

PART I: ABOUT TUALATIN

ABOUT OUR COMMUNITY

The City of Tualatin was incorporated in 1913 and takes pride in being known as a warm and welcoming community for residents, businesses, and retail shoppers alike. The community values a high quality of life and promotes local pride and a sense of ownership, involvement, and belonging.

The earliest known people to live in the place now known as Tualatin were the Atfalati or Tualatin people, part of the larger Kalapuyan people. The Donation Land Claim Act passed by Congress in 1850 abetted white settlers to lay claim to the land in current-day Tualatin. The names associated with these Donation Land Claims are still seen in local place names (Sweek, Hedges, Brown, Byrom). In the 20th century, many donation land claims that had been farmed were subdivided and sold, becoming the industrial, residential, and commercial subdivisions seen today.

[Location](#) Tualatin Comprehensive Plan Proposed Draft 11-19-20

PART II: ABOUT THE COMPREHENSIVE PLAN

A. INTRODUCTION

CHAPTER 2—INTRODUCTION

TDC 2.020.—Purpose.

~~(1)——The general purpose of this Plan is to guide the physical development of the City so as to preserve the natural beauty of the area while accommodating economic growth. Specifically, the Plan is intended to define locations for both private and public land uses and to arrange these uses in a manner that reduces conflicts and provides convenient movement between individual land uses. The Plan is also intended to provide for diverse living and working environments of the highest quality. (2)——When adopted by the City Council, this Plan and the City's Urban Renewal Plan will be is an official land use guide for City development. After the adoption of this Plan, there will not be the construction of any building, structure or use, used or occupied contrary to the provisions of this plan.~~

Tualatin is a southern suburb of Portland, Oregon located along Interstate-5 between Interstate-205, Highway 99W, and Highway 217. The Westside Express Service (WES) commuter rail provides Tualatin residents and visitors access to the greater Portland Metropolitan region. Collectively, these major transportation facilities provide accessible, affordable, and easy movement of goods and people to, from, and within the region.

Population

Deletions, Additions, Notes on Content

Reorganization is reflected through former chapter and section numbers and not otherwise annotated.

Prior to major growth the 1970's, Tualatin remained home to less than a thousand people. At the 1980 Census, shortly after the Tualatin Community Plan was written, the population was 7,348 residents. The 2019 PSU Population Research Center certified population estimate is 27,135 residents, representing nearly a four-fold increase in population over those four decades. Growth has slowed after the year 2000 as compared to the city's major growth period in the 1970's through 1990's. Continuing growth is anticipated through development in Tualatin's Urban Planning Area and through infill development.

Throughout the years, the City of Tualatin has been one of the fastest growing cities in Oregon. Unlike many other sprawling regions, Tualatin continues to maintain a high standard of living, yet remains an affordable place to locate a family.

Demographics

Demographic trends provide a context for growth in a region; factors such as age, income, migration, and other trends show how communities have grown and how they will shape future growth. The Housing Needs Analysis, that was completed in December of 2019, identified key demographic trends that will influence Tualatin's future needs. The analysis found that Tualatin is more ethnically diverse than the Portland Region, with a Lantix population of 16% in 2017. The Housing Needs Analysis also found that Tualatin is less racial diverse than the Portland Region. Tualatin additionally has a slightly larger share of younger people than the Portland Region. About 26% of Tualatin's population and Washington County's population is under 20 years old, compared to 24% of the Portland Region's population.

PART II: ABOUT THE COMPREHENSIVE PLAN

A. INTRODUCTION

Purpose. The general purpose of this Comprehensive Plan is to guide the physical development of the City is an official land use guide for City development. The Comprehensive Plan outlines the goals and policies, as well as significant projects and plan maps that guide future development. The Comprehensive Plan is then implemented by the zoning code, zoning maps, service coordinator agreements, annexations, Urban Renewal Areas, and development agreements. The Comprehensive Plan is used when making land use decisions, particularly those that include a change or exception to the established development regulations.

Timeline of Major Comprehensive Plan Updates:

- 1913: City incorporated
- 1972: City's first Comprehensive Plan
- 1975: City's first Urban Renewal Area pan
- 1973: Oregon establishes Land Conservation and Development Commission

- 1979: City adopts revised Comprehensive Plan
- 1981: DLCDC acknowledges Comprehensive Plan
- 1982: City annexation of western industrial lands
- 1993: Historic Resource Technical Study and Inventory
- 1995: Natural Resource Inventory and Local Wetlands Inventory
- 2001 Transportation System Plan (TSP)
- 2002 and 2004: Metro Urban Growth Boundary expansions
- 2012 Transportation System Plan Update
- 2010: Southwest Concept Plan
- 2015: Northwest Tualatin Concept Plan
- 2018: Tualatin Development Code Improvement Project
- 2019: Basalt Creek Concept Plan
- 2020: Update to Housing Element and policy-neutral update to remainder of Comprehensive Plans to highlight goals and policies.

