assist residents in this predicament by continuing to provide funding through its Community Development Block Grant and H.O.M.E. programs to service providers that assist this "at risk" population. Additionally, the City can explore the idea of establishing a housing code enforcement program to monitor apartment maintenance as both Tigard and Portland have done. Finally, the City has developed a sound relationship with its community housing development organization (CHDO) partner Tualatin Valley Housing Partners (TVHP). This relationship has resulted in the retention of almost 100 multifamily units affordable to those at or below 60% of the MFI that most likely would have been converted to higher market rate housing. The City can continue to work with this organization to retain endangered affordable housing stock.

4.2.3.1 Goal: Promote the retention of existing affordable housing stock in the City.

Policies:

- a) Support low-income homeowners with housing rehabilitation needs through continued funding and administration of the Citywide Housing Rehabilitation Loan Program.
- b) Continue to devote funding through the City's CDBG and HOME Programs to local non-profit agencies in order to aid in the rehabilitation of existing long-term affordable housing in the City.
- c) Provide continued CDBG funding support to local non-profit service providers so that they may continue to supply needed living and service assistance to low income homeowners and renters.
- d) Work in partnership with TVHP, the Bridge Housing Corporation, Community Partners for Affordable Housing, the Housing Development Corporation, and Habitat for Humanity to preserve housing that is affordable to households at or below 60% of the MFI.
- e) Assure the long term affordability of City funded housing projects.

Action: 1 Review CDBG and HOME program requirements that relate to housing assistance and where necessary, establish long term affordability requirements, standards, and guidelines.

2) Production of new affordable housing stock:

According to Metro's RAHS report, the City of Beaverton should seek the development of an additional 656 affordable units within the next five years. Of that number, 229 units should be available to households earning between 30-50% MFI and 427 should be available to

households earning under 30% MFI. This task is by no means a small endeavor. The problem in providing these units lies in the fact that it is very difficult for the free market to produce this housing and still realize the profit necessary to make it stay in business. Often, the only housing developers able to make projects of this kind work are non-profit Community Housing Development Organizations (CHDOs) who receive their funding via public subsidy and private donations of money, materials, or labor, and are able to structure their housing development financing near the break even point. These organizations are proficient in not only creating units affordable to low-income residents, but also play a role in maintaining the affordability status of rented units through their continuous monitoring and effective property management activities.

4.2.3.2 Goal: Promote the production of new affordable housing units in the City.

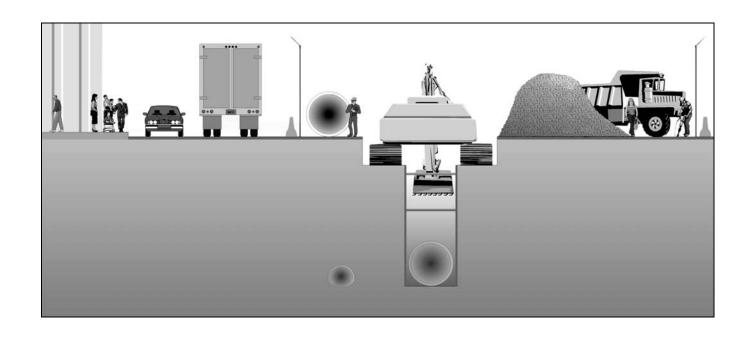
Policies:

- a) Inform Beaverton's residents, property owners, and business owners of the need for additional affordable housing within the City.
 - **Action 1:** Continue participation in statewide efforts to fund affordable housing programs.
 - **Action 2:** Conduct outreach to local media to raise public awareness of affordable housing needs and build public support for such programs.
 - **Action 3:** Continue to support and participate in efforts being undertaken by other groups to develop affordable housing in and around Beaverton (e.g., the Washington County Vision Action Network, the Inter-religious Action Network, and the Housing Advocacy Group).
- b) Partner with and assist local non-profit developers (including TVHP, the Bridge Housing Corporation, Community Partners for Affordable Housing, the Housing Development Corporation, and Habitat for Humanity) in supplying additional affordable units throughout the City for "at risk" populations including those at or below 60% of the MFI.
 - Action 1: Assign the responsibility of coordinating and responding to inquiries about the development review process that involve the development of affordable housing to a specific staff member.
 - Action 2: Whenever possible, assist developers of affordable housing in the development application and review process by providing a single staff contact to assist with application processing.

- **Action 3:** Whenever possible, assign a priority status in the development review and permitting process to applications where affordable housing is being proposed so that application processing time may be reduced.
- **Action 4:** Assist housing developers in determining market demand for low income, elderly and special needs housing in the City and identify specific buildable parcels for affordable housing to serve these populations.
- **Action 5:** Consider comments received from developers of affordable, senior and disabled housing when considering amendments to the City's Development Code in order to minimize impediments to such projects.
- **Action 6:** Consider refining and clarifying criteria for approving alternative parking requirements to reduce the cost of providing parking for affordable housing projects.
- **Action 7:** Establish a revolving loan program to assist affordable housing developers with system development charges, development review and permit fees.
- Action 8: In the interest of leveraging the fund raising capacity of the City's non-profit housing developers, dedicate funding to the Washington County Community Housing Fund. Dedication of funding will be contingent upon establishment by fund trustees of award criteria that would result in allocation of a reasonable proportion of that fund to projects located within or near the City.
- **Action 9:** Establish criteria that qualify affordable housing development proposals for property tax abatements.
- c) Continue to devote funding through the City's CDBG/HOME Program to local non-profit housing development agencies in order to aid in the development and maintenance of new long-term affordable housing in the City.
 - Action 1: Establish a land banking program utilizing the City's CDBG/HOME entitlement to acquire and make available to developers land for the purpose of increasing the City's inventory of affordable housing units.
 - **Action 2:** Explore the idea of establishing a program using City funds to leverage employer efforts to secure affordable housing for their lower-income employees.
 - Action 3: Explore establishing a Community Land Trust that would acquire and hold land for affordable housing projects in Beaverton or Washington County as a whole.
- d) Pursue sources of revenue to be directed toward increasing the City's inventory of affordable housing units.
 - **Action 1:** Support efforts to establish a real estate transfer tax or fee with revenues dedicated to assisting in the provision of affordable housing.

- e) Continue to comply or substantially comply with Metro Urban Growth Management Functional Plan (UGMFP) provisions that pertain to affordable housing.
 - **Action 1:** Annually monitor the progress of efforts to increase the supply of affordable housing in Beaverton, and report the findings to Metro as specified by relevant provisions of the UGMFP.
- f) Continue over time to explore various tools and strategies that may serve to encourage the development of affordable housing in Beaverton.
 - **Action 1:** Consider implementing a density bonus or density credit program that focuses on achieving the City's affordable housing goals.
 - **Action 2:** Consider future implementation of a residential demolition delay policy targeted for residentially zoned properties where redevelopment of the property could result in the loss of affordable units.
 - Action 3: Explore implementing a voluntary inclusionary housing program to be used in combination with various affordable housing incentives.

CHAPTER FIVE: PUBLIC FACILITIES AND SERVICES ELEMENT



PUBLIC FACILITIES AND SERVICES

5.1 OVERVIEW

Beaverton was platted in December 1868 in anticipation of a railroad link being constructed to Portland. The railroad arrived in 1871. Prior to the railroad the area was developed with farms. The construction of the railroad and electric trains provided reliable access to and from Portland, which was a major improvement over the wood plank Canyon Road constructed in 1851. This connection to Portland allowed Beaverton to develop as a bedroom community. Today Beaverton is an inner ring suburb in the Portland Metropolitan area. Except for the southwest corner of the City, which touches the Urban Growth Boundary, Beaverton is surrounded by urban development. There is very little undeveloped land in the City or in its Urban Services Area. What undeveloped land exists is being developed rapidly. The population of the existing City and its Urban Services Area will continue to increase due to measures taken by both the City and Washington County to allow for or require new development to be at a higher density than currently exists.

Public facilities and services are essential to an urban community. The availability and adequacy of these facilities and services is required for urban land uses. The need to provide these services historically has been a primary reason for cities to incorporate or for areas to annex to existing cities.

The City of Beaverton incorporated in 1893 primarily to provide municipal services. The City has provided these services in the most logical and economic way possible. Over the years, the City has made arrangements with special districts to provide services when that was the most logical route at the time. Because special district jurisdiction also included unincorporated portions of Washington County north, east and west of Beaverton, these areas were able to urbanize, with the provision of limited municipal services by the County such as police patrols, road maintenance and planning, without incorporation. Although the County has supported eventual annexation of these areas to the City, they have also established special districts for enhanced Sheriff's patrols and local road maintenance that allow for an adequate level of urban services to these areas until they are annexed.

Beaverton is not a full service city in terms of providing all necessary public facilities and services itself but has arranged for all of these services to be provided within its incorporated area. The Tualatin Hills Park and Recreation District (THPRD) provides parks and recreation facilities and services. The Tualatin Valley Fire and Rescue District (TVF&R) provides fire and emergency medical services. Several water districts as well as the City, provide potable water. Storm water management and sanitary sewers are provided by cooperation between the City and Clean Water Services (CWS). Solid waste disposal sites, including sites for inert waste, are the responsibility of Metro. Public transportation is primarily provided by Tri-Met, but the City and Washington County retain the option to augment Tri-Met's transit system. K through 12 schools are provided by the Beaverton School District with the exception of the West Slope area, which is in the Portland School District. The City provides library services and the library also is a member of the Washington Cooperative Library System in order to provide better service for residents. The City provides police, planning, zoning, development review, building permitting

and subdivision control for its entire incorporated area.

An Urban Services Area has not yet been established for the City of Beaverton. The requirements for an Urban Services Boundary that will establish an Urban Services Area for Beaverton are set out in ORS 195.020 and 195.060 through 195.085. The basic concept behind the establishment of an Urban Services Area is to define the area that will eventually be incorporated into the City of Beaverton and for which the City will eventually be responsible for the provision of urban services after incorporation. Urban Service Agreements are required by State statute between the City, Washington County and the various service providers to insure a logical, rational and efficient provision of these services. The urban services required by ORS 195.065 to be included in these Urban Services Agreements are sanitary sewers, water, fire protection, parks, open space, recreation, streets, roads and mass transit. The boundary has been agreed to for areas to the north, east and south of the City. The western boundary still has to be agreed to by the City, the City of Hillsboro and Washington County, or established by Metro if such agreement is not possible.

5.2 Public Facilities Plan

The City's Public Facilities Plan (PFP), mandated by State statute for all cities with a population over 2,500, consists of this Element, the Transportation Element of the Comprehensive Plan, the City's Capital Improvements Plan, and the most recent versions of master plans adopted by providers of the following facilities and services in the City: storm water drainage, potable water, sewage conveyance and processing, parks & recreation, schools and transportation. Master plan documents included in the Public Facilities Plan are:

- Tualatin Valley Water District Water Master and Management Plan
- Water System Plan for the West Slope Water District
- Raleigh Water District Water System Master Plan
- City of Beaverton Water System Facilities Plan
- City of Beaverton Sanitary Sewer Master Plan
- Clean Water Services of Washington County, Sewer System Master Plan
- The City of Beaverton Drainage Master Plan
- Tualatin Hills Park and Recreation District 20-Year Comprehensive Master Plan
- Tualatin Hills Park and Recreation District Trails Master Plan
- Beaverton School District School Facilities Plan
- City of Beaverton Transportation System Plan

The City of Beaverton has chosen to define its Public Facilities Plan in this way because it provides a limited range of municipal services and relies on other independent public agencies to provide many facilities and services for Beaverton residents and property owners. The facilities and services provided by these agencies, as well as the City, are generally described in other sections of this element, by type of facility and service. The exception to this is transportation facilities and services, which are addressed in the Transportation Element of this Plan.

CAPITAL IMPROVEMENT PLAN

The City of Beaverton Capital Improvements Plan (CIP) is an annually updated document with listings of prioritized proposed improvements and expansions of the City's infrastructure system to maintain appropriate service levels to existing City residents and businesses, and to accommodate population growth and land development. The CIP reflects the needs and priorities established by the City and projects the financial resources available to fund projects within a four-year period. The CIP also prioritizes projects many years into the future. The CIP can be modified during the fiscal year (FY) through the supplemental budget process as needs, priorities, and resources change. Although the CIP is a separate document from the fiscal budget, it is used as a road map in preparing and administering the budget.

The CIP is updated and adopted by the City Council on a yearly basis. The City's fiscal year begins on July 1 of each calendar year and ends on June 30 of the next calendar year. Each year, the City Council adopts a fiscal budget in June for the upcoming fiscal year, as recommended to the Council by the City's Budget Committee. By Oregon law, the City of Beaverton can only fund (budget) projects for the current fiscal year and upcoming fiscal year. Therefore, only projects in the CIP that are shown in the first fiscal years are actually funded. Programmed but not funded projects (projects for the following three fiscal years) and future year projects are included in the CIP for information purposes.

Development of a realistic CIP and applying it to the City budgeting process helps provide orderly growth of the community at a manageable cost. The City's CIP only addresses the City's capital needs and projects and not those of the other providers of facilities and services in Beaverton and its proposed Urban Services Area. Service providers are responsible for their own CIP. The City's most current CIP, including any amendments, is adopted as part of this Element by reference and when the City adopts a new CIP or amends the CIP that will be the one referenced.

Beaverton's CIP addresses transportation, potable water, sanitary sewer and storm drainage capital projects. Sanitary sewer and storm drainage improvements are planned for the current incorporated area. Transportation improvements are also planned for the current incorporated area and include those transportation projects for which the City is responsible, namely local and collector roads, pedestrian facilities and bikeways. The City's CIP for potable water only includes those projects in the Beaverton Water Division's service area. The Beaverton School District, Clean Water Services, Tualatin Valley Fire and Rescue District, Tualatin Hills Park and Recreation District, Tualatin Valley Water District, West Slope Water District and Raleigh Water District are each responsible for their own Capital Improvement Plans, funding and project implementation. The City and these agencies coordinate their respective planning efforts pursuant to cooperative agreements that have been signed consistent with ORS 195.

5.3 URBAN SERVICES AREA

URBAN PLANNING AREA AGREEMENT

An Urban Planning Area was established by the adoption of the Washington County – Beaverton Urban Planning Area Agreement (UPAA) in 1989 (the UPAA is adopted in the Land Use Element of this Plan). The City and County entered into the UPAA in order to comply with Statewide Planning Goal #2 and requirements of the Oregon Land and Conservation and Development Commission. The purposes of this agreement are to ensure coordinated and consistent comprehensive plans by creating a defined Urban Planning Area within which both the County and City maintain an interest in comprehensive planning and to create a process for coordinated comprehensive planning and development in this Urban Planning Area. The UPAA and the Urban Planning Area defined by it are out of date and should be amended.

URBAN SERVICES AREA

Cities are traditionally established in the State of Oregon to be urban service providers and to provide a system of governance tailored to responding to and delivering urban services. Toward that end, an Urban Services Boundary is established for two primary purposes:

1. The boundary establishes the extent of the City of Beaverton's direct interest and involvement in planning for and coordination of public facilities and services. This planning and coordination is accomplished through coordination with Washington County and the special districts that currently provide services within the area. It is not necessarily assumed that the City will directly provide all of the services within that boundary in the future. Services planning with the County and special districts will determine the most effective and efficient method of providing these services without further complicating the existing pattern of urban service provision.

The City provides the following services:

- a) Construction and maintenance of City maintained arterial, collector and local streets
- b) Police protection
- c) Water supply and distribution to approximately eighty-five percent of existing residents
- d) Planning, zoning, building, and development control
- e) Library Services
- f) Franchising of solid waste collection and recycling services provided by private contractors
- g) Municipal Court

Provision of the following facilities and services is shared or a joint responsibility, generally as specified in intergovernmental agreements:

a) Sanitary sewer and storm drainage services in conjunction with Clean Water Services

- b) Parks and recreation services with Tualatin Hills Park and Recreation District
- c) Emergency communication system (911) through Washington County Consolidated Communications Agency

The following are services that are the responsibility of other agencies, but the City may be involved in planning and some aspects of provision of these services:

- a) Fire and emergency medical protection by Tualatin Valley Fire and Rescue
- b) Solid waste disposal is the responsibility of Metro
- c) Justice services are the responsibility of Washington County (with the exception of Municipal Court)
- d) K 12 schools are provided by Beaverton School District with the exception of the West Slope which is in the Portland School District and is a small percentage of our assumed urban services area
- e) Community college services are provided by the Portland Community College District
- f) Transit services are provided by Tri-Met
- 2. The Urban Services Boundary establishes the extent of the City's annexation interests, although it does not indicate when or if the City might annex properties within the boundary. In this respect, the boundary serves to inform property owners and citizens in the urban services area of the City's long-term expansion interests and intent.

The Urban Services Boundary is not intended to imply direct changes to land use plans or regulations as established by Washington County. However, to the extent that the establishment of the Boundary creates a planning area for services, it could indirectly influence changes in land use as a result of service planning.

An Urban Services Area has not yet been established for the City of Beaverton. The boundary has been agreed to for the areas to the north, east and south of the City.

In 1985, the cities of Tigard and Beaverton adopted by joint resolution an Annexation Planning Area Agreement -- in effect an urban services boundary between the two cities. The boundary generally lies to the south and east of Beaverton and to the north of Tigard. Metro Council established an Urban Services Boundary between the cities of Beaverton and Portland in 1997. The boundary to the north in the area not covered by the Metro Council's decision is the Urban Growth Boundary. The western boundary still has to be worked out between the City, the City of Hillsboro and Washington County or be determined by Metro. The City is presently working on the East Beaverton Urban Services Agreement with Washington County and the affected service providers. This agreement when adopted will establish an interim western boundary that will create an interim Urban Services Area for the City. The current debate concerns an area west of SW 185th Avenue, which is in the Beaverton School District, the Tualatin Valley Fire and Rescue District and the Tualatin Hills Park and Recreation District. The City is unaware of any objections to Beaverton's western Urban Services Boundary being at least as far west as 185th Avenue with the exception of that part of the City of Hillsboro which is currently east of 185th. This Element will assume that the western Urban Services Boundary is the eastern right-

of-way line of SW 185th Avenue except that where a portion of the City of Hillsboro currently exists east of 185th the boundary shall follow the Hillsboro City limit. Beaverton is not supporting this assumed western Urban Services Boundary as the final boundary but believes that at a minimum it will be located this far west if not further west. The complete assumed Urban Services Boundary and Urban Services Area are shown on Figure V-1.

Changes to the City's Urban Services Boundary will be required in the future if Metro expands the Urban Growth Boundary to the City's north and/or southwest.

5.3.1 Goal: Ensure long-term provision of adequate urban services within existing City limits and areas to be annexed in the future.

Policies:

- a) The City shall maintain agreements with the special districts and the County to plan for the long-term provision of services within the City's Urban Services Area.
 - Action 1: An Urban Services Boundary shall be established to identify the urban unincorporated area that the City is to consider in planning for urban public facilities and services and for future annexation.
 - Action 2: Adopt the East Beaverton Urban Services Agreement that will establish an interim Urban Services Area when the involved parties have reached agreement. This agreement shall be adopted as part of this Element by reference.
 - Action 3: Finalize the Urban Services Boundary between Beaverton and Hillsboro and adopt an Urban Services Agreement establishing the permanent Urban Services Area. This agreement shall be adopted as part of this Element by reference.
 - Action 4: Work with Washington County to update the Washington County Beaverton Urban Planning Area Agreement. Upon adoption, the current UPAA, which is in the Land Use Element of this Plan, shall be deleted and the updated UPAA shall be adopted in its place.
- b) The City shall work cooperatively with service providers within its Urban Services Area in the development of master plans that are elements of the City's Public Facility Plan, so as to prescribe the most effective and efficient long-term methods of providing each service.
- c) The City will involve owners of properties and residents in the unincorporated portion of its urban services area in planning for facilities and services.
- d) The City shall seek to eventually incorporate its entire Urban Services Area.

5.4 STORM WATER AND DRAINAGE

The storm water collection and treatment system maintained by the City consists of inlets and pipe systems, regional detention facilities, streams and their adjacent riparian corridors, and wetland areas. Many streams and wetland areas are located on private or park district property and are not actively maintained.

Pursuant to the current intergovernmental agreement (IGA) with CWS, ownership and maintenance of facilities operated by CWS are transferred permanently to the City for all areas annexed to the City. The current IGA with CWS establishes certain maintenance service levels that the City follows and may be amended from time to time as allowed by the IGA.

Urban storm water runoff is a major water quantity and quality issue affecting Beaverton area streams. As development continues, the magnitude of this problem can increase without proper mitigation. The process of planning, design, construction, and maintenance of storm water runoff facilities is more difficult and expensive when an area is already developed. The management of storm water run-off is a problem that crosses jurisdictional boundaries. The City of Beaverton has worked with CWS to conduct storm water planning, implement storm water utility and system development charge funding methods, develop design standards for storm water facilities and execute agreements for storm water facility operation and maintenance. In addition, the City contracts with CWS for regional stream system water testing and federal/state permitting such as the National Pollution Discharge Elimination System (NPDES) Permit.