TDC 2.010. - Background.

- ~~(1) — The City of Tualatin's first Comprehensive Plan was adopted in 1972, 59 years after the City was incorporated in 1913. In 1975, the City adopted a plan for the City's Urban Renewal Area, and then produced a more detailed Renewal Plan in 1977. Since the adoption of the 1972 Plan, the City has seen rapidly changing circumstances that have created the need for a revised plan. These circumstances included the establishment of the State Land Conservation and Development Commission (LCDC), adoption of the Statewide Planning Goals, annexation of most of the industrial area west of the City in 1982, and accelerated economic development that has occurred since 1972 in the Tualatin area.~~
- ~~(2) — In 1973, the Oregon Legislature passed a law establishing the Land Conservation and Development Commission (LCDC) and empowered the Commission to adopt Statewide Planning Goals. The Legislature also required all Oregon cities and counties to adopt plans and ordinances in conformance with the statewide goals and to coordinate their plans with each affected local general purpose government or special district. Each city or county also had to prepare a plan that considered state and federal government programs. To help each local government prepare a plan to meet the planning goals, the State Legislature allocated considerable sums of money to provide planning grants to the local jurisdictions. This planning effort has been achieved by using some of those grant funds.~~
- ~~(3) — While the Statewide Planning Goals were being formulated, the nation was recovering from an economic recession. Tualatin was only beginning to feel the double impact of renewed economic growth. At the same time, development of the metropolitan urban fringe finally reached and went beyond Tualatin's border. Because of these factors, the City is now experiencing an unprecedented development boom that must be guided by an adequate plan that will ensure the long-term livability of~~

~~the City. While the 1972 Plan was adequate for its time, a new plan, building on the strengths of the old plan, was necessary to provide an adequate guide for current and future City growth.~~

- ~~(4) After six years of work, Tualatin adopted a revised comprehensive plan on October 22, 1979, which, with amendments, was acknowledged as being in compliance with the Statewide Goals and Guidelines by the LCDC on September 24, 1981.~~
- ~~(5) The Tualatin Plan is unique in that it involves a single document integrating both the traditional comprehensive plan and zoning ordinance into a single development code. This direction is followed in the land use mapping by having only one map with planning districts rather than a zone map and a plan map. With this approach, Tualatin provides a very strong legal authority to its planning programs.~~
- ~~(6) The 1979 Tualatin Plan dealt with land, both within the City limits and in the unincorporated area, out to the Metropolitan Service District (METRO) Urban Growth Boundary (UGB). However, the acknowledgement of the plan by the LCDC was only for the City limits. Therefore, the 1979 plan was termed "complementary" in that it dealt only with land inside the limits and left the growth areas reaching to the UGB to Washington County for detailed planning and administration. It was the County's responsibility to finalize the plan for this area so that it could be acknowledged by the LCDC.~~
- ~~(7) Planning responsibility shifted to the City with the October 1982 annexation of most of the Industrial Planning Area. At that time, Tualatin and Washington County agreed that the City would assume planning responsibility for the unincorporated balance of the planning area. In order to fulfill this responsibility, the City prepared two separate land use plan amendments, one for the newly annexed industrial area and another for the unincorporated, predominantly residential balance of the planning area. At the same time, the City prepared updates to the Transportation and Sewer and Water elements of the Public Facilities Plan. These three amendments, scheduled for adoption in 1983, were intended to bring the total plan into "active" status. This means that the City was taking authority for its own growth lands and is planning for those lands so that they can be best integrated into one community.~~
- ~~(8) Map 9-2 shows the Western Industrial District, the Industrial Planning Area, and the individual industrial areas.~~
- ~~(9) Map 9-2 shows the individual Residential Planning Areas.~~
- ~~(10) The Northwest Tualatin Concept Plan technical document development occurred in 2004-05 based on a Metro Urban Growth Boundary expansion in December 2002. The concept plan focus is on industrial uses and related public infrastructure.~~
- ~~(11) The Southwest Tualatin Concept Plan (SWCP) technical document was accepted in October 2010 based on a Metro Urban Growth Boundary expansions in December 2002 and June 2004 and the 117 acre "Knife River Urban Reserve." The concept plan for industrial development of 615 acres of land in the southwestern corner of Tualatin is based on Metro Urban Growth Management Functional Plan (MUGMFP) Title IV Industrial Land Policy, Title XI Planning for New Urban Areas, a Metro Region-~~

~~ally Significant Industrial Area (RSIA) designation and other conditions in Metro Ordinances specific to the SWCP area.~~

~~The SWCP focuses on industrial uses and related public infrastructure. The SWCP requires a minimum of one 100-acre and one 50-acre parcel for industrial development within the properties designated as RSIA and provides for a limited commercial area in the properties north of SW Blake Street that is intended as local services for SWCP industrial facilities and employment.~~

~~(Ord. 590-83, 04-13-83; Ord. 592 83, §22, 06-13-83; Ord. 1191-05, 06-27-05; Ord. 1321-11 §2, 04-25-11; Ord. 1414-18, 12-10-2018)~~

~~(Ord. 1414-18, 12-10-2018)~~

~~TDC 2.030. -- Plan Format.~~

- ~~(1) The format is intended to organize the Code's content into a logical sequence. The first chapter contains definitions of planning terms. Chapter two provides general background on the reasons for the plan revision, explains the plan's format, and discusses matters such as citizen involvement and agency coordination. Chapter 3 provides a description of the data that was generated as a part of the planning process and was used to provide an objective analysis of planning alternatives.~~
- ~~(2) Chapter 4 discusses general community growth and describes growth characteristics. It also defines community growth objectives. The next four chapters deal specifically with individual land use categories, providing rationale for their location and explaining their purpose.~~
- ~~(3) Chapter 9 contains the plan map and shows the specific location of private and public land uses. It also provides a graphic description of the City's Urban Growth Boundary, and also provides a narrative description of each plan area.~~
- ~~(4) Chapter ten provides a description of community design objectives relating to the physical appearance of the City.~~
- ~~(5) Chapters 11 through 15 comprise the public facilities element of the plan. Subjects addressed include transportation, water service, sewer service, and parks and recreation.~~
- ~~(6) Chapter 16 provides objectives relating to the preservation of the City's identified historic landmarks.~~
- ~~(7) Chapter 20 provides objectives related to sign design.~~
- ~~(8) Chapters 40 through 80 contain the Planning District Standards. These Standards are equivalent to what is generally referred to as a "Zoning Ordinance" in most cities and counties. Under the system adopted by the City of Tualatin, the traditional comprehensive plan map and zoning map have been combined into a single map, and what used to be called "zones" are referred to as planning districts.~~

~~(Renumbered by Ord. 844-91, §2, 10-14-91; Ord. 1191-05, 06-27-05; Ord. 1414-18, 12-10-2018)~~

TDC 2.040.—Planning Area Description.

- ~~(1) The beginning of any planning effort includes a definition of the area to be studied. This planning effort studied an area that is described on the Plan Map in Chapter 9 and referred to as the Study Area.~~
- ~~(2) Subsequent modifications to the original Study Area include Urban Reserve Area 43 in 1998 and the Northwest Tualatin Concept Plan (2005) areas.~~
- (3) The study area corresponds to the Urban Growth Boundary (UGB) adopted by the Columbia Region Association of Governments (CRAG) in 1976 or as modified by Metro in 1981, 1986, 1991, 1998, 2002 and 2004. In the eastern and southern portions of the City the line follows the 1976 UGB and the Metro 2002 and 2004 UGB Expansion Decision and the Urban Reserve recommended by Metro in 2010. The western portion of the Study Area corresponds to a line generally following Cipole Road, Pacific Highway and the Bonneville Power Administration right-of-way, while the northern portion of the Study Area follows the natural divide of the Tualatin River and the political boundaries of the cities of Durham, Tigard, Lake Oswego and Rivergrove.

(Ord. 1191-05, 06-27-05; Ord. 1321-11 §3, 04-25-11)

~~TDC 2.060, 2.070.—Reserved.~~

~~Editor's note—Ord. No. 1406-17, adopted November 13, 2017, repealed §§ 2.060 and 2.070.~~

TDC 2.080.— Agency Coordination.

- (1) Numerous public agencies have been involved in the planning process. This Plan, as well as Phase I Technical Memoranda, the data base for this Plan, and subsequent modifications to this Plan, were sent to the following public agencies for comment. This coordination is required by statewide planning legislation, and agency comments are on file at the Tualatin City Hall.
- (a) Land Conservation and Development Commission.
 - (b) Columbia Region Association of Governments.
 - (c) Metropolitan Service District (Metro).
 - (d) Portland Metropolitan Area Local Government Boundary Commission.
 - (e) Tri-Met.
 - (f) Washington County Planning Commission.
 - (g) Clackamas County Planning Commission.
 - (h) Cities of Durham, Lake Oswego, Rivergrove, Sherwood, Tigard, Wilsonville.
 - (i) Tigard-Tualatin School District 23 J.
 - (j) Sherwood School District 88.