In 1990, CWS's jurisdiction was expanded from exclusively sanitary sewer service to include storm water. The State Legislature officially authorized formation of CWS's Surface Water Management (SWM) program on July 23, 1990, to more effectively deal with the quantity (associated with flooding) and quality of urban surface (storm) water runoff. The Oregon Department of Environmental Quality and the U.S. Environmental Protection Agency had previously established strict regulations on water quality to control the pollutants that were being carried directly into streams and rivers. CWS in concert with other cities implemented the Surface Water Management utility to address the new regulations that affected the urbanized portion of Washington County (which includes all of Beaverton's assumed Urban Services Area). This was the first time that surface water runoff was administered regionally in Washington County. At the time that CWS formed the SWM program, the City of Beaverton and Washington County had long recognized and developed drainage systems to convey storm water and control flooding. Today, the City continues to own and operate the storm water conveyance system and non-regional detention basins within the City limits.

The CWS SWM program focuses on controlling pollution at the source thus reducing the sediments and pollutants that enter receiving streams and the Tualatin River. Preventative measures like using natural and artificial filtration systems, cleaning streets and catch basins, and building holding basins for quantity and quality detention are used. There are also rules for erosion at construction sites, floodplains and wetlands. These methods and many more are currently being used by CWS and cities to effectively control flooding and reduce pollutant loads carried by receiving streams and the Tualatin River.

The City of Beaverton has been involved in a number of studies over the last several years relating to storm water planning and development of storm water design standards. These studies include:

Storm Water Planning

- Millikan Subbasin Drainage Analysis, August 2000, David Evans and Associates
- Beaverton Creek Watershed Management Plan, June 1999, Brown & Caldwell (CWS with City of Beaverton)
- Analysis of the Central Interceptor Drainage System, June 1999, Economic and Engineering Services
- Murray Scholls Town Center Master Plan, April 1998, Zimmer Gunsul Frasca Partnership
- Westside Interceptor Storm Drainage Project, December 1997, KCM
- Fanno Creek Watershed Management Plan, June 1997, Kurahashi & Associates (CWS with City of Beaverton)
- Carrying Capacity Analysis and Capital Improvement Plan for the Beaverton Regional Center and Tek Station Area, December 1996, KCM
- Subbasin Strategies Plan for Rock, Bronson and Willow Creeks, March 1996 (CWS with City of Beaverton)
- The most recent version of The City of Beaverton, Drainage Master Plan

Storm Water Design Standards

• City of Beaverton – Engineering Design Manual and Standard Drawings. CWS standards entitled "Design and Construction Standards for Sanitary Sewer and Surface Water Management" are incorporated by reference from the Beaverton Design Standards.

5.4.1 Goal: Ensure long-term provision of adequate storm water management within existing City limits and areas to be annexed in the future.

Policies:

- a) The City shall continue to participate in the CWS's Surface Water Management (SWM) program for the urban portion of the Tualatin River watershed. The City shall retain responsibility for planning, construction and maintenance of portions of the local storm water facilities within its incorporated limits.
- b) On-site detention will be used as a storm water management tool to mitigate the impacts of increased storm water run-off associated with new land development.
- c) All new land development will be connected to a storm water drainage system. Each new development will be responsible for the construction or assurance of construction of their

portion of the major storm water run-off facilities that are identified by the SWM program as being necessary to serve the new land development.

5.5 POTABLE WATER

The City operates and maintains a system for the storage and distribution of potable water within a service area that includes the majority of its residents. Several areas along the easterly boundary of the City are served by the West Slope Water District (WSWD), Raleigh Water District (RWD) or Tualatin Valley Water District (TVWD). Similarly, in the northern and western portions of the City, several areas receive water from the Tualatin Valley Water District. The water provider service areas are shown on Figure V-2.

In 1979, the City entered into a joint service agreement with the Cities of Forest Grove and Hillsboro to establish joint operations for the water supply, pumping, treatment and transmission. In conjunction with this agreement, the City constructed new transmission lines, several new reservoirs, and other improvements to the water system. The agreement was amended in 1994 to add the Tualatin Valley Water District. The joint facilities are administered by the Hillsboro - Forest Grove – Beaverton - Tualatin Valley Water District Joint Water Commission. The Joint Water Commission consists of twelve members with three members appointed by each agency.

This joint system obtains raw water (prior to treatment) from the Trask and Tualatin Rivers with raw water storage in Barney Reservoir and Hagg Lake. Treatment is at the Joint Water Commission Treatment Plant located south of Forest Grove. Treated water is conveyed to Beaverton from the plant through 45, 42 and 36-inch transmission pipes.

The West Slope Water District, Raleigh Water District and a portion of the Tualatin Valley Water District purchase their water from Portland's Bull Run system. Most of this water is delivered by way of the 60-inch Washington County supply line that comes from the Powell Butte reservoir in east Portland. The City has separate intergovernmental agreements for water supply with the Tualatin Valley Water District and West Slope Water District. The agreements establish obligations and boundaries between the parties.

The following documents set forth the City of Beaverton's water service plan, method of financing and maintenance program:

Water System Planning

- Fire Hydrant Replacement Program, Phase 1 Beta Test, Phase 1 Preliminary Prioritization, June 2000, Murray, Smith and Associates, Inc.
- Technical Memorandum, Fire Hydrant Replacement Program Prioritization, Phase 1 and 2 Summary, June 1, 2000.
- Regional Water Providers Consortium Regional Transmission and Storage Strategy, Board Discussion Draft Report, February 22, 2000, Montgomery Watson
- SW 155th Avenue Reservoir Preliminary Siting Evaluation, November 10, 1999, Murray, Smith and Associates, Inc.

- Joint Water Commission, Water Management Plan Final Report, August 1998, Montgomery Watson
- Murray Scholls Town Center Master Plan, April 1998, Zimmer Gunsul Frasca Partnership
- Carrying Capacity Analysis and Capital Improvement Plan for the Beaverton Regional Center and Tek Station Area, December 1996, KCM
- Regional Water Supply Plan for the Portland Metropolitan Area, Final Report, October 1996, Prepared by the Water Providers of the Portland Metropolitan Area
- Report for Phase I, Joint Infrastructure Planning Project for City of Beaverton and Tualatin Valley Water District, March 1993, Murray, Smith and Associates
- Report for Phase II, Joint Infrastructure Planning Project for City of Beaverton and Tualatin Valley Water District, June 1993, Murray, Smith and Associates
- Cooper Mountain Water Storage Tank, July 17,1992, OTAK, Inc.
- Modeling TVWD/Beaverton Water System on Cooper Mountain, April 13, 1992, OTAK, Inc.
- The most recent version of the Water System Facility Plan

Water System Design Standards

• City of Beaverton – Engineering Design Manual and Standard Drawings

5.5.1 Goal: The City shall continue to participate in the Joint Water Commission and work with the West Slope, Raleigh and Tualatin Valley Water Districts to ensure the provision of adequate water service to present and future customers in Beaverton.

Policies:

- a) All new land development (residential subdivisions, multiple family dwelling development, and industrial and commercial developments) shall be connected to a public water system.
- b) All new development served by the Beaverton Water Division shall be reviewed by the City to determine that the pressure of water available to serve the proposed development meets City standards.

c) The City shall encourage water conservation consistent with current intergovernmental agreements, to prolong existing supplies and to help postpone water system capacity improvements needed to supply expected future demands as a result of projected population increases.

Action 1: The City shall consider establishing a wellhead protection program.

d) The City will comply with State and federal laws and regulations relating to potable water.

5.6 SANITARY SEWER

The City owns and maintains the wastewater collection system (all pipes 21-inches and smaller) within its incorporated limits and conveys flows to a trunk interceptor system that is owned and maintained by the sewer treatment service provider, CWS. CWS is a special district that was established in eastern Washington County to provide sanitary sewer service in a coordinated and economic manner necessary to meet federal, state, and regional water quality regulations. The City contracts with CWS for sanitary sewerage treatment, trunkline conveyance service, development of regional minimum design standards for sanitary sewer systems and regulation of industrial discharge permits. The National Pollution Discharge Elimination System Permit (NPDES) permit is held by CWS.

Pursuant to the current intergovernmental agreement (IGA) with CWS, ownership and maintenance of collection pipes 21-inches and less operated by CWS are transferred permanently to the City for all areas annexed to the City. The current IGA with CWS establishes certain maintenance service levels that the City follows and may be amended from time to time as allowed by the IGA.

The City's collection system directs flow to sewer trunk lines that convey the flow to two treatment plants: the Durham Treatment Plant and the Rock Creek Treatment Plant. Flows from Downtown Beaverton as well as the easterly and southerly areas of the City are conveyed to the Durham Plant located on the north side of the Tualatin River south of Tigard. Flows from the westerly portion of the City are directed to the Rock Creek Plant near Hillsboro.

The following documents set forth the City of Beaverton's sewer service plan and maintenance program:

Sewer System Planning

- Clean Water Services Conveyance System Management Study, Final Draft Report, November 1998, Shaun Pigott Associates
- Murray Scholls Town Center Master Plan, April 1998, Zimmer Gunsul Frasca Partnership
- Carrying Capacity Analysis and Capital Improvement Plan for the Beaverton Regional Center and Tek Station Area, December 1996, KCM
- Clean Water Services of Washington County, Sewer System Master Plan Update 1995,

David Evans and Associates

• The most recent version of The City of Beaverton Sanitary Sewer Master Plan

Sewer System Design Standards

• City of Beaverton – Engineering Design Manual and Standard Drawings. CWS standards entitled "Design and Construction Standards for Sanitary Sewer and Surface Water Management" are incorporated by reference into the Beaverton Design Standards.

5.6.1. Goal: The City shall continue to cooperate with CWS to ensure long-term provision of an adequate sanitary sewer system within existing City limits and areas to be annexed in the future.

Policies:

- a) All new land development (residential subdivisions, and multiple family dwelling, industrial, and commercial developments) shall be connected to the City sewer system.
- b) When sewer service is extended into an area that contains existing development, all existing habitable buildings shall be connected to the new sewer if they are within 100 feet of the sewer line and if gravity lateral sewer lines can serve them.

5.7 SCHOOLS

The need for and location of schools is closely related to residential development and housing densities in the community. The location of public schools can significantly influence the direction and rate of growth of a given area. This is especially true of elementary schools. Beaverton School District #48 (the District) is responsible for providing public schools in the community. In order to assist the District with monitoring enrollment potential, the City provides the District with information on development proposals that may potentially impact a present or future school site.

The District is required, by State Statute (ORS 195.110), to adopt a School Facility Plan to identify school facility needs based on population growth projections and land use designations contained in local government comprehensive plans covering the area within the District. The current School Facility Plan was adopted by the District on June 13, 1994 in compliance with ORS 195.110 and adopted by the City as a supporting document to the Comprehensive Plan on March 7, 1995 by ORD. 3920. The School Facility Plan is a supporting document to this Comprehensive Plan and is adopted by reference. The District is currently in the process of updating the School Facility Plan, which will be incorporated into this Element by reference after the District adopts it. The District is responsible for planning its own facilities and the City may only cooperate and advise them in this process.

State Statutes (ORS 195 and 197) do not allow the City to deny a development request based on school capacity but these Statutes do require the City to provide notice to the "...District when considering a plan or land use regulation amendment that significantly impacts school capacity."

The City has gone beyond this minimal requirement in attempting to inform and assist the District regarding their facilities planning and the development of the School Facilities Plan.

In most cases, the School Facilities Plan recommends a park adjacent to each school. School-parks serve essentially the same area as the school and can combine to make a year-round educational and recreational center for part of the community.

5.7.1 Goal: Cooperate with the Beaverton School District in its efforts to provide the best possible educational facilities and services to Beaverton residents.

Policies:

- a) The City shall encourage the School District to provide facilities that will adequately accommodate growth while recognizing the limited supply of buildable land in the city for such facilities.
- b) Schools should locate within or adjacent to residential districts for the convenience of those the facilities serve. However, public and private school proposals should be assessed for compatibility in order to assure that the stated purposes of the residential districts are not unnecessarily eroded.
- c) The City shall encourage the District to provide for schools throughout the City in locations that are easily accessible to those they are intended to serve.
- d) The City shall work cooperatively with the School District in implementation of the Comprehensive Plan through the District's various programs, joint acquisition and development efforts.
- e) The City shall notify the school district of development proposals that may potentially impact a present or future school site to allow the district the opportunity to comment, purchase or request dedications.
- f) The City shall notify the School District when considering Comprehensive Plan or land use regulation amendments that may significantly impact school capacity.
- g) The City shall encourage the School District and the Tualatin Hills Park and Recreation District THPRD to continue their excellent level of cooperation in the joint acquisition, development and use of facilities for educational and recreational purposes.

5.8 PARKS AND RECREATION

Parks and recreation facilities are basic and essential for the health and welfare of the community. The City coordinates the land use aspects of locating these facilities but does not predetermine sites. Location and improvement decisions for these types of facilities are the responsibility of the Tualatin Hills Park and Recreation District (THPRD).

As Beaverton and the Metro area become more densely developed, the number, location, size and quality of parks and recreation facilities have become increasingly more important. The demand for these facilities has been brought about in part by a higher standard of living; more leisure time resulting from such things as shorter work weeks, earlier retirement, and increasing life span; higher densities of development and a continuing emphasis on health and exercise. The by-products of urbanization in terms of congestion, air pollution and noise have also created a greater awareness of the need for open space in the urban environment. An adequate park and recreation system contributes to the physical and mental health of the community and can be a source of community pride.

As features in the urban landscape, parks improve the character of neighborhoods and tend to stabilize property values. Also, many businesses and industries seek locations with a high level of environmental quality as a means of increasing their ability to attract and retain a stable and productive work force. With improved transportation systems giving greater flexibility for business and industrial site selection, a well-developed park and recreation system can be an important factor in attracting such developments to the community.

THPRD is independent from the City with its own elected five-member Board of Directors and taxing authority. THPRD was established in 1955. THPRD's boundaries include most of Beaverton's assumed Urban Services Area. THPRD, for the most part, has developed its own acquisition and development plan pursuant to the adopted Tualatin Hills Park & Recreation District 20-Year Comprehensive and Trails Master Plans, which are adopted here by reference. In addition to donations and outright purchases, the THPRD works with the City and Washington County through the land development process to obtain sites by dedication.

The THPRD's plan recognizes different types of park and recreation facilities including regional, neighborhood, community and specialty parks, school parks, recreational/aquatic center, multiuse trail system plan, off-street trail corridors and natural areas along streams. These descriptive park designations relate to the function or character of the parks shown on THPRD's 20-Year Comprehensive Park & Recreation and Trails Master Plans. As the area grows, opportunities will occur in addition to those shown on the plan. Each should be evaluated in terms of conformance with this plan's goals and policies and those of the THPRD 20-Year Comprehensive Park & Recreation and Trails Master Plans.

The Portland General Electric (PGE)/Bonneville Power Administration (BPA) transmission lines provide opportunities for open space and trail corridors in the community. These rights-of-way will not be converted to intensive urban land uses in the foreseeable future.

5.8.1 Goal: Cooperate with THPRD in implementation of its 20-Year Comprehensive Master Plan and Trails Master Plan in order to ensure adequate parks and recreation facilities and programs for current and future City residents.

POLICIES:

a) The City shall support and encourage THPRD efforts to provide parks and recreation

facilities that will accommodate growth while recognizing the limited supply of buildable land in the city for such facilities.

- b) The City shall encourage THPRD to provide parks and recreation facilities throughout the City in locations that are easily accessible to those they are intended to serve.
- c) The City shall support and encourage acquisition of park and recreation sites in advance of need so that the most appropriate sites are available for these vital public facilities.
 - **Action 1:** The City shall work with THPRD to further explore opportunities for mixing public park and recreation activities with revenue-generating public/private partnerships such as restaurants, recreation and aquatic centers, sports complexes, or other concession activities, in order to help finance recreation programming, park acquisition, and maintenance.
- d) The City shall notify THPRD of development proposals that may potentially impact a present or future park site to allow the district the opportunity to comment, purchase or request dedications.
- e) A number of financial incentives exist to encourage private property owners to donate, dedicate, or provide easements for resource preservation, park, trail or open space use. The City shall work cooperatively with property owners and THPRD to maximize the use of these tools for the benefit of the community.
- f) To offset increased densities and to meet the needs of the population, the City and THPRD should work together to provide urban scale public spaces in regional centers, town centers, station communities and main street areas within the city.
- g) The planning, acquisition and development of multi-use paths should be consistent with this Plan's Transportation Element and THPRD's Trail Master Plan.
- h) The City shall encourage park acquisition and appropriate development in areas designated as Significant Natural Resources, as defined by Volume III of this Comprehensive Plan.

5.9 POLICE

The Beaverton Police Department is a full service agency that operates under the community-oriented policing principle. The police department is comprised of over 130 men and women (circa year 2000). In addition to enforcement of all federal, state, and local laws; Police Department personnel respond to non-criminal calls for assistance. The department utilizes planning and research to maximize use of current technology, participates in the development of law enforcement legislation and interagency operations to combat regional crime problems, and encourages and coordinates citizen crime prevention efforts through various methods and programs. Continuing education within the force has become increasingly important in order to respond appropriately to changes in society. Changes in the cultural mix of the City's population and the nature of crimes, for example, increased incidents of "white collar" crimes, may require modification of current methods. Operating under a community oriented policing and problem solving philosophy, the Department is guided in their efforts by the following mission statement:

"The Beaverton Police Department shall provide the highest quality service, preserving human rights, lives, and property, while striving to achieve the goals of the department, the City, and the community. We are committed to the highest professional standards, working in partnership with our citizens to problem solve and meet the challenges of reducing crime, creating a safer environment, and improving our quality of life."

This philosophy and organizational strategy is based on forging a partnership between the police and the community for the purpose of working together to solve problems of crime and fear of crime and disorder to enhance the overall quality of life in the community's neighborhoods. Community oriented policing shifts the focus of police work from handling random calls, to solving community problems. To further this philosophy, the City has established a policy of providing 1.5 officers per thousand population. This policy was established after careful study to determine the optimal level of officers needed to provide normal police protection and community outreach in line with the City's financial restraints. City voters supported this policy in 1996, with their approval of a tax levy to fund maintaining the ratio of 1.5 officers per 1,000 population.

5.9.1 Goal: Provide full service police protection to the City's incorporated area and to new areas as they are annexed.

Policies:

- a) The City shall endeavor to provide one and a half (1.5) uniformed officers per 1000 population.
- b) Apply an integrated, department-wide program of identifying problems, analyzing causation, developing resource strategies, and assessing results as a means of long-term problem solving within the community.
 - Action 1: Provide drug and gang education and resistance programs in the community through teaching in the schools, Beaverton Youth Peer Court, adult awareness programs, community talks, and other related programs.
 - **Action 2:** Provide the community with crime prevention education as part of efforts to expand community policing.
 - **Action 3:** Target problem times and locations, and deploy police personnel to effect a positive change in our traffic flows and accident potentials.
 - **Action 4:** Continue the City's Police Department's participation in meeting with and regularly informing Neighborhood Association Committees (NACs).
- c) Be aggressively proactive in the investigation of narcotics and gang-related crimes.
- d) Aggressively investigate and pursue prosecution of violent crimes, such as sex abuse, child abuse, and homicide.

- e) Proactively train Police Department personnel so as to maximize their knowledge, skills and abilities. Challenge and empower them by delegating responsibility.
- f) Provide equipment and facilities of a standard that will make the organization operate efficiently and effectively in a safe, professional, and pleasant work environment.
- g) Promote cooperation, communication, and the sharing of vital information among other agencies and internally. Address opportunities as a team.

Action 1: Continue the City's participation in the first responder agreement with Washington County.

5.10 FIRE AND EMERGENCY MEDICAL SERVICES

The City has designated the Tualatin Valley Fire and Rescue District (TVF&RD) to be the service provider for fire and emergency medical services for Beaverton. The City no longer provides its own fire protection and emergency medical services. Rather, in 1996, the City annexed to TVF&RD, Oregon's largest fire district, for such services. As a result, the District levies its tax rate within the City and the City no longer levies taxes for these purposes. The district's elected five-member board of directors provides policy direction in the area of fire and emergency services.