- (k) Tualatin Valley Fire and Rescue (Tualatin Rural Fire Protection District).
 - (l) Clean Water Services (Unified Sewerage Agency).
 - (m) Oregon State Highway Division (Oregon Department of Transportation).
 - (n) Oregon Department of Environmental Quality.
 - (o) Federal Environmental Protection Agency.
 - (p) U.S. Army Corps of Engineers.
 - (q) Oregon Division of State Lands.
- (2) Additionally, the planning process included the following private utility companies:
- (a) Verizon (General Telephone Company of the Northwest, Inc.)
 - (b) Northwest Natural Gas Company.
 - (c) Portland General Electric Company.
 - (d) Comcast

(Ord. 1191-05; 06-27-05; Ord. 1414-18, 12-10-2018)

CHAPTER 1— ADMINISTRATION PROVISIONS

~~TDC 1.010.— Interpretation.~~

Where differences exist between the Plan Map and Plan Text, the Plan Map controls Plan intent unless, otherwise determined by the City Council.

~~TDC 1.020.— Definitions.~~

Definitions of some terms used within the Comprehensive Plan are included below.

~~Where no definition has been provided, a dictionary definition may be presumed.~~

Acre. A measure of land area containing 43,560 square feet. Gross Acreage is the land area within the lot lines of a unit of land. Net Acreage is the land area within the lot lines of a unit of land after removing land for rights-of-way and tracts.

Annexation. The formal act of adding land to the corporate limits of a City.

Buildable Lands. Land within an Urban Growth Boundary that is vacant, has access to public streets, water and sewer services, and is not subject to natural hazards such as flooding, landslides, etc.

City. The City of Tualatin, Oregon; a municipal corporation.

Conditional Use. A land use category in a Planning District for land uses that may have an adverse impact on other land uses within that district. These uses require special approval procedures and may have conditions attached to their approval so they can be made compatible with surrounding land uses.

~~*Dedication.* The act of permanently de-voting a portion of private land to a public purpose, which includes, but is not limited to, road right-of-way or a public park.~~

~~*Density:*~~

~~*Gross Residential Density.* The number of dwelling units per gross acre. See also Acre.~~

~~*Housing Density.* The number of dwelling units per acre of land rounded to the nearest whole number.~~

~~*Maximum Net Density.* Maximum net density applies only to partition, subdivision, and architectural review applications reviewed through the Expedited Process set forth in House Bill 3065, Sections 6-11, 1995 Legislature, and is the land area within the lot lines of a unit of land after land has been removed for rights-of-way and tracts. House Bill 3065's reference to 80 percent of maximum net density in Section 7(1)(a)(E) is calculated by taking the gross acreage and subtracting land removed for rights-of-way and tracts and multiplying that net acreage figure by the maximum allowed density and then multiplying that figure by 80 percent.~~

~~*Net Residential Density.* The number of dwelling units per net acre. See also Acre.~~

Design Standards. Specific defined criteria formulated to guide the preparation of plans for buildings, landscaping, parks, etc.

~~*Development Agreement.* An agreement between either the City or the Tualatin Development Commission and a developer that clearly establishes the developer's responsibility regarding project phasing, the provision of public and private facilities, improvements, and any other mutually agreed to terms and requirements.~~

~~*Floodplain.* See, TDC Chapter 70 (Floodplain District).~~

Floodplain. The area subject to inundation by the base flood as identified on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM). The base flood is one that has a 1% chance of being equaled or exceeded in any given year, also referred to as the "100-year flood."

Grade Crossing. A crossing of high-ways, railroad tracks, or pedestrian walks or combinations of these at the same ground elevation.

Greenway. A naturally landscaped area of land usually located adjacent to watercourses and roadways.

Growth Controls. A combination of regulations, public policy and capital expenditures designed to either limit growth or to direct growth into specific geographic areas.

~~*Historic Resource.* See, Chapter 31 and 68 definitions. Are those buildings, structures, objects, sites or district that potentially have a significant relationship to events or conditions of the human past.~~

Housing Starts. The number of building permits issued for the construction of dwelling units for a specific period of time.

Land-Extensive. An industrial use characterized by large storage areas or large land areas needed for manufacturing processes and relatively few employees per acre.

~~*Land Use Intensity.* The relative concentration or activity generated on a parcel of land by a specific land use.~~

~~*Moratorium.* A temporary deferment or delay of construction activity, usually based on the lack of adequate capacity for public facilities such as schools, roads, and sewer and water systems.~~

Multi-Mode Transportation. A mix of transportation forms usually integrated as a system.

Needed Housing. As defined by the State of Oregon, means housing types determined to meet the need shown for housing within an urban growth boundary at particular price ranges and rent levels, including at least the following housing types:

- (a) Attached and detached single-family housing and multiple family housing for both owner and renter occupancy;

- (b) Government assisted housing;
- (c) Mobile home or manufactured dwelling parks as provided in ORS 197.475 to 197.490;
- (d) Manufactured homes on individual lots planned and zoned for single-family residential use that are in addition to lots within designated manufactured dwelling subdivisions; and
- (e) Housing for farmworkers.

Official Map. A legislatively adopted map indicating the exact location of public improvements such as streets, with the purpose of prohibiting uses within these locations that would prohibit future municipal use of the location.

Peak Hour. A specific period of time at which traffic counts are highest.

Planning District. See, Chapter 31 definitions. Land use regulatory designation under the Tualatin Development Code. The term "Zone" has the same meaning as "Planning District."

Right-of-Way. A strip of land reserved for public uses, which includes, but is not limited to, roadways, sewer facilities, water facilities, and stormwater facilities.

Transportation Mode. A form of transportation such as the automobile mode, bus mode, light rail mode, etc.

Truck Route. A selected course of travel for trucks, primarily intended to route trucks away from residential neighborhoods.

Unincorporated Land. Land not within the corporate or city limits of a city.

Urban Growth Boundary. An adopted line at or outside the current City limits defining an area that would accommodate future City growth.

Urban Growth Management Agreement (UGMA). An agreement between the City and Clackamas County establishing a process for coordinating comprehensive planning and development in a geographically defined area composed of both area within city limits and unincorporated properties.

Urban Planning Area Agreement (UPAA). An agreement between the City and Washington County establishing a process for coordinating comprehensive planning and development in a geographically defined area composed of both area within city limits and unincorporated properties.

(Ord. 743-88, §34, 3-28-1988; Ord. 818-91, §1, two & 3, 1-14-91; Ord. 844-91, §1, 10-14-91; Ord. 849-91, §1 & 2, 11-25-91; Ord. 882-92, §1, 12-14-92; Ord. 890-93, §1, 4-12-93; Ord. 956-96, §1 & 2, 01-8-96; Ord. 988-97, §1, 12-8-97; Ord. 1026-99, §1, 08-9-99; Ord. 1277-09, §1, 03-9-09; Ord. 1310-10 §1, 09-13-10; Ord. 1321-11 §1, 04-25-11; Ord. 1339-12 §1, 01-23-12; Ord. 1414-18, 12-10-2018)

B. PLAN IMPLEMENTATION

~~TDC 3.010. -- Background.~~

~~(1) — The development of the Plan for Tualatin was based as much as possible on objective data that measured conditions within the planning area. To obtain this data, the planning process was divided into two phases, with the first phase being data collection and the second phase being the preparation of a plan based on the collected data. The data was collected in a document entitled Phase I — Technical Memoranda. The Technical Memoranda described data concerning numerous topics. These topics are described as follows:~~

~~(a) — Citizen Involvement:~~

~~Citizen Participation~~

~~(b) — Land Use:~~

~~Natural Resource Inventory~~

~~Geological Resources~~

~~Flood Plains, Drainage and Wetlands~~

~~Fishery Resources~~

~~Wildlife Resources~~

~~Wetland Protection Regulations~~

~~Ecologically Significant Natural Areas~~

~~Vegetation~~

~~Soils Inventory, Urban/Rural Conflicts~~

~~Air Quality, Pollution Potentials~~

~~Noise Quality, Pollution Potentials~~

~~Groundwater Resources, High Groundwater and Weak Soils~~

~~Historical and Cultural Resource Inventory~~

~~Land Use Summary~~

~~Existing Land Use~~

~~Buildable Land Summary~~

~~Residential, Commercial and Industrial Demand~~

~~Population Forecast~~

~~Housing~~
~~Commercial/Industrial~~
~~Urbanization~~
~~Housing Inventory~~
~~Energy Conservation~~

~~(c) — Public Facilities:~~

~~Transportation~~
~~Public Services~~
~~Water Supply~~
~~Sewerage~~
~~Storm Drainage~~
~~Flooding and Natural Hazards~~
~~Recreation and Open Space~~
~~Schools~~
~~Electrical, Gas and Utilities~~

~~(2) — To portray material lending itself to graphic description, a series of clear mylar overlays were produced. This series of overlays was useful in describing to the advisory committees and the public much of the information necessary to reach planning decisions. The graphic overlays cover the following topics and are available for review at the Tualatin City Hall.~~

- ~~(a) — Slope Analysis (indicates areas that may be natural hazard areas).~~
- ~~(b) — Soils Classifications (indicates areas that may be natural hazard areas).~~
- ~~(c) — Water Areas and Wetlands (indicates areas that may be natural hazard areas).~~
- ~~(d) — Vegetation and Wildlife.~~
- ~~(e) — Recreation and Open Space Inventory.~~
- ~~(f) — Street Classifications and Capacities.~~
- ~~(g) — Major Street Inventory.~~
- ~~(h) — Existing Land Use.~~
- ~~(i) — Water Service Areas.~~
- ~~(j) — Sewer Service Areas.~~