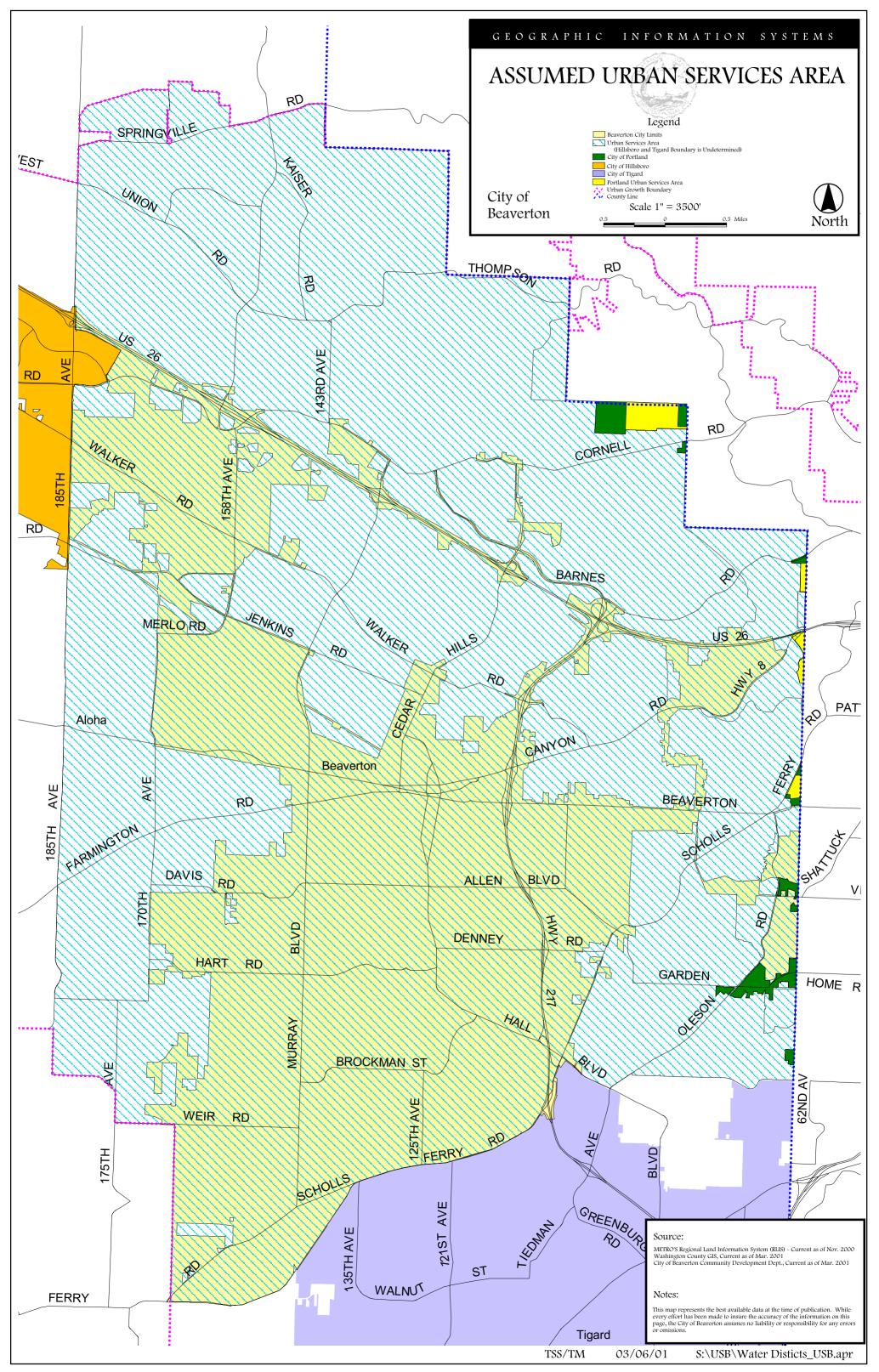
The district operates two stations within, and a number of stations in close proximity to, the City. Recently, the District constructed a new main fire station on Farmington Road to better serve the City's residents. Another new facility, combined with recent modifications to the District's deployment strategies, has markedly improved fire and emergency medical services since the annexation.

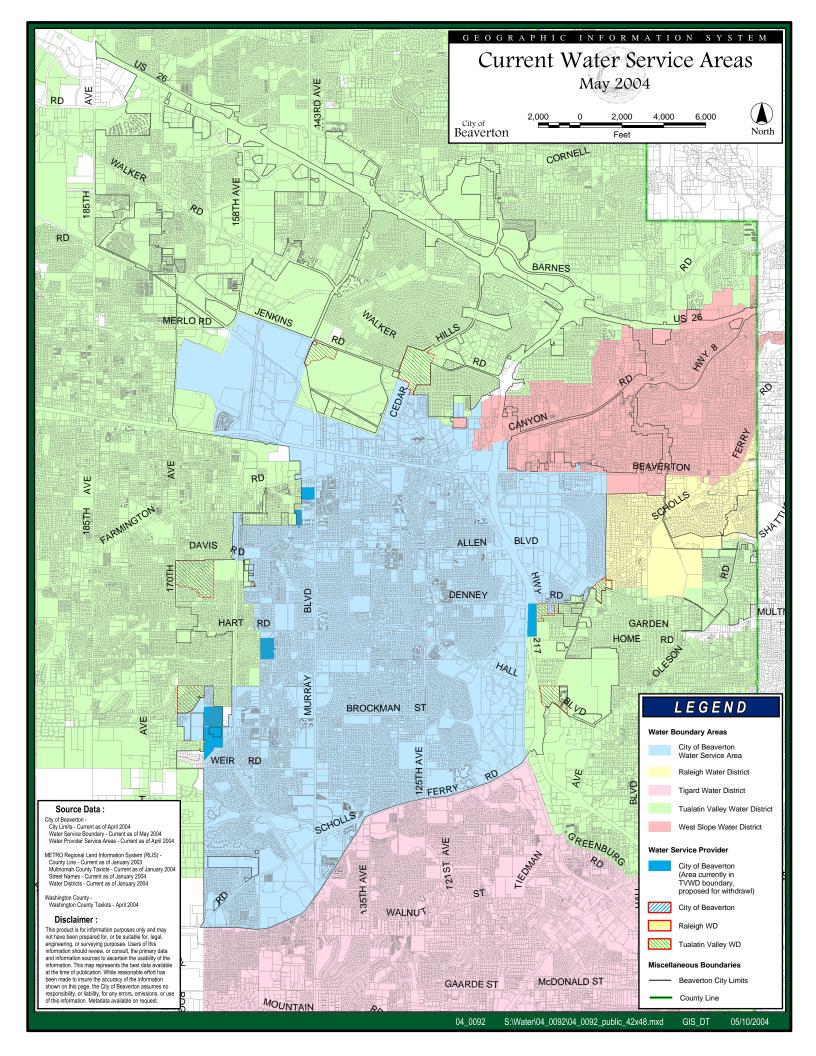
5.10.1 Goal: Cooperate with TVF&RD to insure adequate fire and emergency medical services for the current and future residents of the City.

Policies:

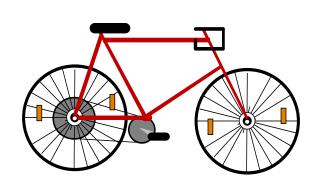
- a) Retain TVF&RD as the provider of fire and emergency medical services for the entire City of Beaverton incorporated area.
- b) The City shall cooperate with TVF&RD in the siting of new facilities.
- c) The TVF&RD shall enforce the Uniform Fire Code for existing buildings and the City shall enforce it for new construction.
- d) The City shall adopt and enforce the State Building Code.

Action 1: The City shall adopt and enforce an optional element of the State Building Code that requires automatic fire sprinkler systems for apartments buildings over one story or with more than sixteen (16) units for new construction.

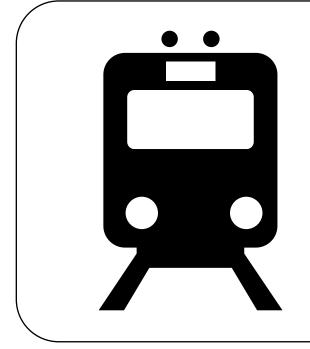




CHAPTER SIX: TRANSPORTATION ELEMENT









TRANSPORTATION ELEMENT

6.1. BACKGROUND

Like many communities across the nation, Beaverton's development pattern evolved as a result of several economic and geographic circumstances that established the transportation framework of the City. The historic presence of a large beaver marsh in what is now central Beaverton, the advent of the railroad, and the community's early history as a commercial center of farming and logging activities all influenced its early settlement. The City's location within the Tualatin Valley and its proximity to Willamette River commerce in Portland destined Beaverton to become a regional transportation hub.

As the City grew, so did the demand for roads. The road systems of the various subareas reflect the transportation philosophies and attitudes during the times they were built. The central downtown area was the first to be officially platted and is characterized by the traditional grid pattern of streets. After the original traditional grid was established, subsequent street creation and extension patterns varied greatly as incremental development demanded. East Beaverton residential areas, such as Royal Woodlands, developed with a series of long local streets. In contrast, south Beaverton developed at a time when residents wanted to be protected from through traffic. The result was a maze of short, circuitous, dead-end streets that fulfilled this goal but overburdened the few connecting local streets and adjacent collector and arterial streets with high residential volumes. The road system west of Murray Boulevard was initially designed to serve farming needs. It has proven to be inadequate in accommodating the travel needs of more recent residential development.

Over the years, the City has undertaken a number of efforts to evaluate and improve its transportation system. In 1976, *Comprehensive Plan* amendments were adopted that eliminated many proposed major streets in favor of protecting neighborhoods from increased traffic congestion. Beginning in 1978, the Beaverton Urban Renewal Agency undertook a number of improvements to the street circulation system of central Beaverton. In 1979 through 1983, the City participated with the region in planning for a future light rail transit system linking downtown Portland with eastern Washington County. The City updated its transit element and made other changes to the downtown plan, which included the provision for a new transit center in central Beaverton. In 1988, Plan amendments were adopted to update the bikeway and pedestrian elements, and to provide for a functional classification of streets.

Beaverton and the Portland region grew significantly in the early 1990s. Legislative changes also occurred. In May 1991, the State adopted the Transportation Planning Rule (Oregon Administrative Rules Section 660 Division 12), which implements Oregon's Statewide Planning Goal 12 (Oregon Administrative Rules Section 660 Division 15) and mandates transportation system planning for Oregon cities, counties, and regions. The Oregon Department of Transportation responded by adopting the *Oregon Transportation Plan* (1992). Metro responded to state and federal mandates by developing its 2040 Land Use Concept (1995) and adopting its Urban Growth Management Functional Plan (1996), Regional Framework Plan (1997), and 2020 Regional Transportation Plan (2000).

Chapter Six: Transportation Element

Beaverton complied with these mandates by adopting an updated Transportation Element (1999), which is based on the *1997 Transportation System Plan* (1999) that accommodates the growth projected to occur by forecast year 2015. In 2001, the City updated its *Transportation System Plan* to forecast year 2020 to be consistent with State and Metro plans as required. The 2020 *Transportation System Plan Update* is the product of a yearlong public participation process. This Transportation Element is based on the *Transportation System Plan Update* (included in *Comprehensive Plan, Volume IV*). The updated goals, policies, and actions are included in section 6.2. The analysis and discussion of 2020 system needs are summarized and the system improvements are listed and/or mapped in section 6.3. Section 6.4 summarizes the projected revenues and estimates the cost of the 20-year transportation plan.

2020 Study Area

The 2020 transportation plan study area responds to area wide growth. Projected land uses and population and employment figures reflect the *Comprehensive Plan Land Use Element* and Metro's assumptions for forecast year 2020. The planning area accommodates approximately 22,000 additional households and approximately 53,000 new employees over the next 20 years; 47 percent and 69 percent increases respectively over the 1994 base year household and employment figures. In areas outside City limits, designations and improvements included in this plan are considered recommendations to the appropriate lead agency(ies) responsible for that area or facility.

6.2. TRANSPORTATION GOALS AND POLICIES

The transportation goals and related policies are updated from the previous Transportation Element. They reflect the City's *Comprehensive Plan* goals. The transportation goals are brief guiding statements that describe a desired result. Their related policies focus on how each goal is met and describe necessary actions that move the community toward the goal. Below many of the policies, italic text clarifies the intent of the policy and provides recommended implementing actions.

At times, policies direct the establishment of requirements and standards for new development. The requirements for new development are contained in the Beaverton *Development Code*. The construction standards for improvements are found in the Beaverton *Engineering Design Manual and Standard Drawings*.

6.2.1. **Goal:** Transportation facilities designed and constructed in a manner to enhance Beaverton's livability and meet federal, state, regional, and local requirements.

Policies:

a) Maintain the livability of Beaverton through proper location and design of transportation facilities.

Actions:

• Design streets and highways to respect the characteristics of the surrounding land uses, natural features and natural hazards, and community amenities.

- Recognizing that the magnitude and scale of capital facilities also affect aesthetics and environmental quality, the City will continue to require design plans and impact analyses as specified in the Development Code.
- Preserve right-of-way for improvements that are slightly beyond or within a specified time period that is beyond the planning forecast year identified in the Transportation System Plan.
- b) Consider noise attenuation in the design and redesign of arterial streets immediately adjacent to residential development.
- c) Locate and design recreational multi-use paths to balance the needs of human use and enjoyment with resource preservation in areas identified on the Natural Resource Inventory Plan Map for their Significant Natural Resource values.

Action:

- Proposals for shared-use paths through significant natural resource areas shall assess compatibility of the path with the resource. The assessment shall include the impacts of lighting, appropriate restrictions on uses of the path, and options available to mitigate the impacts of the path. (Ordinance 4301).
- d) Protect neighborhoods from excessive through traffic and travel speeds while providing reasonable access to and from residential areas. Build streets to minimize speeding.

Actions:

- Maintain street design standards and criteria for neighborhood traffic calming for use in new development and existing neighborhoods.
- Complete construction of the 125th Avenue extension and the Murray Boulevard connection from Scholls Ferry Road to Barrows Road at Walnut Street prior to completing the Davies Road connection from Scholls Ferry Road to Barrows Road.
- e) New commercial and industrial development shall identify traffic plans for residential streets where increased cut-through traffic may occur due to the proposed development.
- 6.2.2. **Goal:** A balanced transportation system.

Policies:

- a) Implement Beaverton's public street standards that recognize the multi-purpose nature of the street right-of-way for a combination of utility, pedestrian, bicycle, transit, truck, and auto uses, and recognize that streets are important to community identity and provide a needed service.
- b) Develop and provide a safe, complete, attractive, efficient, and accessible system of pedestrian ways and bicycle ways, including bike lanes, shared roadways, multi-use paths, and sidewalks according to the pedestrian and bicycle system maps and the *Development Code* and *Engineering Design Manual and Standard Drawings* requirements.

Actions:

- Continue to coordinate with Washington County, Metro, Beaverton area schools, Oregon Department of Transportation, and the Tualatin Hills Park and Recreation District.
- Sidewalks will remain the responsibility of fronting property owners.
- Maintain the opportunity for resident groups to fund multi-use path improvements through the local improvement district process.
- c) Provide connectivity to each area of the City for convenient multi-modal access. Ensure pedestrian, bicycle, transit, and vehicle access to schools, parks, employment and recreational areas, and destinations in station areas, regional and town centers by identifying and developing improvements that address connectivity needs.
- d) Develop neighborhood and local connections to provide adequate circulation into and out of neighborhoods.
- e) The permanent closure of an existing road in a developed neighborhood is not recommended and will be considered by the City only under the following circumstances: as a measure of last resort, when the quality of life in the neighborhood is being severely threatened by excessive traffic volumes or the presence of a traffic safety hazard; or, as part of a plan reviewed through the City's land use, site development, and/or capital improvement process(es). Maintain existing neighborhood connectivity by avoiding closures of existing streets except when the closure is part of a larger plan for improvements to the neighborhood.

Actions: Jay Street is recommended to remain open between 158th Avenue and Burlington Drive.

f) Design streets to accommodate transit while minimizing impacts to traffic flow.

Actions: Improve transit service, pedestrian facilities leading to bus stop waiting areas, and make the waiting areas themselves safe, comfortable, and attractive. Continue to work with TriMet, the Oregon Department of Transportation, and Washington County to develop and implement a transit shelter program, to place marked crossings at major transit stops, and to provide signal priority.

6.2.3. **Goal:** A safe transportation system.

Policies:

a) Improve traffic safety through a comprehensive program of engineering, education, and enforcement.

b) Design streets to serve anticipated function and intended uses as determined by the *Comprehensive Plan*.

Action: Maintain a functional classification system that meets the City's needs and respects the needs of other agencies including, but not limited to, Washington County, Oregon Department of Transportation, TriMet, Tualatin Valley Fire and Rescue, and Metro.

c) Enhance safety by prioritizing and mitigating high accident locations within the City.

Actions: Work with Washington County to periodically review traffic collision and Safety Priority Index System information in an effort to systematically identify, prioritize, and remedy safety problems. The City should continue to expand its collision record evaluation program working cooperatively with Washington County and Oregon Department of Transportation.

d) Designate safe routes from residential areas to schools.

Action: The City should continue to work with Beaverton area schools and the community in developing safe transit, pedestrian, and bicycle routes to schools. Improvement projects near schools shall consider school access and safety during project development.

e) Construct multi-use paths only where they can be developed with satisfactory design components that address safety, security, maintainability, and acceptable uses. Multi-use paths should converge at traffic-controlled intersections to provide for safe crossing, although they should be separate and distant from major streets for most of their length.

Actions: Study trail crossing treatments for appropriate use at locations where out-ofdirection travel by path users to an intersection is significant. When multi-use paths follow rear lot lines, use design treatments to minimize the impacts to private property.

- f) Provide satisfactory levels of maintenance to the transportation system in order to preserve user safety, facility aesthetics, and the integrity of the system as a whole.
- g) Maintain access management standards for streets consistent with City, County, and State requirements to reduce conflicts among vehicles, trucks, bicycles, and pedestrians. Preserve the functional integrity of the motor vehicle system by limiting access per City standards.
- h) Ensure that adequate access for emergency services vehicles is provided throughout the City.

Actions: Work cooperatively with Tualatin Valley Fire and Rescue and other Washington County emergency service providers to designate Primary and Secondary Emergency Response Routes. Work with these agencies to establish acceptable traffic calming

strategies for these routes. Recognize the route designations and associated acceptable traffic calming strategies in the City's Traffic Calming Program.

- i) Meet federal and State safety compliance standards for operation, construction, and maintenance of the rail system.
- j) Provide safe routing of hazardous materials consistent with federal guidelines, and provide for public involvement in the process.

Action: Work with federal agencies, the Public Utility Commission, the Oregon Department of Environmental Quality, public safety providers, and Oregon Department of Transportation to assure consistent routes, laws, and regulations for the transport of hazardous materials.

6.2.4. **Goal**: An efficient transportation system that reduces the percentage of trips by single occupant vehicles, reduces the number and length of trips, limits congestion, and improves air quality.

Policies:

a) Support and implement trip reduction strategies developed regionally, including employment, tourist, and recreational trip reduction programs.

Actions: Encourage implementation of travel demand management programs. Work to shift traffic to off-peak travel hours. Coordinate trip reduction strategies with Washington County, Metro, Westside Transportation Alliance, Oregon Department of Transportation, TriMet, neighboring cities, and the Oregon Department of Environmental Quality. Seek to raise p.m. peak average vehicle occupancy (AVO) to 1.3 AVO or more in the evening peak and/or move 50 percent or more of the standard evening peak trip generation outside the peak hour. Educate business groups, employees, and residents about trip reduction strategies. Work with business groups, residents, and employees to develop and implement travel demand management programs. Support and implement strategies that achieve progress toward attaining Metro's 2040 Regional Non-Single Occupant Vehicle Modal Targets.

2040 Non-Single Occupant Vehicle Modal Targets are as follows:

- Beaverton Regional Center: 45-55%;
- Murray/Scholls Town Center: 45-55%;
- Beaverton Main Streets, Station Communities, and Corridors: 45-55%;
- Beaverton Industrial Areas, Intermodal Facilities, Employment Areas, Inner and Outer Neighborhoods: 40-45%

(Targets apply to trips to, within, and out of each 2040 Design Type. The targets reflect conditions appropriate for the year 2040 and are needed to comply with Oregon Transportation Planning Rule objectives to reduce reliance on single-occupancy vehicles.)

Continue to implement the following action plan to work toward achieving these targets:

i) Encourage development that effectively mixes land uses to reduce vehicle trip generation.

- ii) Develop consistent conditions for land use approval that require future employment related land use developments to agree to reduce peak hour trips through transportation demand management strategies.
- iii) Support efforts by Washington County, Oregon Department of Transportation, Department of Environmental Quality, TriMet, and the Westside Transportation Alliance to develop productive demand management measures that reduce vehicle miles traveled and peak hour trips.
- iv) Coordinate with Oregon Department of Transportation and TriMet on development of sufficient park-and-rides, including sites at transit stations and freeway interchange locations. Transfer stations and interchange construction and reconstruction projects should be required to identify potential park-and-ride sites. Explore park-and-ride locations along existing bus routes to minimize commuter parking impacts in neighborhoods.
- v) Build on existing percentage of Regional Center employers (seven percent) who provide transit pass discounts to achieve 25 percent by 2020.
- vi) Work with Washington County, Westside Transportation Alliance, and TriMet to develop and implement a downtown Beaverton fareless transit area, a regional center transportation management agency, and reduced transit fare programs based on increased demand and funding availability.
- vii) Implement the master improvement plans for bicycles, transit, pedestrians, and motor vehicles to implement a convenient multi-modal transportation system that encourages increased bicycle, pedestrian, and transit use.
- b) Limit the provision of parking to meet regional and State standards.

Actions: Work to reduce parking per capita in accordance with Metro and State requirements, while minimizing impacts to neighborhoods. Continue to implement the motor vehicle and bicycle parking ratios in new development. Develop and implement a Regional Center parking plan and a residential parking permit program as demand increases. Continue to implement shared parking and timed parking in new development and through existing programs. Work toward implementing other parking-based transportation demand management strategies, such as metered and structured parking, to help achieve Metro's 2040 Non-Single Occupant Vehicle mode split targets.

c) Maintain levels of service consistent with Metro's *Regional Transportation Plan* and the *Oregon Transportation Plan*. Applications for Comprehensive Plan Amendments shall comply with the requirements of OAR 660-012-0060 and as appropriate include a Transportation Impact Analysis that shows that the proposal will not degrade system performance below the acceptable two-hour peak demand-to-capacity ratio of 0.98. If the Adopted *Comprehensive Plan* forecasts a two-hour peak demand-to-capacity ratio greater than 0.98 for a facility, then the proposed amendment shall not degrade performance beyond the forecasted ratio. (*Ordinance 4301*)

Reduce traffic congestion and enhance traffic flow through such system management measures as intersection improvements, intelligent transportation systems, incident management, signal priority, optimization, and synchronization, and other similar measures.

Action: Maintain performance standards that meet the needs of the City and are consistent with regional and State standards. (Ordinance 4301)

d) Plan land uses to increase opportunities for multi-purpose trips (trip chaining).