~~(3) — To briefly acquaint the reader with some of the data that has been used in the Plan, the following summary has been written. The summary briefly describes the data and initial findings produced in the first planning phase. For a detailed review of data used in this Plan, please refer directly to Phase I— Technical Memoranda, City of Tualatin Historic Resource Technical Study and Inventory 1992-1993, City of Tualatin Natural Resource Inventory and Local Wetlands Inventory 1995, 2001 Transportation System Plan (TSP) and 2012 TSP Update (TSP Technical Memorandum, December 2012), and NW Tualatin Concept Plan 2005.~~

~~(Ord. 1103-02, 03-25-02; Ord. 1191-05, 6-27-05, Ord. 1354-13 §2, 02-25-13)~~

CHAPTER 3- TECHNICAL MEMORANDA

<u>Background and Supporting Documents Adopted as part of the Comprehensive Plan</u>		
<u>Title</u>	<u>Year</u>	<u>Ordinance</u>
<u>Economic Opportunities Analysis</u>	<u>2019</u>	<u>TBD</u>
<u>Housing Needs Analysis</u>	<u>2019</u>	<u>TBD</u> <u>1450-20</u>
<u>Parks and Recreation Master Plan</u>	<u>2019</u>	<u>1427-19</u>
<u>Sewer Master Plan</u>	<u>2019</u>	<u>1427-19</u>
<u>Water Master Plan</u>	<u>2013</u>	<u>1359-13</u>
<u>Transportation System Plan (TSP)</u>	<u>2012</u>	<u>1354-13</u>
<u>Natural Resource Inventory and Local Wetlands Inventory</u>	<u>1995</u>	<u>979-97</u>
<u>Historic Resource Technical Study and Inventory</u>	<u>1993</u>	<u>844-91;</u> <u>894-93</u>
<u>Tualatin Drainage Plan</u>	<u>1979</u>	<u>491-79</u>

Area-Specific Concept Plans

<u>Title</u>	<u>Year</u>	<u>Ordinance</u>
<u>Basalt Creek Concept Plan</u>	<u>2019</u>	<u>1418-19</u>
<u>Southwest Tualatin Concept Plan</u>	<u>2010</u>	<u>1321-11</u>
<u>Northwest Tualatin Concept Plan</u>	<u>2005</u>	<u>1191-05</u>

~~TDC 3.020. -- Citizen Participation.~~

~~Two questionnaires were used to aid the development of planning objectives. One assessed general community attitudes and asked residents to list Tualatin's assets and liabilities. The other polled commercial and industrial employees in the planning area regarding the need for housing for people who work in Tualatin.~~

(Ord. 1103-02, 03-25-02; Ord. 1354-13 §3, 02-25-13)

PART III: GOALS AND POLICIES:

CHAPTER 1 – COMMUNITY INVOLVEMENT

Purpose. The purpose of this chapter is to provide a framework for community input into the land use planning process and to meet Oregon Statewide Planning Goal 1 (Citizen Involvement). In Tualatin, Goal 1 is met by the Tualatin Planning Commission, an advisory body to the Tualatin City Council.

TDC 2.050. – Citizen Involvement.

- (1) ~~The first Statewide Planning Goal is the Citizen Involvement~~
- (2) ~~Goal. This goal provides that each community must adopt, implement and periodically review a citizen involvement program. In 1976, the Tualatin City Council appointed a seven member Committee for Citizen Involvement (CCI) to draft a Citizen Involvement Program. This program was adopted by the City Council on April 12, 1976, and has been the basis for the City's citizen involvement activities. After the adoption of the Citizen Involvement Program, the City Council formed two new advisory committees to provide recommendations to the Council on planning matters. These new groups were the Tualatin Planning Advisory Committee (TPAC), which became the Planning Commission in 2012, and the Urban Renewal Advisory Committee (URAC). URAC provides planning assistance to the Tualatin Development Commission on matters within the Urban Renewal Area, and the Planning Commission provides planning recommendations for the general community.~~
- (2) ~~The City Council transferred the Citizen Involvement Program responsibility to the Tualatin Planning Advisory Committee in 1976. This responsibility was transferred to the Tualatin Planning Commission in 2012.~~
- (3) ~~Another advisory group influencing the plan is the Tualatin Park Advisory Committee (TPARK). This committee over- sees the City's park and recreation pro-grams and thus has an interest in the park and recreation element of the Public Facilities Plan, which is also reflected on the community's General Land Use Plan. Both TPAC (changed to the Tualatin Planning Commission) and TPARK have met regularly to review the plan proposals and to take actions recommending this plan to the City Council. Meeting minutes and recordings are available for public review at the Tualatin City Hall. The powers, duties and organizational structure of TPAC (changed to the Tualatin Planning Commission) and TPARK are described in The Tualatin Municipal Code.~~

~~(Ord. 1119-02, 10-14-02; Ord. 1414-18, 12-10-2018)~~

Goals and Policies.

- **Goal 1.1** Implement community involvement practices in line with Statewide Planning Goal 1.
 - **Policy 1.1.1** Support community advisory committees to provide recommendations on planning matters.
 - **Policy 1.1.2** Foster civic pride and community spirit so as to improve the quality and quantity of citizen participation in local government and in community growth, change and improvement.
 - **Policy 1.1.3** Conduct the planning process with adequate input and feedback from citizens in each affected neighborhood.

CHAPTER 2 - COMMUNITY DESIGN

CHAPTER 10 - COMMUNITY DESIGN

TDC 10.010. - Background. Purpose.

~~In 1972 the City adopted an ordinance establishing an Architectural Review Board with powers to review the functional and esthetic aspects of each new City structure, excluding single family dwellings and minor remodeling. When adopting this ordinance, the City Council found that, "excessive uniformity, dissimilarity, inappropriateness or poor quality of design in the exterior appearance of structures and signs and, the lack of proper attention to site development and landscaping in the business, commercial industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use and value of land and improvement, adversely affects the stability and value of property, produces degeneration of property in such areas with attendant deterioration of conditions affecting the peace, health and welfare of the City, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor."~~

Purpose. The purpose of this chapter is to express elements of community design that guide functional and aesthetic development standards including those regarding site development, trees in the context of urban design, and sign regulation.

Goals and Policies.

- **Goal 2.1** Promote the City's natural beauty, and achieve pleasant environments for living and working that sustain the comfort, health, tranquility, and contentment of people who live, work, and enjoy time in Tualatin.
 - **Policy 2.1.1:** Encourage structures be planned in ways that relate to the site and surrounding context.
 - **Policy 2.1.2:** Encourage meaningful public engagement with community design projects ~~while also ensuring.~~
 - **Policy 2.1.3:** Promote design that fosters a sense of place and community identity through the Central Design District.
- **Goal 2.2** Promote the preservation and establishment of trees throughout the city, in order to protect and enhance the aesthetic character of Tualatin, protect and improve air and water quality, provide noise and visual screening, and protect habitat for wildlife.
 - **Policy 2.2.1:** Require the establishment and protection of street trees.
 - **Policy 2.2.2:** Promote the protection and establishment of trees during the development process.

TDC 10.020. – Design Objectives.

The City Council also adopted the following objectives as a part of the ordinance establishing the Architectural Review Board.

- ~~(1) — Encourage originality, flexibility and innovation in site planning and development, including the architecture, landscaping and graphic design of said development.~~
- ~~(2) — Discourage monotonous, drab, unsightly, dreary and inharmonious development.~~
- ~~(3) — Promote the City's natural beauty and visual character and charm by insuring that structures and other improvements are properly related to their sites, and to surrounding sites and structures, with due regard to the esthetic qualities of the natural terrain and landscaping, and that proper attention is given to exterior appearances of structures and other improvements.~~
- ~~(4) — Protect and enhance the City's appeal to tourists and visitors and thus support and stimulate business and industry and promote the desirability of investment and occupancy in business, commercial and industrial properties.~~
- ~~(5) — Stabilize and improve property values and prevent blighted areas and thus increase tax revenues.~~
- ~~(6) — Achieve the beneficial influence of pleasant environments for living and working on behavioral patterns and thus decrease the cost of governmental services.~~
- ~~(7) — Foster civic pride and community spirit so as to improve the quality and quantity of citizen participation in local government and in community growth, change and improvement.~~
- ~~(8) — Sustain the comfort, health, tranquility and contentment of residents and attract new residents by reason of the City's favorable environment; and thus promote and protect the peace, health and welfare of the City.~~

~~(10.020(3) amended by Ord. 960-96, §12, 5-28-96)~~

TDC 10.025. – Design Guidelines—Central Design District.

The Design Guidelines in TDC 73.600 and 73.610 apply to properties in the Central Design District as shown on Figure 73-4. The Design Guidelines are to be considered when evaluating development in the Central Design District.

~~(Ord. 1097-02, 02-11-02)~~

TDC 10.030. – Design Improvements.