Actions: Encourage mixed-use development where allowed to promote trip chaining in an effort to reduce vehicle trips, cold starts, and air pollution.

- e) Require land use approval of proposals for new or improved transportation facilities. The approval process shall consider the project's identified impacts.
- f) Support mixed-use development in appropriate locations.
- g) Encourage TriMet to implement transit improvements concurrent with roadway improvements, to improve access and frequency of service, and to increase ridership potential and service area. Encourage development of regional high capacity transit, including light rail transit and commuter rail.

Action: Support commuter rail and its associated supportive transit services.

6.2.5. **Goal**: Transportation facilities that serve and are accessible to all members of the community.

Policies:

a) Construct transportation facilities, including access to and within bus stop waiting areas, to meet the requirements of the Americans with Disabilities Act.

Action: Identify, assess, and remove access barriers to persons with disabilities.

- b) Support TriMet, other transit service providers, and employers' and social service agencies' efforts that respond to the transit and transportation needs of elderly, economically disadvantaged, and disabled persons.
- 6.2.6. **Goal**: Transportation facilities that provide efficient movement of goods.

Policies:

- a) Designated arterial routes and freeway access are essential for efficient movement of goods. Design these facilities and adjacent land uses to reflect these needs.
- b) Reflect the needs of existing railroad and air transportation facilities in land use decisions.
- 6.2.7 **Goal:** Implement the transportation plan by working cooperatively with federal, State, regional, and local governments, the private sector, and residents. Create a stable, flexible financial system.

Policies:

a) Coordinate transportation projects, policy issues, and development actions with all affected governmental units in the area. Key agencies for coordination include Washington County, Oregon Department of Transportation, TriMet, Metro, Tualatin Hills Park and Recreation District, Tualatin Valley Fire and Rescue, and the adjacent cities of Tigard, Hillsboro, and Portland.

- b) Participate in regional transportation, growth management, and air quality improvement policies. Work with agencies to assure adequate funding of transportation facilities to support these policies.
- c) Monitor and update the *Transportation Element* of the *Comprehensive Plan* so that issues and opportunities are addressed in a timely manner. Maintain a current capital improvement program that establishes the City's construction and improvement priorities, and allocates the appropriate level of funding.

Action: The City commits to working with Metro and the Department of Land Conservation and Development in the City's next Transportation Plan update to address local issues related to non single-occupant-vehicle strategies.

d) Use the System Development Charge, Traffic Impact Fees, and development exactions as elements of an overall program to pay for adding capacity to the collector and arterial street system and for making safety improvements related to development impacts.

Action: Base the roadway system taxes and fees on the total expected cost of making extra capacity and safety improvements over a twenty-year period, allocated back to development on a pro rata formula taking into account the relative expected future traffic impact of the development in question.

- e) Establish rights-of-way through development review and, where appropriate, officially secure them by dedication or reservation of property.
- f) Develop a long-range financial strategy to make needed improvements to the transportation system and to support operational and maintenance requirements by working in partnership with Metro, Oregon Department of Transportation, and other jurisdictions and agencies.

Actions: The financial strategy should consider the appropriate shares of motor vehicle fees, impact fees, property tax levies, and development contributions to balance needs, costs, and revenue. View the process of improving the transportation system as that of a partnership between the public (through fees and taxes) and private sectors (through exactions and conditions of development approval), each of which has appropriate roles in the financing of these improvements to meet present and projected needs.

g) Provide adequate funding for maintenance of the capital investment in transportation facilities.

Action: Develop a long-term financing program that provides a stable source of funds to ensure cost-effective maintenance of transportation facilities and efficient effective use of public funds.

6.3. TRANSPORTATION SYSTEM PLAN IMPROVEMENTS

The transportation improvements included in this element implement the City's transportation goals and policies and mitigate the needs identified in the 2020 *Transportation System Plan Update*. Improvements are based on the *Regional Transportation Plan* and its land use, population, employment, and mode split assumptions for forecast year 2020. Any improvements included in this plan that are not under City jurisdiction are considered recommendations to the responsible agency.

Modal master plans identify improvements that provide a complete system network and necessary capacity. Modal action plans identify shorter-term improvements that work toward completing the network and providing capacity by filling key system gaps or serving highly used destinations. Transportation system and demand management projects serve to implement the mode split targets that reduce vehicle miles traveled, traffic congestion, and vehicle emissions.

The improvement figures and tables do not preclude implementing any project whether mapped or not mapped, listed or not listed, in order to take advantage of an opportunity provided by a proposed development or redevelopment, a roadway construction or reconstruction project, or any other project involving infrastructure improvements. The responsibility of new development to provide improvements and the standards to which all improvements must be built are identified in the Beaverton *Development Code*, the *Engineering Design Manual and Standard Drawings*, and the standards of 28 CFR Part 36 Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities (the Americans with Disabilities Act).

Any change within or adjacent to a transportation facility or public right-of-way represents an opportunity to expand or improve the system. To take advantage of such opportunities and make the most cost-effective use of public and private funds, the City may schedule and make financing provision for any transportation improvement that the City deems necessary or desirable, whether the improvement is specifically planned in the *Comprehensive Plan* or not, whether the improvement is funded publicly, privately, or in combination, whether the improvement is ultimate or interim, and regardless of the timing of the improvement relative to the priorities and timing in the *Comprehensive Plan*.

Correspondingly, the City Council may include a transportation improvement that it deems necessary in the capital improvement plan and budget. The City may seek state, regional, and federal funding assistance whether an improvement is specifically planned in the *Comprehensive Plan* or not, and whether the improvement is ultimate or interim. However, only those transportation improvements that comply with applicable provisions of the City's adopted codes, ordinances, and *Comprehensive Plan* shall be implemented.

6.3.1. Transportation System Management and Demand Management Improvements
Transportation system and demand management strategies are part of the transportation improvement plan. Transportation system management improvements are relatively lower cost strategies that enhance the transportation system's operational performance by helping to reduce congestion and decrease travel time. Signal coordination and synchronization improvements, intersection channelization, access management, high occupancy vehicle lanes, ramp metering, rapid incident response, intelligent transportation solutions (ITS), and transit operation

Chapter Six: Transportation Element

optimization programs can provide tangible benefits to the public. Though most of these types of improvements focus on the broader regional network, traffic monitoring and surveillance, signal coordination and optimization, signal priority, information availability, and incident management are strategies that Beaverton continues to implement locally.

Transportation demand management improvements remove vehicle trips from the roadway system during peak travel demand periods. Applying demand management strategies over a large geographic area can be an effective tool in reducing vehicle miles traveled. Such strategies include encouraging mixed use in appropriate locations, flexible working hours, compressed work weeks, transit subsidy programs for employees, agency participation in transportation management associations, park-and-ride facilities, bike parking requirements, minimum and maximum vehicle parking requirements, and fareless transit areas in regional centers. Demand management also includes implementing bicycle, pedestrian, vehicle, and transit system improvements that help make travel more direct and convenient.

Beaverton's transportation policies, actions, and modal improvement plans in this element identify some of the regionally significant transportation system and demand projects the City will implement in working toward attaining the mode split targets over the next 20 years. Smaller more localized improvements are also identified in the City's capital improvement plan.

6.3.2. Pedestrian and Bicycle System Improvements

Beaverton's bicycle system is composed of shared roadways, bicycle lanes, and multi-use paths. Its pedestrian system is made up of sidewalks and multi-use paths. Pedestrian and bicycle system needs and improvement projects are identified in the pedestrian and bicycle action and master plans. The plans work toward filling the gaps in these circulation systems and providing greater access and more direct routes to destinations. Such improvements help provide a safer, more attractive, direct, and well-maintained bicycle and pedestrian network that encourages use. Transportation demand management and system management improvements also help encourage these trip types.

Pedestrian System Improvements

Beaverton's Pedestrian Master Plan (Figure 6.1) is an overall plan that summarizes the desired framework to meet local and regional needs. Improvement projects provide the circulation network that is needed within Beaverton's 2020 study area. Improvement projects also respond to specific needs identified in the *Regional Transportation Plan's* designated pedestrian districts and transit/mixed use corridors where pedestrian scale design, transit interface, and user amenities are a priority due to expected increased pedestrian activity. Designated pedestrian districts and major transit stops are identified on the Pedestrian Master Plan.

The Pedestrian Action Plan (Table 6.1) includes some of the projects that should be funded in the near term. These are projects that fill gaps and provide important connections to destinations. Pedestrian and transit related improvements are also implemented through new development as regulated by the Beaverton *Development Code*.

Table 6.1 Pedestrian Action Plan

Table 6.1			Approximate Cost (1000s of 2001
Project	From	То	dollars)
Priority: Connect key pedestrian	corridors to schools, par	rks, recreational uses and a	activity centers
155 th Avenue	Davis Road	Nora-Beard Road	410
US 26/Bethany Trail Crossing	US 26	US 26	100
Study US 26 Trail Crossings	143 rd Avenue	Canyon Road	80
Study and improve unsignalized trail crossing of roadways	City jurisdiction		10,000
Link Fanno Creek Path over ORE 217 at Denney	ORE 217	ORE 217	100
Study Fanno Creek Path	Rock Creek	Fanno Creek Greenway	80
TV Highway/Canyon Road (gaps on one	ity: Fill in gaps in pedes Murray Blvd.	170 th Avenue	470
side)	Murray Blvd. ORE 217		
TV Highway/Canyon Road (Boulevard Design)	ORE 217	Murray Blvd.	8,000
Canyon Road/TV Highway (sidewalks and crossings)	91 st Avenue	ORE 217	1,465
Canyon Road	US 26	110 th Avenue	6,750
Cedar Hills Boulevard	Butner Road	US 26 WB off ramp	124
Murray Boulevard (gaps on one side)	Jenkins Road	Millikan Way	100
Murray Boulevard (gaps)	Farmington Road	TV Highway	112
Denney Road	Nimbus Avenue	Scholls Ferry Road	241
Allen Boulevard (gaps)	Western Avenue	Scholls Ferry Road	69
Western Avenue	5 th Street	800 feet south of 5 th	55
Division Street	149 th Avenue	170 th Avenue	365
Davies Road (east side)	Scholls Ferry Road	Hiteon Drive	76
Scholls Ferry Road (gaps)	Barrows Road (west end)	Beaverton-Hillsdale Highway	1,893
Scholls Ferry Road	Beaverton-Hillsdale Highway	Raleighwood Way	151
SW Park Way (gaps)	Walker Road	ORE 217	213

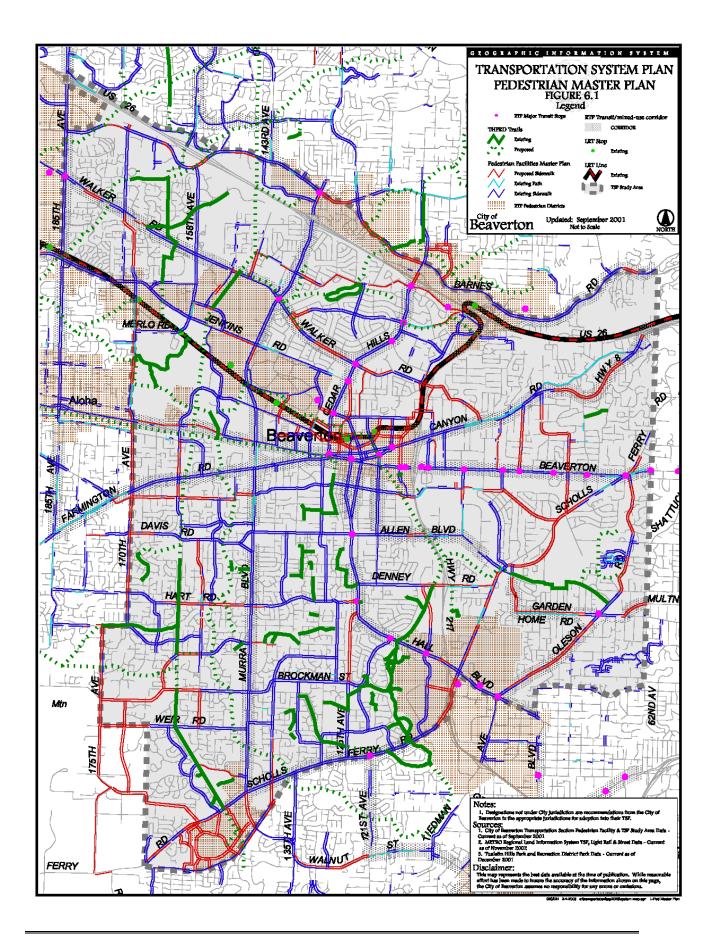
Table 6.1 Project	From	То	Approximate Cost (1000s of 2001
Troject		10	dollars)
Cornell Road (gaps)	158 th Avenue	US 26 WB off ramp	101
Barnes Road	Tuefel Lane	Viewmont Drive	118
Garden Home Road	77 th Avenue	76 th Avenue	43
Multnomah Boulevard	Garden Home Road	Wash. County line	198
92 nd Avenue	Allen Boulevard	Garden Home Road	302
Garden Home Road (gaps one side)	92 nd Avenue	77 th Avenue	242
Hall Boulevard	Cascade Avenue	ORE 217 SB ramp	23
Hall Boulevard (gaps one side)	ORE 217 SB ramp	Approximately 470 ft. west of ramp	34
Barnes Road (gaps one side)	117 th Avenue	Stark Street	104
Barnes Road	Stark Street	Approximately 100 ft. west of Stark St.	14
Cornell Road (gaps one side)	Approximately 500 ft west of Science Park Dr.	Approximately 500 ft east of 153 rd Ave.	101
110 th Avenue (gap-one side)	Beaverton-Hillsdale Highway	Canyon Road	34
Priority: F	Pedestrian corridors to transit	stations and stops	
Hall/Watson (Boulevard Design)	Allen Blvd.	Cedar Hills Blvd.	510
160 th Avenue	TV Highway	Davis Road	358
117 th Avenue (gaps-one side)	Light Rail Transit Line	Center Street	34
Downtown Beaverton Connectivity	Hocken Avenue/	110 th Avenue/	1,033
collector roadways	TV Highway	Cabot Street	
Pedestrian Access to MAX	LRT Stations		1,148
Priority: Cons	truct sidewalks with roadway	improvement projects	
125 th Avenue	Hall Boulevard	Brockman Road	193
Hall Boulevard	Cedar Hills	Hocken Avenue/Terman Rd.	Part of road improvement
Farmington Road	172 nd Avenue	185 th Avenue	218
Nimbus Avenue	Denney Road	Cirrus Drive	138
Walker Road	ORE 217	Canyon Road	209
Walker Road (gaps)	173 rd Avenue	Mayfield Avenue	441

Table 6.1 Project	From	То	Approximate Cost (1000s of 2001 dollars)
Davies Road	Scholls Ferry Road	Barrows Road	61
Murray Boulevard	Scholls Ferry Road	Barrows Road	110
170 th Avenue	Alexander Street	Baseline/Jenkins	366
173 rd Avenue	Cornell Road	Bronson Road	55
Hart Road (gaps)	Hall Boulevard	Murray Boulevard	49
Cornell Road (one side)	158 th Avenue	185 th Avenue	165
Oak Street/Davis Rd./Allen Blvd. (gaps)	160 th Avenue	170 th Avenue	244
Allen Boulevard (gaps)	Alice Lane	Western Avenue	112
Nora-Beard Road	175 th Avenue	155 th Avenue	281
Weir Road	175 th Avenue	160 th Avenue	248
175 th Avenue-Rigert Road	170 th Avenue	Scholls Ferry Road	755
Jenkins Road	153 rd Avenue	Murray Boulevard	112
Hart Road/Bany Road (gaps)	170 th Avenue	185 th Avenue	214
SW Beaverton collector roadway	Scholls Ferry Road	175 th Avenue	346
Johnson Street Extension	170 th Avenue	209 th Avenue	Part of road improvement
Barnes Road Improvements	Highway 217	119 th Avenue	Part of road improvement.
Barnes Road Improvements	Saltzman Road	119 th Avenue	Part of road improvement
Cornell Road Improvements	US 26	143 rd Avenue	Part of road improvement
Cornell Road Improvements	143 rd Avenue	Saltzman Road	Part of road improvement
Cornell Road Boulevard Improvements	Barnes Road	Trail Street	2,295
Murray Boulevard Improvement	Science Park Drive	Cornell Road	Part of road improvement
ORE 217 Overcrossing roadway	Scholls Ferry Road	Nimbus	Part of road improvement
Murray/Scholls Ferry Town Center – extensions and new roadways			Part of road improvement
103 rd Avenue	Walker Road	Western Boulevard	Part of road improvement
SW Beaverton circulation roadway	High Hill Lane	Nora-Beard Road	275

Table 6.1 Project	From	То	Approximate Cost (1000s of 2001 dollars)
Priority: Ped	lestrian corridors that conn	ect neighborhoods	
SW Butner Road (one side)	Murray Boulevard	Park Way	296
SW Downing Road (gaps on south side)	Murray Boulevard	Meadow Drive	41
Meadow Drive (one side)	Downing Road	Walker Road	38
Laurelwood Avenue/87th Avenue	Canyon Road	Scholls Ferry Road	434
Jamieson Road	Pinehurst Drive/Cypress	Scholls Ferry Road	206
Cypress Street	Jamieson Road	Elm Avenue	79
Sexton Mountain Drive (gaps)	Maverick Terrace	Nora-Beard Road	296
91st Avenue	Canyon Road	Beaverton-Hillsdale Highway	1,970
96 th Avenue (one side)	Canyon Road	Beaverton-Hillsdale Highway	90
Unfunded Pedestrian Action Plan Proje	ects Total Estimated Cost:		\$ 45,588

Sidewalk projects noted as "part of road improvement" are anticipated to be built with the street improvement project so the cost of the sidewalk is included in the street improvement cost estimate in Table 6.3.

Projects with Committed Funding (9/01)	From	То	Approximate Cost (1000s of 2001 dollars)
Priority: Connect key pedestrian	corridors to schools, parks,	recreational uses and a	ctivity centers
170 th Avenue	Rigert Road	Alexander Street	515
170 th /173 rd Avenue	Baseline/Jenkins	Walker Road	220
Millikan Way	Hocken Avenue	Cedar Hills Blvd.	57
Hart Road/Bany Road (gaps)	Murray Boulevard	170 th Avenue	236
Murray Boulevard (gap)	Farmington	TV Highway	112
Oleson Road	Fanno Creek	Hall	Part of road improvement
Pedestrian Improvement Projects with	\$1,140		





Bicycle System Improvements

Beaverton's primary bicycle system is its arterial and collector street network that provides access to schools, parks, recreational uses, transit stops, employment, and activity centers. Arterials and collectors usually have higher-speed traffic and larger volumes, so they are designed with bicycle lanes. Beaverton's short-term Bicycle Action Plan (Table 6.2) contains projects that fill gaps in the primary bicycle network, connect to activity centers for convenient access, and should be funded in the near term. The Bicycle Master Plan (Figure 6.2) identifies the full bicycle system needs that should be built by 2020 through development and capital improvement projects. *Regional Transportation Plan* designations are included to acknowledge the regional significance of the bicycle system for both recreational riders and commute cyclists. Bicycle improvements are often part of a larger street improvement project. System management improvements such as bicycle loop detectors and actuated traffic signals also play a role in completing the system and encouraging use.

Table 6.2 Bicycle Action Plan

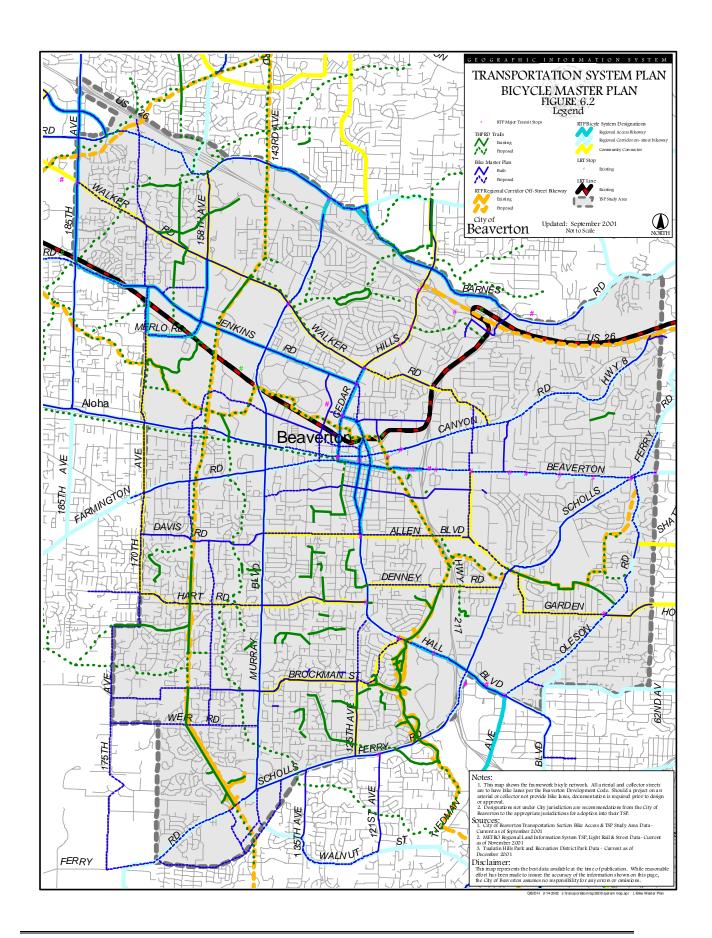
Table 6.2 Bicycle Action Plan					
Table 6.2			Approximate Cost		
Project	From	То	(\$1000s of 2001 dollars)		
Priority: Connect key bicycle corridors to schools, parks, recreational uses and activity centers					
Greenway Road	Hall Boulevard	125 th Avenue	266		
155 th Avenue/Weir Road	Davis Road	Murray Boulevard	1,190		
Millikan Way	Murray Boulevard	TV Highway	521		
160 th Avenue	TV Highway	Davis Road	503		
Canyon Road	142 nd Avenue	91 st Avenue	1,310		
Hall Boulevard bike lanes	Priority: Fill in gaps in bicycle Beaverton-Hillsdale Hwy.	e network Cedar Hills Blvd.	78		
Hall Boulevard Extension	Cedar Hills	Hocken Avenue/Terman Rd.	Part of road improvement		
Watson Avenue bike lanes	Beaverton-Hillsdale Hwy.	Hall Boulevard	68		
Cedar Hills Boulevard bike lanes	Farmington Road	Walker Road	506		
6 th Street bike lanes	Murray Boulevard	Menlo Drive	241		
Murray Boulevard bike lanes (west side of Murray Boulevard)	Farmington Road	approximately 200 ft south of TV Highway	48		
Denney Road bike lanes	Hall Boulevard	Scholls Ferry Road	684		
Allen Boulevard bike lanes	approximately 200 ft east of Western Avenue	Scholls Ferry Road	221		

Table 6.2 Project	From	То	Approximate Cost (\$1000s of 2001 dollars)
Western Avenue bike lanes	Beaverton-Hillsdale Hwy.	Allen Boulevard	337
Beaverton-Hillsdale Hwy. bike lanes	ORE 217	91 st Avenue	520
Beaverton-Hillsdale Hwy. bike lanes	91 st Avenue	Wash. County Bound.	1,023
Scholls Ferry Road	77 th Avenue	Beaverton-Hillsdale Hwy.	251
92 nd Avenue	Allen Boulevard	Garden Home Road	377
Garden Home Road	92 nd Avenue	Oleson Road	641
Scholls Ferry Road	Hall Boulevard	Cascade Avenue	328
Scholls Ferry Road	Beaverton-Hillsdale Hwy.	Wash. County Bound.	431
Taylors Ferry Road	Oleson Road	Washington Drive	137
Davies Road	Scholls Ferry Road	Barrows Road	187
Barrows Road	Scholls Ferry Road (east)	Scholls Ferry Road (west)	1,180
Scholls Ferry Road	Murray Boulevard	175 th Avenue	896
125 th Avenue bike lanes	Hall Boulevard	Brockman Road	302
125 th Avenue bike lanes	Hall Boulevard	Brockman Road	302
Farmington Road Bikeway	Hocken Avenue	ORE 217	3,213
Walker Road bike lanes	ORE 217	Canyon Road	327
Walker Road bike lanes	Cedar Hills Boulevard	Lynnfield Lane	150
Walker Road bike lanes	178 th Avenue	185 th Avenue	309
170 th Avenue bike lanes	Alexander Street	Baseline/Jenkins	573
173 rd Avenue bike lanes	Walker Road	Cornell Road	371
Hart Road/Bany Road bike lanes	167 th Avenue	170 th Avenue	69
Cornell Road bike lanes	158 th Avenue	185 th Avenue	516
Murray Boulevard bike lanes	Scholls Ferry Road	Barrows Road	72
Allen Boulevard bike lanes Allen Boulevard bike lanes	ORE 217 ORE 217	Murray Boulevard approximately 200 ft west of Western Ave	293 108
Nora-Beard Road bike lanes	175 th Avenue	155 th Avenue	499
Weir Road	175 th Avenue	155 th Avenue	448
Barnes Road Improvements	Saltzman Road	119 th Avenue	Part of road improvement

Table 6.2 Project	From	То	Approximate Cost (\$1000s of 2001 dollars)
Cornell Road Improvements	143 rd Avenue	Saltzman Road	Part of road improvement
Canyon Road	US 26	110 th Avenue	6,750
103 rd Avenue Connection	Walker Road	Western Avenue	Part of road improvement
175 th Avenue-Rigert Road bike lanes	170 th Avenue	Scholls Ferry Road	1,180
Unfunded Bicycle Action Plan Projects	\$ 27,124		

Bicycle lane projects noted as "part of road improvement" are built with the street improvement project so the cost of the sidewalk is included in the street improvement cost estimate in Table 6.3.

Projects with Committed Funding	From	То	Approximate Cost (\$1000s of 2001 dollars)
Priority: Connect key bicycle	e corridors to schools, pa	rks, recreational uses and ac	tivity centers
Millikan Way bike lanes	Hocken Avenue	Cedar Hills Blvd.	91
170 th Avenue bike lanes	Rigert Road	Alexander Street	804
170 th /173 rd Avenue bike lanes	Baseline Road	Walker Road	344
Hall Boulevard bike lanes	12 th Street	500 ft south of Allen	154
Hart Road bike lanes	Murray Blvd.	167 th Avenue	499
Barnes Road Improvements	Saltzman Road	119 th Avenue	Part of road improvement
Cornell Road Improvements	Murray Blvd.	Saltzman Road	Part of Road improvement
Hall Boulevard bike lanes	Ridgecrest	ORE 217	357
Oleson Road	Fanno Creek	Hall Blvd.	453
Bicycle Improvement Projects with C	Committed Funds Total	Estimated Cost:	\$ 2,702



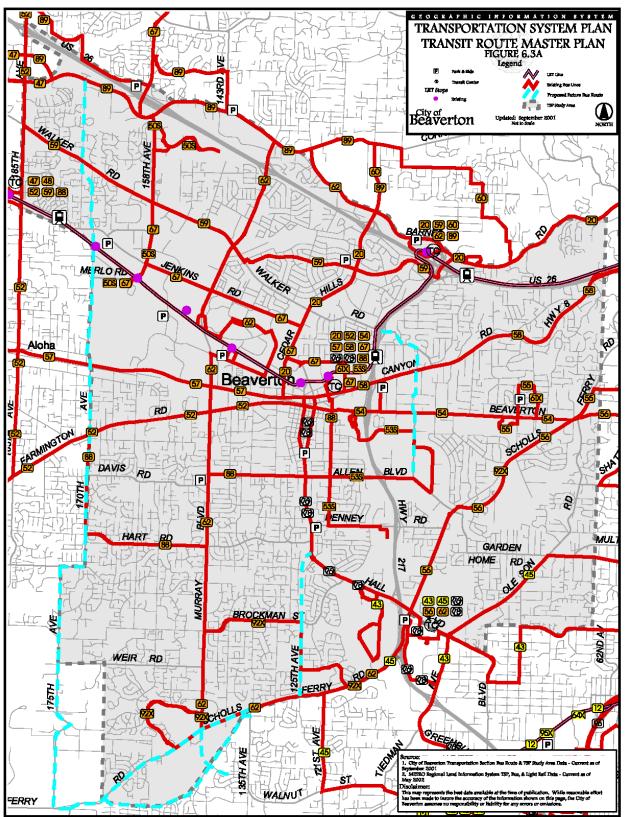


6.3.3. Transit System Improvements

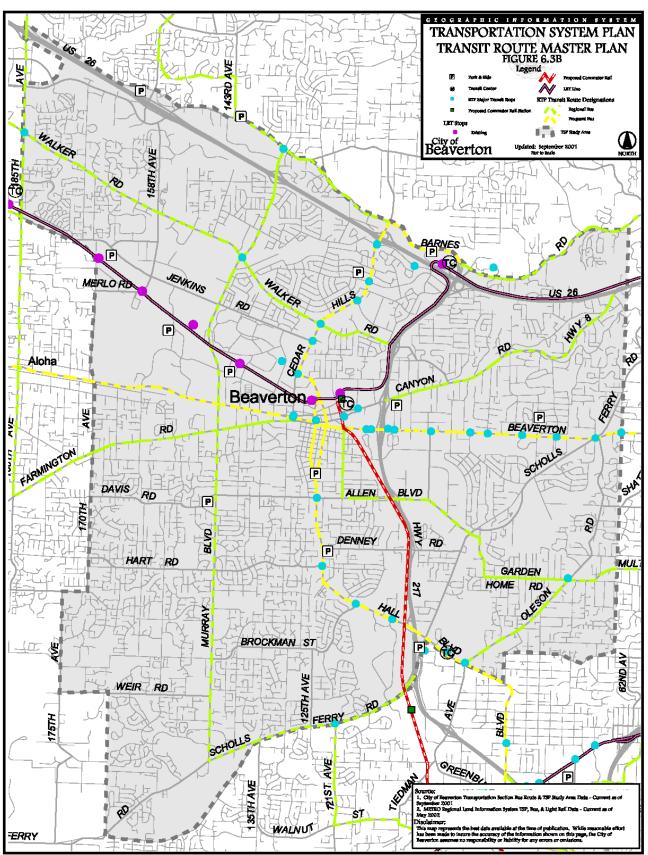
The transit system includes the proposed Beaverton to Wilsonville commuter rail, MAX light rail, and TriMet bus service. Existing and proposed future bus routes are identified in Beaverton's Transit Route Master Plan Figure 6.3.A. The proposed commuter rail system and *Regional Transportation Plan* bus designations are shown on the Transit Route Master Plan Figure 6.3.B. The commuter rail alignment is general in nature. It follows existing Portland & Western railroad tracks from the south into downtown Beaverton. It then turns in a northerly direction along Lombard Avenue at Beaverton-Hillsdale Highway and follows Lombard Avenue into the Beaverton Transit Center. Precise alignment of the tracks in the downtown will be determined during the design phase of the commuter rail project.

The *Regional Transportation Plan* designates Frequent, Regional, and Rapid Bus routes. Frequent Bus service runs at least every 10 minutes and includes transit preferential treatments like bus lanes and signal preemption. Regional Bus service runs on most major urban streets with maximum frequencies of 15 minutes. Rapid Bus emulates light rail and runs at least every 15 minutes during weekdays and during weekend mid-day periods. Rapid Bus is not planned in Beaverton at this time.

Major Transit Stops are mapped on Figure 6.3.B. and indicate higher use stops where shelters and marked crossings should be considered. Park-and-ride sites are also part of the transit system. Expansion of these sites should focus on transit stations and on interchange locations along Highway 217 and US 26. Complete sidewalk networks, park-and-ride lots, and transit amenities such as shelters and benches are important components of the transit system, as are transportation system strategies that serve to improve bus speed and reliability. In combination, all of these types of improvements help encourage transit use by providing a more convenient and pleasant transit experience.



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6.3.4. Motor Vehicle System Improvements

Functional Classification Plan

Beaverton's street functional classifications reflect regional and local mobility and access needs (Figure 6.4). Classifications of freeway, principal arterial, arterial, collector, and neighborhood route are designated based on connectivity as the best indicator of function. Any street not designated either a freeway, principal arterial, arterial, collector, or neighborhood route is considered a local street.

Freeways provide the highest level of connectivity. These roadways generally span several jurisdictions and are of regional and statewide importance.

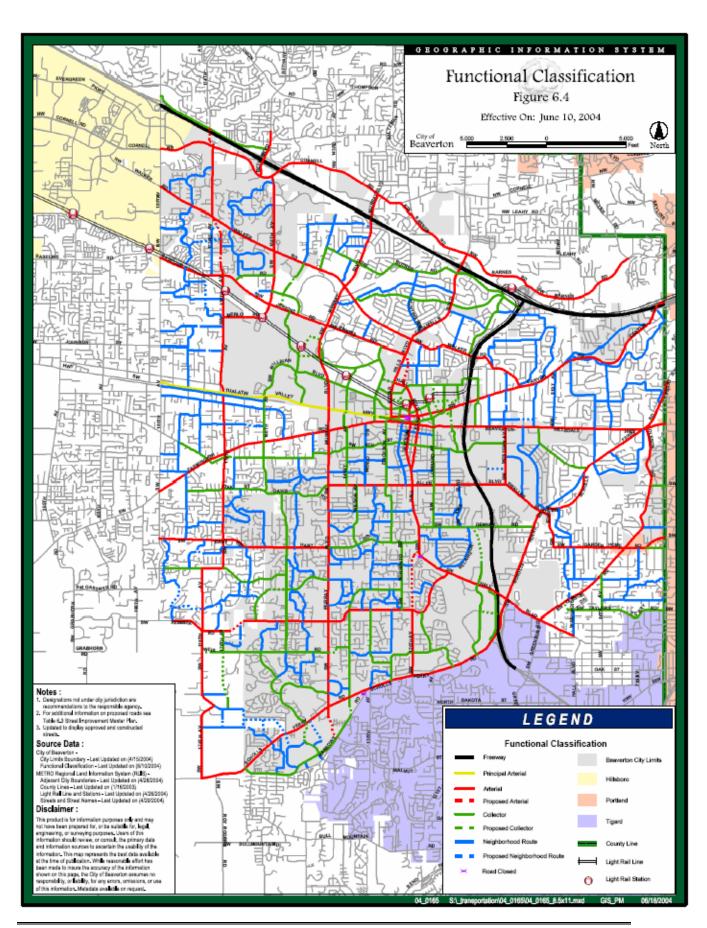
Principal arterial streets serve to connect neighboring cities and urban areas. They are of regional significance and often of statewide importance as well.

Arterial streets serve to interconnect and support principal arterials and freeways. They link major commercial, residential, industrial, and employment areas. Arterials are typically spaced about one mile apart to assure access to through routes and to reduce the incidence of traffic using collectors or local streets in lieu of a well-placed arterial street.

Collector streets balance access and circulation within residential, commercial, and industrial areas. Collectors differ from arterials in that they provide circulation within the city and distribute trips onto neighborhood routes and local streets.

Neighborhood routes are usually longer than local streets and provide connectivity to collectors or arterials. Because they have greater connectivity, they generally have more traffic than local streets and are used by residents to get into and out of their neighborhoods.

Local streets have the sole function of providing access to adjacent land. Local street design deliberately discourages through traffic and is important to neighborhood identity.



Access Management

Managing access to land is important to traffic flow, safety, and mobility. Local streets and neighborhood routes function primarily to provide access to adjacent land uses. Collector and arterial streets primarily serve through travel and higher traffic volumes and speeds. When access is not managed effectively, numerous driveways or improperly spaced streets increase the number of potential conflicts and the probability of collisions while decreasing mobility and traffic flow.

The City's access management standards set access point spacing minimums and maximums and corner clearance minimums. Shared access is also encouraged to preserve and improve mobility, flow, and safety. State standards set interchange spacing for State highways where inadequate spacing can increase conflicts and decrease mobility and flow.

Safety

The City monitors intersection collision history through its own safety index program and Washington County's Safety Priority Index System. Both are linked to the Oregon Department of Transportation's safety program. Intersections with high collision rates are given special attention for safety improvements. Safety improvement projects are developed and proposed for funding through various State and local sources.

Street Improvements

Street improvements needed by forecast year 2020 to accommodate projected traffic volumes and circulation needs are identified in the Street Improvement Master Plan (Figure 6.5 and Tables 6.3 and 6.4) and the Intersection Improvement Plan (Table 6.5). The improvements respond to the 2020 *Transportation System Plan Update* needs analysis that showed where connectivity, intersection turning capacity, and north/south and east/west capacity was needed within the study area. Alignments of new streets and extensions of existing streets in Figures 6.4 through 6.6 are general in nature. Specific alignment is determined through the development review process when new development or redevelopment is proposed in that area.

Street improvements are to assure that intersections operate at a future demand-to-capacity ratio of less than 1.0 in the evening two-hour peak period (level of service "E"), and to maintain system performance measures at a two-hour demand to capacity ratio of less than 1.0.

Streets where future right-of-way is needed for more than two lanes are identified in Figure 6.6. At times, right-of-way may be needed for construction of bike lanes on a collector or arterial. Such needs are also included in Figure 6.6. In some cases, a need is anticipated to be slightly beyond the 20-year planning period and is noted as such in Table 6.3 so that the opportunity to preserve the right-of-way is considered if new development is proposed or anticipated in the area. In addition, arterial and collector intersections should plan for right-of-way for turn lanes within 500 feet of the intersection.

The *Regional Transportation Plan* includes street design classifications for certain Beaverton streets. The designs reflect the regional function of the street and surrounding land use designation. The regional street design classifications for Beaverton streets are contained in Appendix F of the 2020 *Transportation System Plan Update* and shall be considered when a street is improved.

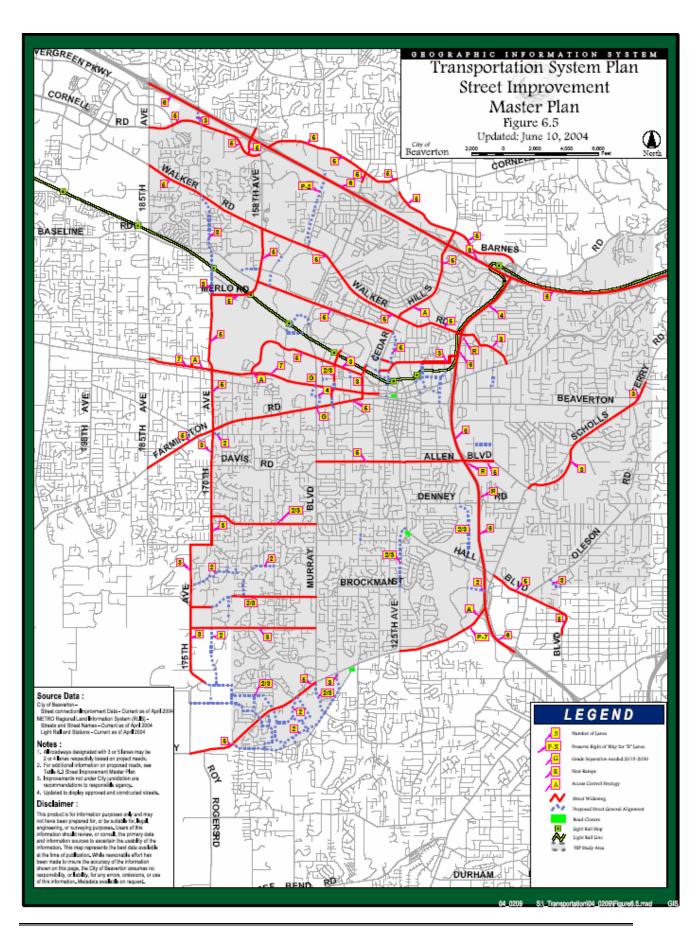


Table 6.3 Street Improvement Master Plan

These projects within the Beaverton study area are needed by forecast year 2020. The *Regional Transportation Plan (RTP)* projects are excerpted from the Financially Constrained and the Priority Systems of the adopted August 10, 2000, *RTP*. Most were originally submitted by jurisdictions based on their adopted *Transportation System Plans (TSPs)*, Regional Center plans, Town Center plans, and specific area studies.

The table also contains projects that should be implemented by 2020 and should be included in the *RTP* Priority System. These projects are based on Beaverton's 2020 *TSP Update* analysis, 2015 *TSP*, Regional Center plan, Town Center plan, and specific area studies within the *TSP* study area as noted.

Table 6.3 Location	Improvement Description (Jurisdictional Plan Reference, RTP Project Number and TimeLine)	Jurisdiction	Approximate Cost in 1000s of 2001 Dollars
Beaverton-Hillsdale Highway/Scholls Ferry Road	Redesign the intersection to improve safety for all modes of travel. (Raleigh Hills Town Center, RTP #1184 2006- 2010)	ODOT County	\$14,920
Taylors Ferry: Washington to Oleson	Construct a 3-lane extension with sidewalks and bike lanes. (Washington Square Regional Center, RTP #6017 2011-2020)	County	\$2,181
ORE 217 Overcrossing: Nimbus to Mall Area	Construct a 2-lane crossing including sidewalks and bike lanes. (Washington Square Regional Center, RTP #6052 2011-2020)	ODOT Tigard	\$28,693
ORE 217	Add capacity based on recommendations from the ORE 217 corridor study. (RTP #3000 2011-2020)	ODOT	\$80,339
ORE 217: TV Hwy to US 26	Widen northbound to 3 lanes with ramp improvements. (RTP #3001 2006-2010) Regional Center, 2015 <i>TSP</i> : widen ORE 217 from Canyon Rd. to 72nd to six through lanes adding shoulders, auxiliary lanes and ramp braids, widen ramps for ramp meter storage, and add ITS to ORE 217 and adjacent arterial roadways.	ODOT	\$24,102
ORE 217 and US 26	Reconfigure the interchange with braided ramps. (2015 <i>TSP</i> , Regional Center, RTP #3002 2006-2010)	ODOT	\$57,385
ORE 217: Walker and Canyon Ramps	Braid ramps between Canyon and Walker (2015 <i>TSP</i> ; supplements RTP Priority #3002 2006-2010).	ODOT	\$20,800
ORE 217: Allen to Walker	Interchange improvements: NB/SB at Walker, SB at TV Hwy., NB/SB at BH Hwy., and NB/SB at Allen Blvd. (2015 TSP, Regional Center, RTP #3023 2000-2005)	ODOT	\$4,132
US 26: ORE 217 to Camelot Court	Widen eastbound to 3 lanes. (RTP #3007 2006-2010)	ODOT	\$13,772
US 26: Murray to 185th	Widen freeway to 6 lanes with possible HOV lane. (RTP #3009 2011-2020)	ODOT	\$29,840

Table 6.3 Location	Improvement Description (Jurisdictional Plan Reference, RTP Project Number and TimeLine)	Jurisdiction	Approximate Cost in 1000s of 2001 Dollars
Beaverton Regional Center Connections	Complete downtown street connections as follows:	Beaverton	
East/west connections:			
Hall: Cedar Hills to Hocken	Construct a 3-lane collector. (2015 TSP, Regional Center (RC), RTP #3034 2000-2005)		\$5,279
Center: Cedar Hills to Hocken via Westgate/Dawson	Extend 3-lane collector from Center to Westgate and from Westgate via Dawson to Hocken. (2015 TSP, RC)		\$4,500
Crescent: Cedar Hills to Hall	Extend 2-lane collector to Cedar Hills (2015 TSP, RC, RTP #3020 2006-2010)		\$1,600
Millikan Way: Hall to 114 th	Extend 2-lane collector to 114 th (2015 TSP, RC, RTP #3019 2000-2005)		\$7,750
Connection: Broadway to 115 th	Connect Broadway to 115 th /Griffith Drive collector. (2015 TSP, RC, RTP #3020 2006-2010)		\$2,100
Electric to Whitney to Carousel to 144th	Connect roadways. (2015 TSP, RC, RTP #3020 2006-2010)		\$1,650
North/south connections:			
Hall extension to Jenkins	Extend new 5-lane arterial north of Center to connect with Jenkins at Cedar Hills. (2015 TSP) 2020 TSP: If all downtown connections and ORE 217 improvements are complete, consider 3-lane "boulevard" design with bike lanes and sidewalks separated by landscape strip within the preserved 5-lane right-of-way.		\$12,630
Short Avenue:	Close roadway.		
Rose Biggi: Westgate to Broadway	Construct 2-lane collector. (2015 TSP, RC, RTP #3019 2000-2005. 2020 TSP: extend to Broadway.)		\$4,200
120 th Ave.: Center to Canyon	Construct new 2-lane collector. (2020 TSP)		\$4,100
114 th /115 th : LRT to Beaverton-Hillsdale Hwy./Griffith Drive	Construct 2-lane collector. (2015 TSP, RC, RTP #3020 2006-2010)		\$4,200
Tualaway Ave.: Electric to Millikan	Extend 2-lane street. (2015 TSP, RC, RTP #3019 2000-2005)		\$1,400
Center: Hall to 113 th	Widen to 3 lanes including sidewalks and bike lanes. (2015 TSP, Regional Center, RTP #3038 2011-2020)	Beaverton	\$3,673

Table 6.3 Location	Improvement Description (Jurisdictional Plan Reference, RTP Project Number and TimeLine)	Jurisdiction	Approximate Cost in 1000s of 2001 Dollars
Hocken at TV Hwy and Farmington Road	 Widen Hocken to accommodate 2 additional lanes between TV and Farmington to allow turn lanes. Widen Hocken to 3 lanes north to Tek. Widen TV from 141st to Hocken to allow 3 through lanes and additional turn lanes. (2015 TSP) 	ODOT Beaverton	\$7,010
141 st /142 nd : Tek to south of Farmington Rd.	 Realign and extend 2/3 lane roadways Tek /141st/142nd/141st to south of Farmington Rd. including sidewalks and bike lanes. Create signalized intersections at TV and Farmington Rd. Extend 142nd to Carousel and 	Beaverton	\$3,214
144 th to Millikan	signalize. Vacate 141 st between TV and Carousel. (2015 TSP, Regional Center, South Tek) • Extend 144 th to Millikan. (2015 TSP, Regional Center, South Tek)		
Jenkins: Murray to 158 th	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, Regional Center, RTP #3022 2006-2010)	County	\$2,146
Jenkins: Murray to Cedar Hills	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP)	County	\$4,461
TV Hwy: Cedar Hills to Hillsboro	Add capacity based on recommendation from refinement planning and corridor study. Widen to 7 lanes Cedar Hills to Murray; 6 lanes limited access from Murray to Brookwood and 5 lanes from Brookwood to 10 th . (2015 TSP, Regional Center, RTP #3025 2011-2020, RTP #3121 2000-2005)	ODOT County	\$38,104
TV Hwy: 117 th to Hillsboro	Implement access management strategies. (2015 TSP, RTP #3060 2006-2010)	ODOT County	\$17,216
TV Hwy: 209 th to ORE 217	Interconnect Traffic Signals. (RTP #3061 2006-2010)	ODOT County	\$1,722
TV Hwy: Cedar Hills to Minter Bridge	Refinement planning to identify phased strategy to implement a limited-access facility. (RTP #3121 2000-2005)	ODOT	N/A
Allen: ORE 217 to Murray	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, Regional Center, RTP #3031 2011-2020)	Beaverton	\$9,777
Allen: ORE 217 to Western	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, Regional Center, RTP #3076 2011-2020)	Beaverton	\$1,148
Cedar Hills: Farmington Road to Walker Road	Widen to 5 lanes including sidewalks and bike lanes. Study land use changes between Westgate and Jenkins that would	Beaverton	\$4,247

Table 6.3 Location	Improvement Description (Jurisdictional Plan Reference, RTP Project Number and TimeLine)	Jurisdiction	Approximate Cost in 1000s of 2001 Dollars
	allow for a 3-lane facility. Widen Cedar Hills between Canyon and Farmington to 6 lanes for queue storage. (2015 TSP, RTP #3032 2006-2010)		
Cedar Hills: Walker to US 26	Complete 5-lane roadway with access control including sidewalks and bike lanes. (2015 TSP)	County	\$2,410
Cedar Hills/Barnes	Reconstruct intersection and approaches to add travel lanes, turn lanes, and traffic signal upgrades. (RTP #3177 2000-2005)	County	\$2,066
125 th : Brockman to Hall	Construct a 2-lane extension with turn lanes including sidewalks and bike lanes. (2015 TSP, RTP #3033 2000-2005)	Beaverton	\$8,900
Hall: Scholls Ferry to Locust	Widen to 5 lanes. Includes sidewalk and bike lanes. (Washington Square Regional Center, RTP #6013 2006-2010)	ODOT	\$5,394
158 th /Merlo: 170 th to Walker	 Widen to 5 lanes including sidewalks and bike lanes. (RTP #3036 2011-2020) Walker to Jenkins: Widen to include bike lanes. (2015 TSP, RTP #3086 2011-2020) 	County	\$4,591
Scholls Ferry: Hamilton to Garden Home	Widen to 3 lanes including sidewalks and bike lanes. (2015 TSP, RTP #3069 2011-2020)	County	\$9,182
Scholls Ferry: Hall to 125th	2020 TSP: preservation of right-of-way for future widening to 7 lanes. (15-30 year project.) Construction project: 2015 TSP: construction of 7 lanes including sidewalks and bike lanes is included in RTP Preferred #6021.)	County ODOT	\$18,088
Scholls Ferry: ORE 217 to 125 th	Implement system management strategies (2015 TSP, Washington Square Regional Center, RTP #6025 2000-2005)	County	\$574
Scholls Ferry: Murray to 175th	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP)	County	\$4,591
170 th : Alexander to Merlo	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, RTP #3084 2011-2020)	County	\$9,182
170 th : Merlo to Baseline	Widen to 3 lanes including sidewalks and bike lanes. (2015 TSP)	County	\$2,410
173rd/174 th	Construct a new 2-lane under crossing of US 26 from Cornell to Bronson including sidewalks and bike lanes. (2015 TSP, RTP #3205 2011-2020)	County	\$16,986
Millikan: TV Hwy to 141st	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, Regional Center, RTP #3087 2011-2020)	Beaverton	\$4,591

Table 6.3 Location	Improvement Description (Jurisdictional Plan Reference, RTP Project Number and TimeLine)	Jurisdiction	Approximate Cost in 1000s of 2001 Dollars
Millikan: 141 st to Hocken	Widen to 3 lanes including sidewalks and bike lanes. (2015 TSP, Regional Center, RTP #3088 2011-2020)	County	\$3,902
Walker: Cedar Hills to 158 th	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, RTP #3143 2006-2010)	County	\$22,954
Walker: 158 th to Amberglen	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, RTP # 3144 2006-2010)	County	\$11,477
Walker: Cedar Hills to ORE 217	Widen to 3 lanes including sidewalks and bike lanes. (RTP #3148 2006-2010)	County	\$9,182
Walker: Cedar Hills to ORE 217	Widen street to 5 lanes including sidewalks and bike lane. (2020 TSP; RTP Preferred #3145 no date)	County	\$30,414
Barnes: ORE 217 to 119th	Widen to 5 lanes including sidewalks and bike lanes. (RTP #3175 2006-2010)	County	\$7,116
Barnes: 119th to Saltzman	Widen to 5 lanes including sidewalks and bike lanes. (RTP #3185 2000-2005)	County	\$6,083
Cornell: US 26 to 143rd	Widen to 5 lanes including sidewalks and bike lanes. (RTP #3181 2011-2020)	County	\$3,443
Cornell: 143 rd to Saltzman	Widen to 3 lanes including sidewalks and bike lanes. (RTP #3183 2000-2005)	County	\$5,279
Cornell: 143 rd to Dale	Widen street to 5 lanes including sidewalks and bike lanes. (2020 TSP)	County	\$5,197
Cornell: Dale to Saltzman	Future capacity improvement based on additional study and coordination with Washington County. (2020 TSP)	County	\$8,620
Cornell	Modify intersections at Saltzman, Barnes, Murray, and Trail. (RTP #3191 2011-2020)	County	\$500
Cornell: Bethany to 179 th	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, RTP #3204 2006-2010)	County	\$4,591
Bethany Boulevard: Cornell to Bronson	Widen street to 5 lanes including sidewalks and bike lanes. Project includes the widening of the US 26 overcrossing and intersection improvements. (2020 TSP)	County	\$3,424
Murray: Science Park to Cornell	Widen to 5 lanes including sidewalks and bike lanes. (RTP #3186 2000-2005)	County	\$3,579
Murray: TV Hwy to Farmington Rd.	Construct a 4-lane overpassMurray over TV Highway and Farmington Rdincluding sidewalks, bike lanes, and interchange connections. 15-30 year project. (2020 TSP)	County	\$28,517
Murray: TV Hwy to Allen	Interconnect Traffic Signals. (RTP #3063 2000-2005)	County	\$57
Murray: Scholls Ferry to Barrows	Construct a 2/3-lane extension to Walnut at Barrows including sidewalks and bike	Beaverton Tigard County	\$8,172

Table 6.3 Location	Improvement Description (Jurisdictional Plan Reference, RTP Project Number and TimeLine)	Jurisdiction	Approximate Cost in 1000s of 2001 Dollars
	lanes. (2015 TSP, Murray/Scholls Town		
Murray/Scholls Town Center	Center Plan, RTP #6121 2000-2005) Construct 2-lane Teal Road collector extension to Town Center Loop and Barrows, neighborhood route from Murray to Town Center Loop, and new neighborhood route connections. (2015 TSP, Murray/Scholls Town Center Plan, RTP #6119 2011-2020)	County Beaverton	\$12,625
Davies Road: Scholls Ferry to Barrows	Construct a 3-lane extension to Barrows including sidewalks and bike lanes. (2015 TSP, Murray/Scholls Town Center Plan, RTP #6122 2006-2010) Complete construction of the 125 th Avenue extension and the Murray Boulevard connection from Scholls Ferry Road to Barrows Road at Walnut Street prior to completing the Davies Road connection from Scholls Ferry Road to Barrows Road.	Beaverton	\$1,722
Farmington Road: 172 nd to 185 th	Widen to 5 lanes including sidewalks and bike lanes. (2015 TSP, RTP #3214 2011-2020)	County	\$11,477
Bany/Hart: 170 th to 160th	Improve to 2-3 lanes including sidewalks and bike lanes. (2015 TSP)	County	\$1,148
Hyland Extension: Carr to Hart	Extend roadway. (2015 TSP)	Beaverton	\$115
143 rd /Meadow: Science Park to Walker	2020 TSP: preservation of right-of-way for future construction beyond 2020. (2015 TSP: construction of new 2 lane road connections including a grade separation of US 26 with sidewalks and bike lanes.)	County	\$16,000
Beard/Nora: Murray to 175th	Improve to 2-3 lanes including sidewalks and bike lanes. (2015 TSP)	County	\$7,575
Weir: Murray to 175th	Improve to 3 lanes including sidewalks and bike lanes. (2015 TSP)	Beaverton	\$4,246
Nimbus: Hall to Denney	Extend 2/3 lane roadway including sidewalks and bike lanes. (2015 TSP; RTP Preferred #3037 no date)	Beaverton	\$9,526
103 rd : Western to Walker	Improve existing roadway and construct new connections and intersection alignments to provide connectivity and capacity from Walker to Western. Project includes sidewalks and bike lanes and should be built as development occurs. (2020 TSP: Replaces RTP project #6012)	County	\$5,500
Connectivity Streets	Add local, neighborhood route and collector connectivity:	Beaverton	\$48,089

Table 6.3 Location	Improvement Description (Jurisdictional Plan Reference, RTP Project Number and TimeLine)	Jurisdiction	Approximate Cost in 1000s of 2001 Dollars
	SW Beaverton and Tek area west connections; Division extension; Jay to Jenkins connection; Burlington/Koll: Jenkins to Walker; Local Connectivity Map connections; Functional Classification map connections (2015 TSP)		
Traffic Signals	Addition of 50 traffic signals. (2015 TSP)	Beaverton County ODOT	\$14,346
Intersection Improvements	Listed in Intersection Improvement Plan	Beaverton County ODOT	\$96,350
Unfunded Street Improvement	\$898,483		

1998 RTP project cost estimates are factored using a ratio of Seattle 10/01 CCI to national average 10/01 CCI = 1.1477. Metro staff approved updating the RTP costs12/01.

Table 6.4: Street Improvement Master Plan Committed/Completed Improvements The following have received partial or full funding.

Table 6.4			
Location	Description	Jurisdiction	Cost
US 26: Camelot Court to Sylvan	Add third through lane and collector distributor system (Phases 2 and 3). (RTP #3006 2000-2005)	ODOT	\$22,000
US 26: ORE 217 to Murray	Widen to 6 lanes and add braided ramps. (RTP #3009 2010-2020)	ODOT	\$13,000
Oak: 160 th to 170th	Widen roadway including sidewalks and bike lanes. (RTP #3027 2000-2005)	County	\$1,600
170 th : Rigert to Alexander	Widen to 3 lanes Rigert to Division and 5 lanes Division to Alexander including sidewalks and bike lanes. (RTP #3085 2000-2005; 2015 TSP)	County	\$26,700
170 th /173 rd : Baseline to Walker	Widen the street to 3 lanes including sidewalks and bike lanes. Precise alignment to be determined through the project development process. Design to consider safety and circulation around adjacent school. (RTP #3141 2006-2010; 2015 TSP)	Beaverton	\$5,500
Millikan: Hocken Avenue to Cedar Hills Boulevard	Construct new 3-lane extension with sidewalks and bike lanes. (2015 TSP; RTP #3026 2000-2005)	Beaverton	\$4,300

Table 6.4			
Location	Description	Jurisdiction	Cost
Beaverton Connectivity	Millikan Way: Cedar Hills to Watson 2 lanes; Rose Biggi: Canyon to light rail tracks 2 lanes (2015 TSP, Beaverton Regional Center RTP #3019)	Beaverton	\$3,400
Hart: Murray to 165 th	Widen to 3 lanes including sidewalks and bike lanes. (2015 TSP; RTP #3028 2000-2005)	Beaverton	\$7,100
Lombard: Broadway to Farmington	Realign and add turn lanes including sidewalks. (2015 TSP; RTP #3029 2000-2005)	Beaverton	\$1,600
Hall Boulevard at Scholls Ferry	Provide southbound right turn lane. (2015 TSP; RTP #6048)	ODOT	\$250
Hall: 12 th to approx. 500 feet south of Allen	Retrofit to include bike lanes; intersection turn lanes at Allen. (2015 TSP; RTP #3074 2000-2005)	Beaverton	\$1,438
Farmington Rd.: Murray to Hocken (PE funded)	Widen to 5 lanes including turn lanes, sidewalks, and bike lanes (2015 TSP; RTP #3030 2000-2005) \$1,000,000 funded for design)	Beaverton	\$9,300
125 th : Brockman to Hall (2015 TSP)	Design 2002 (2015 TSP; RTP #3033 2000-2005)	Beaverton	\$2,145
Committed Street Improvement Total Estimated Costs	Master Plan Projects		\$98,333.0098,333

Project cost estimates are not factored as projects were programmed at approximate levels noted.

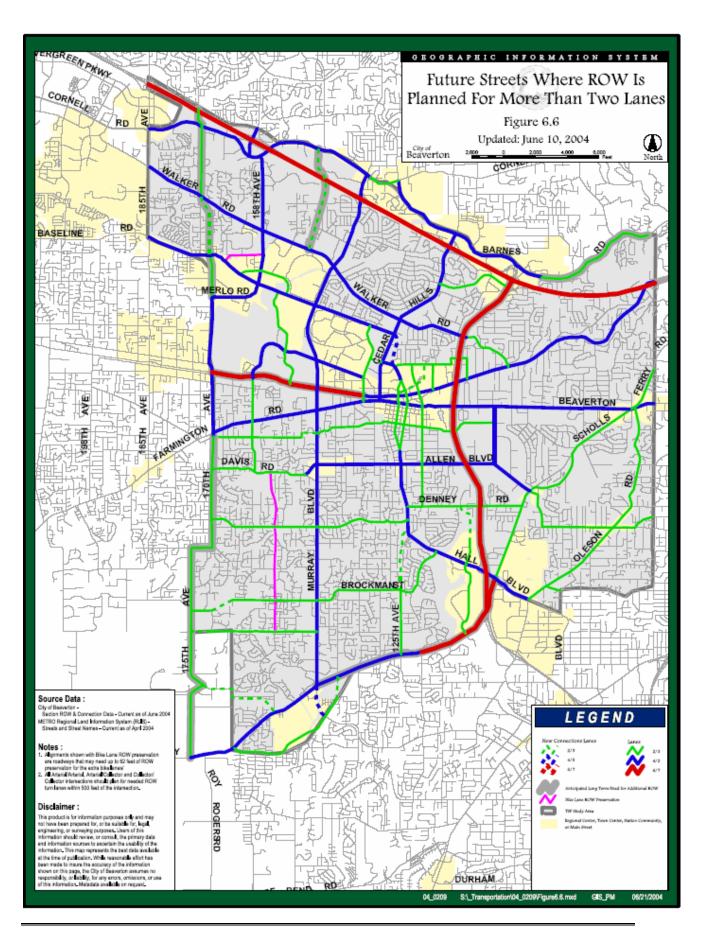


Table 6.5 Intersection Improvement Plan

#	Table 6.5 Location	Improvements: Source: 1 through 67: 2015 TSP (2020 TSP with modifications noted) 68 through 81: 2020 TSP	Approximate Cost in 1000s of 2001 Dollars
1	Kinnaman/Farmington Rd.	Widen Farmington Rd. to 5 lanes; add WB left turn lane; add NB/SB left turn lane; signal phasing modifications to NB/SB permitted/protected phasing.	\$1,435
2	Walker/173 rd	Widen Walker Road to 5 lanes; add EB/WB right turn lanes; NB/SB double left turn lanes.	\$2,295
3	Baseline/170 th	SB double left turn lanes; signal phasing modification of NB/SB to protected phasing; add WB right turn lane.	\$1,435
4	Merlo/170 th	Signal phase change to permitted/protected for NB/SB approaches and to protected phasing for EB/WB approaches; add NB right turn lane; add NB, SB, and EB left turn lanes. 2020 TSP: Restripe WB leg to include second WB left turn lane; cost for right-of-way is included in project.	\$1,722
5	TV Highway/170 th	Widen TV Highway to 7 lanes (3 through lanes each way); widen 170 th to 5 lanes; add SB right turn lane; WB double left turn lanes.	\$1,148
6	Farmington Rd/170 th	Widen Farmington to 5 lanes; add NB left turn lane; add NB through lane and restripe SB for additional through lane (widen 170 th to 5 lanes) 2020 TSP: add EB right turn lane, WB right turn lane; signal modification \$750,000.	Cost included in roadway project
7	Hart-Bany/170 th	Install traffic signal; add NB and SB left turn lanes.	\$1,435
8	Walker/167 th	Install traffic signal; add NB and SB left turn lanes.	\$287
9	Cornell/158 th	Add EB right turn lane and overlap phasing.	\$574
10	Walker/158 th	NB/SB double left turn lanes; add EB right turn lane; NB right turn lane; WB through lane (2 through lanes in each direction); signal phasing change to EB/WB permitted/protected phasing.	\$2,582
11	Jenkins/158 th	Add NB right turn lane; add SB through lane and restripe SB approach; WB double left turn lanes; WB through lane (5 lanes on Jenkins)	\$1,148 \$125
		2020 TSP: overlap NB right turn lane \$125,000.	
12	TV Highway/Millikan	Widen TV to 7 lanes; add SB and NB lane across intersection.	\$1,865
13	Hart/155 th	Add WB left turn lane.	\$574
14	Jenkins/153 rd	Widen Jenkins to 5 lanes (2 through lanes each way).	Cost included in roadway project
15	TV Highway/153 rd	Widen TV Highway to 7 lanes (3 through lanes each way).	Cost included in roadway project
16	Farmington/149 th	Widen Farmington Rd. to 5 lanes.	Cost included in roadway project
17	Walker/Murray	Add double left turn lanes on all approaches; add right turn lanes on all approaches. 2020 TSP: increase cycle length by 20 seconds to 120 seconds \$125,000.	\$4,591 \$125
18	Murray/Jenkins	Add NB and SB right turn lanes; NB and SB double left turn lanes; widen Jenkins to 5 lanes.	\$2,295
19	TV Highway/Murray	Double left turn lanes on all approaches; add NB/SB through lane (3 through lanes each way); install median at TV/Railroad	\$1,722

#	Table 6.5 Location	Improvements: Source: 1 through 67: 2015 TSP (2020 TSP with modifications noted) 68 through 81: 2020 TSP	Approximate Cost in 1000s of 2001 Dollars
		tracks/Farmington to restrict driveways to right in, right out. 2020 TSP: 2 new signals, 2 right turn lanes, 2 double left turn lanes.	
20	Murray/Farmington	Double left turn lanes on all approaches; SB, EB, and WB right turn lanes. 2020 TSP: 2 new signals, 2 right turn lanes, 2 double left turn lanes.	\$2,869
21	Murray/6 th	Install traffic signal; add EB and WB left turn lanes.	\$287
22	Murray/Allen	Widen Allen to 5 lanes to Murray (drop additional WB through lane after Murray); add SB right turn lane. 2020 TSP: add second WB left turn lane, second WB right turn lane, overlap WB right turn lane, modify signal, \$1,250,000.	\$687 \$1,250
23	Murray/Hart	Signal phase change to permitted/protected phasing for all approaches	\$143
24	Murray/Scholls Ferry	Restripe NB, SB, and EB approaches; signal phase change to protected phasing on all approaches.	\$143
25	Murray/Barrows/ Walnut	Install traffic signal; add EB left turn lane; restripe NB approach; construct SB approach left turn lane.	\$861
26	Scholls Ferry/Barrows (west)	Install traffic signal; restripe SB approach for separate left turn and right turn lanes.	\$287
27	Scholls Ferry/Davies	Install traffic signal; restripe WB approach; add NB right turn lane; add NB left turn lane.	\$287
28	Scholls Ferry/Barrows (east)	Close Barrows at Scholls Ferry.	\$172
29	TV Highway/Hocken	Add EB right turn lane; restripe SB approach; widen Hocken to two SB through lanes.	\$3,558
30	Farmington/Hocken	Add WB right turn lanes; SB double left turn lanes (Hocken carries two SB lanes from TV Highway).	\$3,443
31	Cedar Hills/Walker	Double left turn lanes on all approaches; add EB right turn lane 2020 TSP: add 40 seconds cycle length to 140 seconds \$125,000.	\$2,869 \$125
32	Cedar Hills/Jenkins	SB and EB double left turn lanes; add SB right turn lane; widen Jenkins to 5 lanes; WB right turn channel; signal modifications to EB/WB protected phasing. 2020 TSP: Jenkins to 5 lanes, overlap WB right turn lane	\$2,008
		\$125,000.	\$125
33	Cedar Hills/Hall	Add NB right turn lane.	\$574
34	Cedar Hills/Westgate	Add NB left turn lane.	\$1,492
35	Canyon/Cedar Hills	Widen Canyon to 7 lanes on west leg; add NB left turn lane; add SB left turn lane; add SB right turn lane; add EB/WB left turn lane.	\$5,739
36	Farmington/Cedar Hills	SB double left turn lanes (construct SB right turn lane and restripe SB lanes as side-by-side left turn lanes). 2020 TSP: add 2 nd EB left turn lane, right-of-way \$1,250,000.	\$1,148 \$1,250
37	Hall/Westgate-Center	Realign intersection; signal modification to EB/WB protected/permitted phasing.	\$287
38	Canyon/Watson	Restripe SB approach (add a SB receiving lane).	\$803
39	Farmington Rd./Watson	2020 TSP: Preserve right-of-way for 3 through lanes with parking for construction beyond 2020.	\$1,500
40	Farmington Rd./Hall	2020 TSP: Preserve right-of-way for 3 through lanes for construction beyond 2020.	\$1,500

#	Table 6.5 Location	Improvements: Source: 1 through 67: 2015 TSP (2020 TSP with modifications noted) 68 through 81: 2020 TSP	Approximate Cost in 1000s of 2001 Dollars
41	Hall/Allen	Add EB and WB right turn lanes; NB and SB double left turn lanes.	\$1,951
42	Hall/Denney	NB/SB signal phasing change to permitted/protected. 2020 TSP: add 2 nd WB left turn lane \$500,000.	\$172 \$500
43	Hall/Greenway	Signal phase change to permitted/protected phasing for EB and WB approaches, overlap NB right turn.	\$143
44	Hall/Nimbus	Signal phase change to protected/permitted phasing for NB and SB approaches.	\$143
45	Scholls Ferry/Hall	Add double left turn lanes on all approaches; add right turn lane on all approaches.	\$3,443
46	Brockman/125 th	Signal phase change to protected/permitted phasing for all approaches; add WB left turn lane; restripe NB and EB approaches; construct SB left turn lane, right turn lane, and through lane.	Cost included in roadway project
47	Scholls Ferry/125 th	Widen Scholls Ferry Road to 7 lanes (3 through lanes each way); add SB right turn lane. 2020 plan: overlap SB right turn lane \$125,000.	\$574 \$125
48	Scholls Ferry/Nimbus	Widen Scholls Ferry to 7 lanes (3 through lanes in each direction); add NB left turn lane; SB double left turn lanes.	\$1,148
49	Scholls Ferry/ORE 217 SB ramps	Channel EB right turn onto ramp and modify signal to allow free movement of EB right turns.	\$574
50	Scholls Ferry/Ore 217 NB on-ramp	Channel SB right turn onto ramp and modify signal to allow free movement of SB right turns; add WB through lane onto ramp 2020 TSP: add second NB left turn lane and a second WB left turn lane \$1,000,000.	\$574 \$1,000
51	Farmington/Lombard	Add NB right turn lane.	\$574
52	Canyon/Broadway	Add WB right turn lane; signal modification to NB/SB protected phasing.	Completed
53	Canyon/Fred Meyer	Add SB left turn lane; signal modification to NB/SB split phasing.	\$143
54	BH Highway/Griffith	Signal phasing modification to NB/SB protected/permitted phasing.	\$172
55	BH Highway/Western	Add EB right turn lane; add WB double left turn lanes; add NB through lane.	\$1,722
56	Allen/Western	Add EB left turn lane; EB/WB signal phasing change to permitted/protected phasing.	\$143
57	Allen/Scholls Ferry	Widen Allen to 5 lanes; restripe WB approach; signal phase change for all approaches to permitted/protected phasing. 2020 TSP: provide curve correction to the east of the intersection \$1,500,000.	\$1,865
58	Walker/ORE 217 SB	Bridge deck widening; EB double right turn lanes (add right turn lane); WB through lane.	\$861
59	Walker/ORE 217 NB	Add NB double left turn lanes.	\$287
60	Canyon/ORE 217 SB	Add SB left turn lane and restripe SB lanes.	\$574
61	BH Highway/ORE 217 SB	Add SB left turn lane.	\$574
62	BH Highway/ORE 217 NB	NB double left turn lanes.	\$689

#	Table 6.5 Location	Improvements: Source: 1 through 67: 2015 TSP (2020 TSP with modifications noted) 68 through 81: 2020 TSP	Approximate Cost in 1000s of 2001 Dollars
63	Allen/ORE 217 SB	Add SB right turn lane (double right lanes); EB right turn lane (channel onto ramp; signal modification to allow EB right turn to go with SB left).	\$2,295
64	Allen/ORE 217 NB	Add WB right turn lane; signal modifications to NB/SB split phasing.	\$574
65	Denney/ORE 217 SB	Install traffic signal. 2020 TSP: add EB right turn lane, structure work, \$1,100,000.	\$287 \$1,100
66	Denney/ORE 217 NB	Install traffic signal.	\$287
67	Denney/Lombard	Install traffic signal and EB and WB left turn lanes.	\$1,291
		Additional 2020 plan improvements:	
68	Bethany/US 26 WB	Add second WB right turn lane, NB left turn lane.	Included in road project
69	Bethany/Cornell	Overlap SB right turn lane.	Included in road project
70	Cornell/173 rd	Add WB right turn lane, second NB left turn lane, NB right turn lane, SB right turn lane.	\$2,200
71	Cornell/US 26 WB	Add 2 nd WB left turn lane (structure work).	\$1,000
72	Murray/Cornell	Overlap NB right turn lane, add 2 nd NB left turn lane (Cornell 5 lanes).	\$1,000
73	Murray/US 26 WB	Add 2 nd WB right turn lane.	\$500
74	Cedar Hills/Barnes	Add 2 nd NB lane and SB left turn lane.	\$1,000
75	Cornell/Saltzman	Add 2 nd NB lane and SB left turn lane (Cornell to 5 lanes).	\$2,000
76	Canyon/Lombard	Add EB right turn lane.	\$500
77	BH Hwy/Laurelwood	Add SB left turn lane (signal modification and right-of-way).	\$2,000
78	Scholls Ferry/Laurelwood	Install traffic signal, align with Nicol, right-of-way, 2 left turn lane modifications.	\$1,750
79	Hall/ORE 217 SB/Cascade	Add SB right turn lane.	\$250
80	Murray/Brockman	Add WB right turn lane, SB right turn lane, add 20 seconds cycle to 120 seconds, right-of-way.	\$100
81	Garden Home/92 nd	Correct curve deficiency	\$1,500
Unfunded Intersection Improvement Plan Projects Total Estimated Costs			

1998 project cost estimates are factored using a ratio of Seattle 10/01 CCI to national average 10/01 CCI = 1.1477.

Local Connectivity Maps

The Local Connectivity Maps identify recommended and adopted local bicycle, pedestrian, and multi-modal street connections. As new development and redevelopment occur, there is an opportunity to work toward completion of the local circulation system by providing new, more direct and convenient connections within subareas for all modes. Such new connections can also help reduce out-of-direction and cut-through vehicle traffic in neighborhoods.

The Local Connectivity Maps (Figures 6.8 through 6.23) identify existing street stubs and potential future local connections that shall be evaluated and considered with new development.

A new connection may be a local street, or if there are environmental or existing development constraints, a pedestrian and bicycle way can be considered. Each potential connection is numbered and an arrow points in the general direction of a possible new connection. A corresponding data table (Table 6.6) notes if a potential or definite environmental problem or another constraint has been identified and whether a street ("multi-modal") or a bicycle and pedestrian connection ("pursue non-auto") is recommended to be pursued or is already adopted. Adopted Washington County connections within Beaverton's planning area are also noted for information.

Table 6.6: Local Connectivity Map Recommendations on Potential Connections

Table 6.6: Local Connectivity Map Recommendations on Potential Connections				
Table 6.6 Connection Number	Rating: P = Potential or Definite Problems M = Minimal Problems A = City Adopted Street Connections (2015 TSP)	Recommendation:		
	County = County Adopted Connection			
1	P	Feasibility Constraints		
2	M	Pursue Multi-modal		
3	M	Pursue Multi-modal		
5	P	Pursue Multi-modal		
7	P	Pursue Non-auto		
8	P	Pursue Multi-modal		
9	P	Pursue Multi-modal		
10	P	Pursue Multi-modal		
11	P	Pursue Multi-modal		
12	P	Pursue Multi-modal		
13	P	Pursue Multi-modal		
14	P	Pursue Multi-modal		
17	P	Feasibility Constraints		
18	P	Consider Non-auto		
19	P	Feasibility Constraints		
20	P	Feasibility Constraints		
21	P	Pursue Non-auto		
22	P	Feasibility Constraints		
23	P	Consider Multi-modal		
24	P	Consider Multi-modal		
25	P	Consider Multi-modal		
26	P	Feasibility Constraints		
27	P	Pursue Multi-modal		
29	P	Consider Multi-modal		
31	P	Consider Multi-modal		
33	P	Consider Multi-modal		
34	P	Pursue Multi-modal		
35	P	Feasibility Constraints		
36	P	Consider Non-auto		

Table 6.6 Connection Number	Rating: P = Potential or Definite Problems M = Minimal Problems A = City Adopted Street Connections (2015 TSP) County = County Adopted Connection	Recommendation:
37	P	Consider Non-auto
38	M	Pursue Multi-modal
39	M	Consider Multi-modal
40	M	Feasibility Constraints
41	P P	Pursue Non-auto
42	P	Pursue Multi-modal
43	P P	Pursue Multi-modal Pursue Multi-modal
45	P	Feasibility Constraints
46	P	Consider Multi-modal
47	P	Consider Non-auto
48	P	Feasibility Constraints
49	P	Pursue Multi-modal
50	M	Consider Future Cul-de-sac, Pursue Non-auto
51	P	Pursue Non-auto
52	P P	Feasibility Constraints
54 55	P	Pursue Non-auto
56	P	Feasibility Constraints Consider Non-auto
58	P	Consider Non-auto
59	P	Feasibility Constraints
60	P	Feasibility Constraints
61	P	Consider Non-auto
62	P	Consider Non-auto
63	P	Consider Non-auto
64	P	Consider Multi-modal
65	P	Pursue Multi-modal
66	P	Consider Multi-modal
67	M	Pursue Multi-modal
68	P	Pursue Multi-modal
70	P	Pursue Multi-modal
71	P	Pursue Multi-modal
74	P	Pursue Multi-modal
75	M	Pursue Multi-modal
76	P	Pursue Multi-modal
77	A	Adopted Street Connection
78	P	Pursue Multi-modal
79	P	Pursue Non-auto

Table 6.6 Connection Number	Rating: P = Potential or Definite Problems M = Minimal Problems A = City Adopted Street Connections (2015 TSP) County = County Adopted Connection	Recommendation:
80	P	Pursue Non-auto
		Pursue Multi-modal (into Transit
81	M	Center)
82	P	Pursue Multi-modal
83	P	Pursue Multi-modal
84	P	Consider Multi-modal
85	M	Pursue Non-auto
86	M	Pursue Non-auto
87	M	Pursue Non-auto
88	M	Pursue Non-auto
89	P	Pursue Non-auto
90	M	Pursue Non-auto
		Pursue Multi-modal east of 125th,
91	M	Pursue Non-auto west of 125th
92	P	Consider Multi-modal
93	P	Consider Non-auto
94	P	Consider Non-auto
95	County	Pursue Non-auto
96	County	Feasibility Constraints
97	County	Feasibility Constraints
98	M	Consider Multi-modal
99	County	Consider Non-auto
100	County	Feasibility Constraints
101	County	Consider Non-auto
102	P	Pursue Non-auto
103	M	Pursue Non-auto
105	P	Consider Multi-modal
106	P	Consider Non-auto
107	P	Consider Non-auto
108	P	Consider Non-auto
109	P	Pursue Multi-modal
110	P	Pursue Non-auto
111	P	Pursue Non-auto
112	P	Pursue Non-auto
113	County	Potential Connection
114	P	Consider Non-auto
115	P	Pursue Multi-modal
116	P	Pursue Non-auto
117	M	Pursue Multi-modal

Table 6.6 Connection Number	Rating: P = Potential or Definite Problems M = Minimal Problems A = City Adopted Street Connections (2015 TSP) County = County Adopted Connection	Recommendation:
118	M	Pursue Non-auto
119	M	Pursue Multi-modal
120	M	Pursue Multi-modal
121	M	Pursue Multi-modal
122	M	Pursue Multi-modal
123	M	Pursue Multi-modal
125	P	Pursue Multi-modal
126	P	Consider Multi-modal
127	P	Pursue Multi-modal
129	M	Pursue Multi-modal
130	M	Pursue Multi-modal
131	M	Pursue Multi-modal
132	M	Pursue Multi-modal
133	M	Pursue Multi-modal
134	M	Pursue Multi-modal
135	M	Pursue Multi-modal
136	M	Pursue Multi-modal
137	A	Adopted Street Connection
138	A	Adopted Street Connection
139	A	Adopted Street Connection
140	M	Consider Non-auto
141	A	Adopted Street Connection
142	M	Consider Non-auto
143	M	Pursue Multi-modal
146	M	Pursue Multi-modal
147	M	Pursue Multi-modal

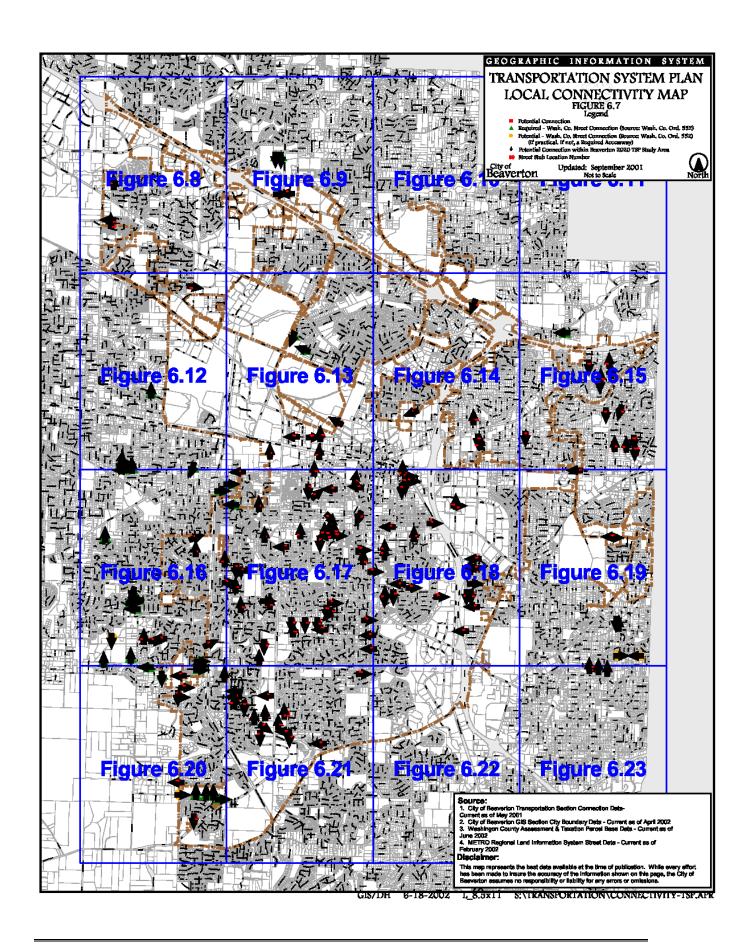


Figure 6.8

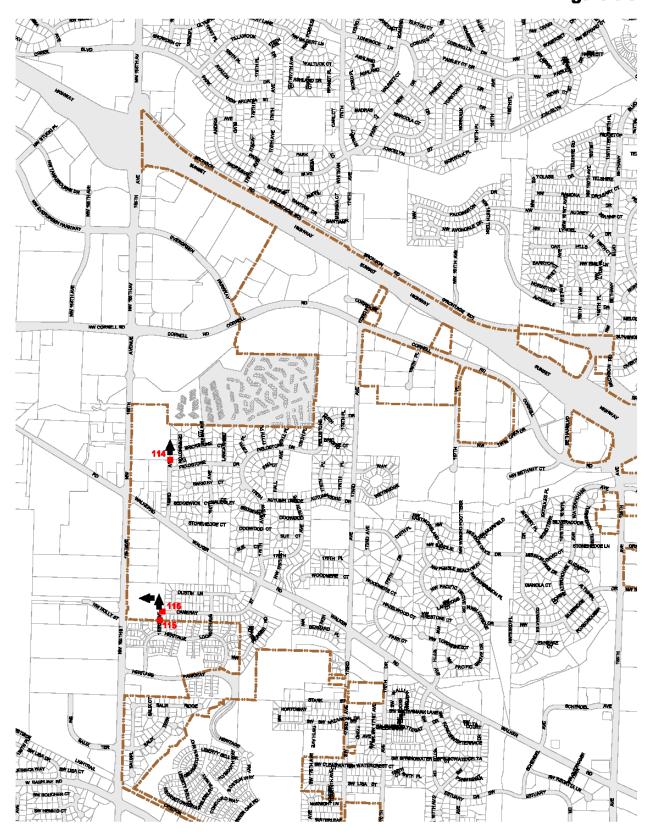


Figure 6.9

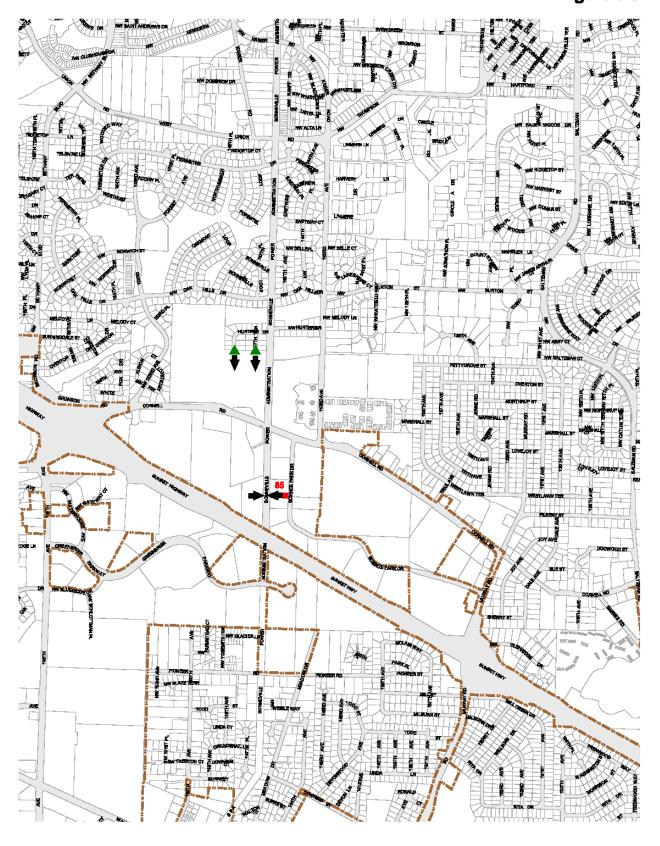


Figure 6.10



Figure 6.11



Figure 6.12



Figure 6.13



Figure 6.14



Figure 6.15

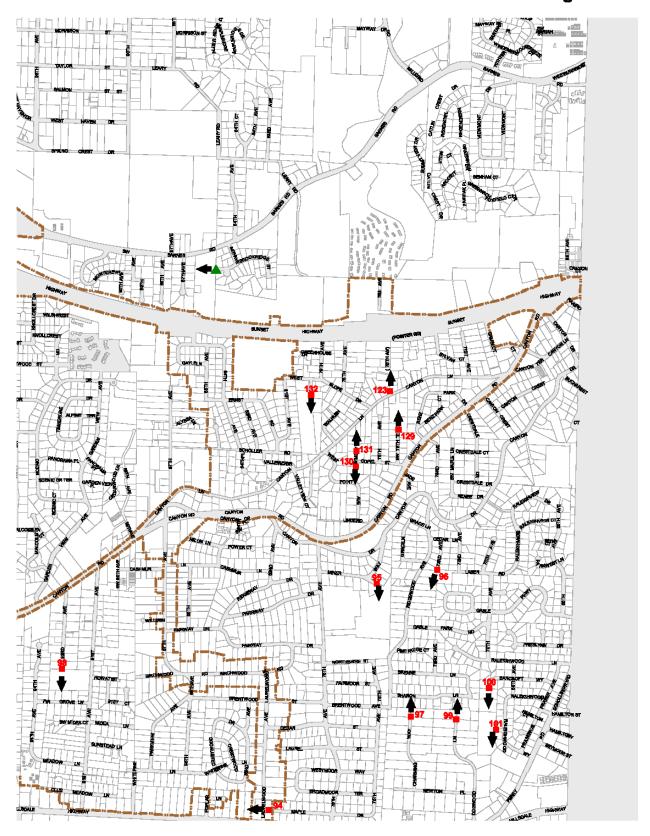


Figure 6.16



Figure 6.17



Figure 6.18

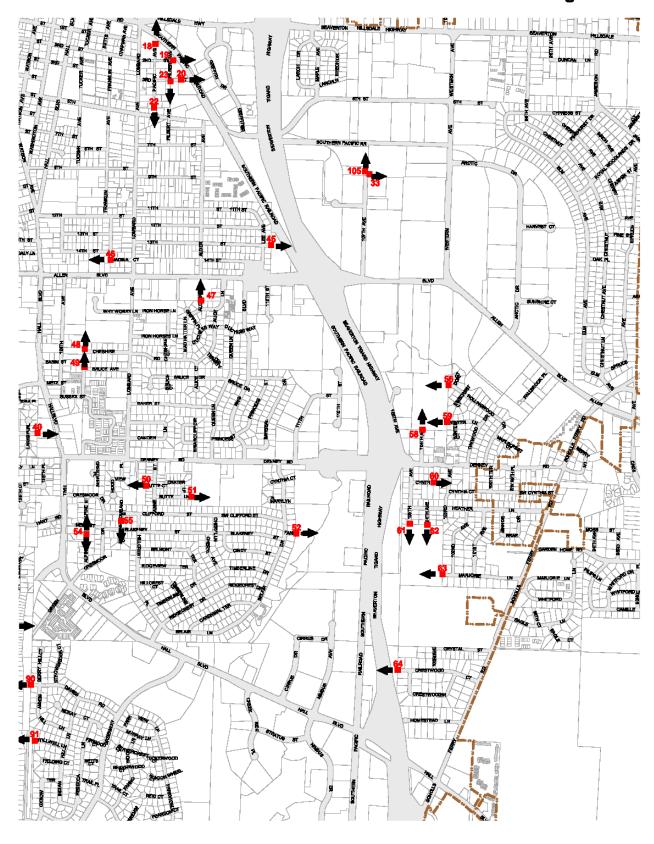


Figure 6.19



Figure 6.20



Figure 6.21

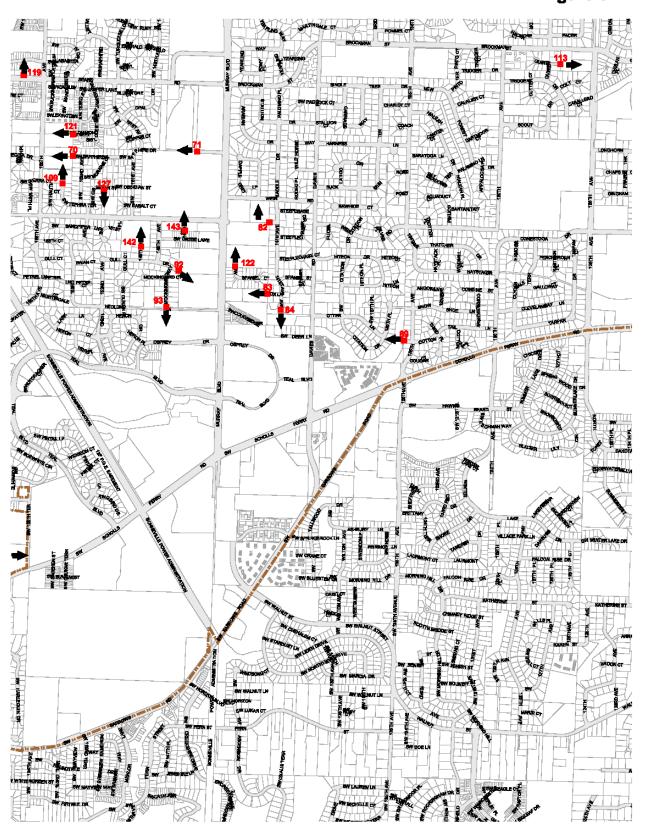


Figure 6.22

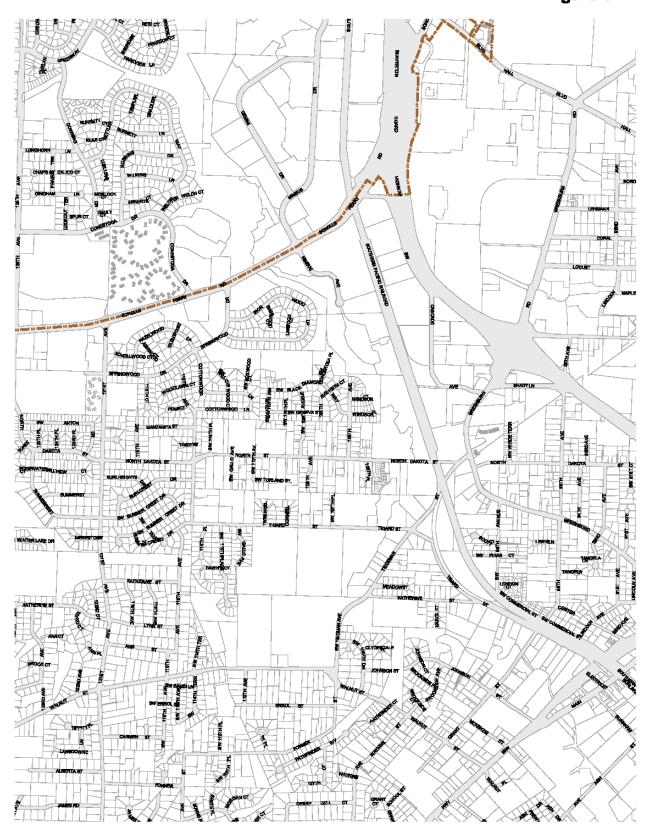


Figure 6.23



System Maintenance

Preservation and maintenance of the transportation system are essential to protecting the transportation investment. The majority of gas tax revenues are used for maintenance. With an increasing inventory of streets and the need for greater maintenance of older facilities, protecting and increasing maintenance funds is critical.

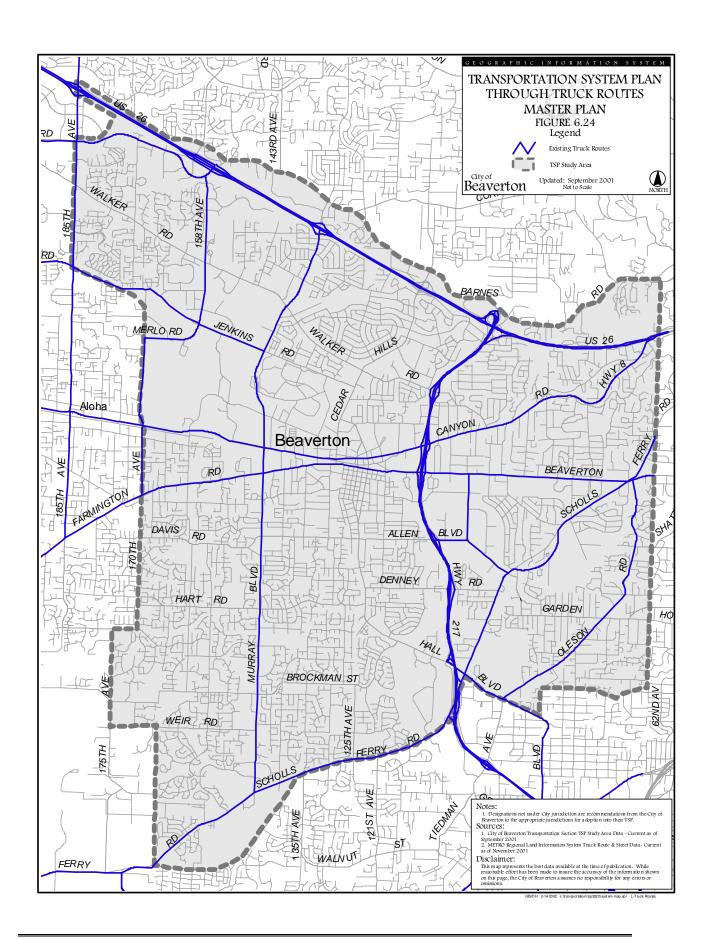
A key concept is that pavement quality deteriorates 40 percent in the first 75 percent of pavement life. However, there is a rapid acceleration of this deterioration later, so that in the next 12 percent of life, there is another 40 percent drop in quality. The City's pavement management program tracks pavement condition so that repairs can be made at an optimum time in pavement life. Pavement management projects are scheduled and funded through the City's capital improvement plan.

Parking

Parking needs are reviewed with new development. The regional parking minimum and maximum ratios are contained in the City's *Development Code*. These ratios address the State required reduction in parking spaces per capita. Shared parking, parking pricing, development of parking districts, and permit parking programs are all strategies for managing demand that the City is using or exploring.

Through Truck Routes

Efficient truck movement plays a vital role in the economical movement of raw materials and finished products. Through truck routes provide for efficient movement while maintaining neighborhood livability, public safety, and minimizing roadway maintenance costs. The Through Truck Route map (Figure 6.24) acknowledges these roadways so that when improvements are made, a "truck friendly" design can be considered. Such designs can include 12-foot wide travel lanes, longer access spacing, 35-foot or larger curb returns, and increased pavement depth.

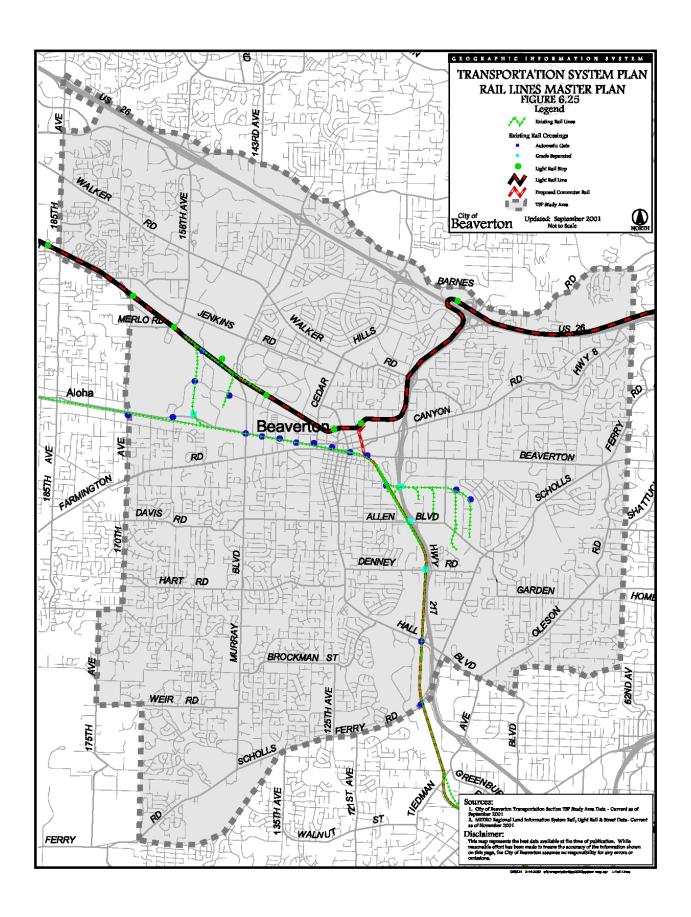


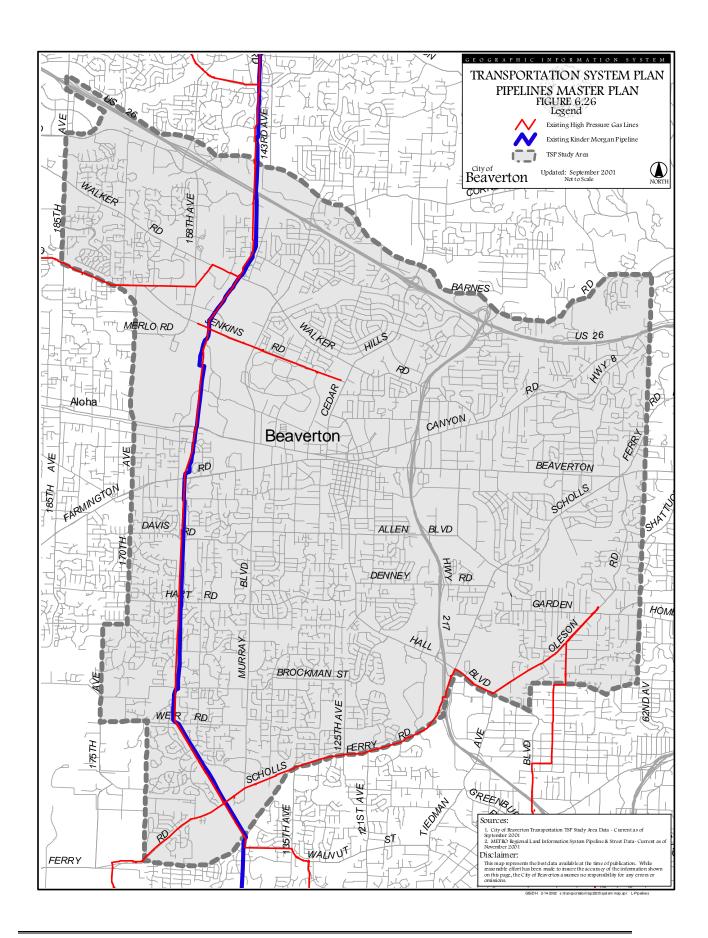
Other Modes (Rail, Air, Pipeline, Waterways)

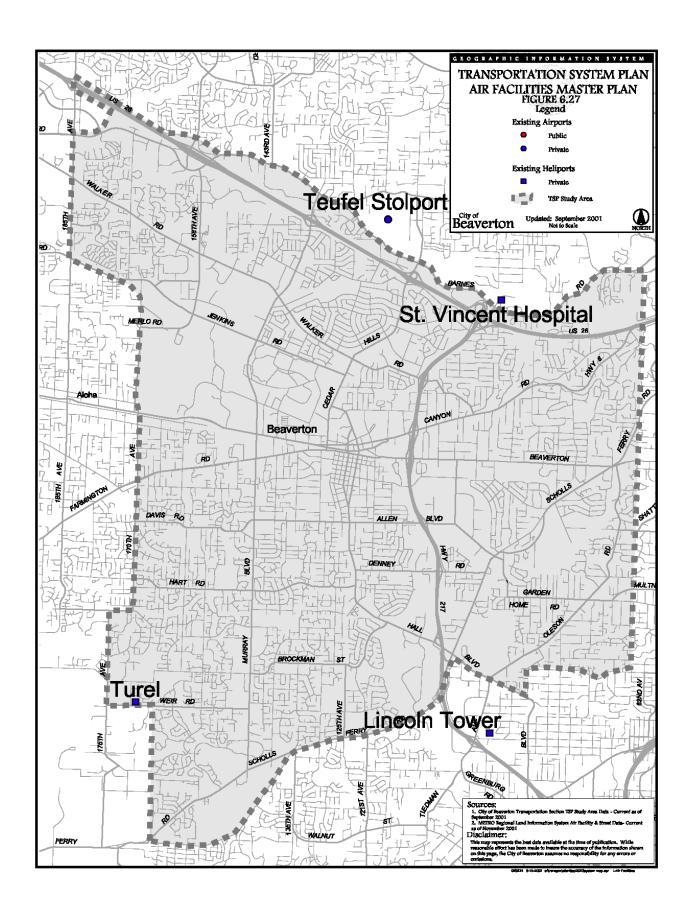
The rail, pipeline, and air facilities master plans show existing and future expansion of these systems. All freight rail lines in the Beaverton area are operated by Portland & Western, a sister company of Willamette & Pacific Railroad, a subsidiary of Genesee & Wyoming Incorporated. Trains operate seven days a week throughout the day. Growth in cars per train will vary in the future based on demand, though train frequency is not expected to change significantly. Long-term growth is based on acquisition of existing trackage in order to expand existing networks that can compete with trucks. (Figure 6.25)

The existing natural gas pipeline system in Beaverton and the petroleum gas line that runs from the Port of Portland to Eugene through Beaverton (Figure 6.26) are not expected to expand during the planning period. Future expansion plans of the Kinder Morgan pipeline could change with market demand.

There are no airports in the Beaverton area, although one private heliport (Turel) is located in southwest Beaverton (Figure 6.27). There are no commercially navigable waterways in the study area for transportation purposes.







6.4 TRANSPORTATION FUNDING

There are several potential funding sources for transportation improvements that have all been used in the past. Chapter 1 of the *Transportation System Plan Update* contains a summary of these options. Often, several sources of funding are used. They can include local system development charges and programs like Washington County's Major Streets Transportation Improvement Program that was approved by the voting public. State and federal grants and transportation allocations are also available. Public support and a consensus on the necessary improvements in the community are critical to funding and building the system improvements. Support is developed through the public participation process that takes place during updates of the *Transportation System Plan*.

Order of magnitude cost estimates for the projects identified in the street, bicycle, and pedestrian action and master plans are contained in previous tables. Other projects are estimated using general unit costs for transportation improvements. Many of the project costs were developed by Washington County, Metro, or the Oregon Department of Transportation for projects in the *Regional Transportation Plan*. Where the City identified the comparable needs, these project costs were used. Table 6.7 summarizes the total costs outlined in the *Transportation System Plan Update*.

Current transportation revenue for the City of Beaverton is summarized in Table 6.8. Assuming a constant funding level over the next 20 years, the identified revenues would potentially fund slightly over \$300,000,000 in transportation projects (maintenance, operation, and construction) leaving a substantial gap between the funding needs and identified funding sources (!The Formula Not In Table - \$301,600,000 = \$1,025,373,000 shortfall). The City continues to work with its regional partners and the State to identify and access improvement funds.

Chapter Six: Transportation Element

Table 6.7 Approximate Costs for Beaverton Transportation System Plan

Transportation Improvements		Approximate Cost In 1000s of 2001 Dollars
Street and Intersection Improvement Projects:	Committed	\$3001
	Unfunded	\$898,483
Signal Coordination, Intelligent Transportation System, Tran Management System Improvements	sportation System	\$6,415
Road Maintenance (assumes 4% per year growth)		\$100,000
Bicycle Action Plan		\$27,124
Pedestrian Action Plan		\$45,588
Transit Service Improvements		\$144,830
Pedestrian and School Safety Program (\$10,000 per year)		\$200
Sidewalk Grant Program (\$50,000 per year)		\$1,000
Park-and-Ride Expansion (1,000 spaces)		\$2,000
Neighborhood Traffic Management (\$75,000 per year)		\$1,500
TSP Support Documents (i.e., TSP, Development Code, Conupdates)	prehensive Plan	\$500
Transportation Demand Management Support (\$50,000 per y	vear)	\$1,000
20-Year Total		\$330,157.00

Table 6.8 Estimate of Available Transportation Funding From Existing Sources

Funding Source	Approximate Annual Revenue In 1000s of 2001 Dollars
State Motor Vehicle Fees to City	\$3,400
County Gas Tax to City	\$290
Traffic Impact Fees to City	\$1,400
Miscellaneous	\$290
Major Streets Transportation Improvement Program Funds to City (approximate)	\$2,900
State and Federal Fees used in City (approximate, assumes 35% of allocation used for capital)	\$6,800
Annual Total	\$15,080
20-Year Total (Assumes current funding sources only)	\$301,600