While the City has been successful in improving the esthetic quality of the City, there remains considerable room for improvement. Weaknesses in the current design review program include the following:

- ~~(1) — Lack of strong community support for design excellence.~~
- ~~(2) — Lack of comprehensive and definitive architectural and landscape design standards for City development.~~

- ~~(3) — Lack of qualified staff and sufficient staff time to work with developers to achieve well-designed projects and enforce construction conformance with plans approved through the Architectural Review process.~~
- ~~(4) — Lack of underground electrical wiring program or other program to deal with overhead utility wiring.~~
- ~~(5) — Small but ineffective street tree program.~~

~~(Ord. 960-96, §2, 5-28-96)~~

~~(Ord. 960-96, §3, 5-28-96)~~

~~TDC 10.050. -- Tree Preservation and Street Tree Objectives.~~

~~This section describes the purpose of tree preservation and street tree provisions in the Planning District Standards.~~

- ~~(1) — Develop a program for tree conservation within the City, including control over tree removal, in order to protect and enhance the esthetic character of Tualatin, protect and improve air and water quality, provide and protect buffering and screening between land uses, and provide and protect habitat for wildlife, in order to create and preserve a desirable community in which to live, work, and invest.~~
 - ~~(a) — Tualatin's tree preservation goal is consistent with the general purpose of the Tualatin Community Plan, which is to guide the physical development of the City so as to preserve the natural beauty of the area while accommodating economic growth.~~
 - ~~(b) — Tualatin's tree preservation goal shall be implemented through adoption and administration of Planning District Standards consistent with this goal.~~
- ~~(2) — Develop a program for street tree planting along public rights-of-way within the City.~~

~~(Ord. 963-96, §1, 6-24-96; Ord. 1097-02, 02-11-02; Ord. 1227-07 §1, 2-12-07)~~

~~CHAPTER 20 -- SIGN DESIGN~~

~~TDC 20.010. -- Background.~~

- ~~(1) — The City of Tualatin is a community of natural beauty, quality architecture and landscaping and planned urban design. Signs are one of the more visual and prominent components of urbanscapes. Signs have a strong visual impact on the character and quality of the community. Signs are of primary concern to business owners, customers and the public. Clear and effective signage is essential to the successful operation of businesses and public and semi-public uses and can, without distraction, facilitate vehicular, bicycle and pedestrian movement. Signage can also, however, be a significant contributor to visual clutter and blight. Large, garish and/or numerous signs designed as "attention getters" are neither necessary nor desirable~~

~~in Tualatin's setting. With care, signs can serve to effectively identify uses and provide a positive contribution to the City's visual quality.~~

~~(2) The City of Tualatin competes with many other Oregon, national and international communities for economic opportunities. Since the City relies on its scenery and physical beauty to attract residents and commerce, esthetic considerations assume economic value. To ensure the City of Tualatin is a desirable community in which to live, vacation and conduct business and to protect the City's economic base, a visually pleasing, attractive environment is important and desired.~~

~~(Ord. 960-96, §1, 5-28-96)~~

~~TDC 20.020. -- Purpose.~~

~~The purpose of this chapter is to promote the public health, safety and welfare through a comprehensive system of effective sign Objectives.~~

~~(Ord. 960-96, §2, 5-28-96)~~

~~TDC 20.030. -- Objectives.~~

~~The following are the City's Sign Objectives.~~

- ~~**Goal 2.3:** Balance the right of free speech, business needs, public wayfinding, safety for all modes, and diverse aesthetic interests, through a functional sign regulation program.~~
 - ~~**Policy 2.3.1:** Protect public health and safety by limiting distracting signs, ensuring that signs do not interfere with multi-modal transportation safety, and ensuring safe construction and installation of signs.~~
 - ~~**Policy 2.3.2:** Align the range of allowed sign types with the urban design context, such as additional small signs in pedestrian-oriented development areas.~~
 - ~~**Policy 2.3.3:** Encourage attractive, creative, and unique sign types through the City's review program. Encourage the improvement and maintenance of non-conforming signs.~~

~~(1) Preserve the right of free speech exercised through the use of signs.~~

~~(2) Protect the public health, safety and welfare.~~

~~(3) Protect persons and property in rights-of-way from unsafe and dangerous signs that distract, rather than inform, motorists, bicyclists and pedestrians.~~

~~(4) Protect persons and property from unsafe and dangerous signs due to natural forces, including but not limited to wind, earthquakes, precipitation and floodwaters.~~

~~(5) Protect persons and property from unsafe and dangerous signs due to improper construction, repair and maintenance.~~

- ~~(6) — Protect and enhance the visual appearance of the City as a place to live, work, recreate, visit and drive through.~~
- ~~(7) — Protect and enhance the quality streetscapes, architecture, landscaping and urban character in Tualatin.~~
- ~~(8) — Protect and enhance property values.~~
- ~~(9) — Protect and enhance the City's economy.~~
- ~~(10) — Ensure the number, height and dimensions of signs allowed adequately identifies a business or use and does not result in sign clutter.~~
- ~~(11) — Allow greater sign heights and dimensions for Major Commercial Centers.~~
- ~~(12) — Allow only temporary signs on a property with no building.~~
- ~~(13) — Allow no new permanent sign, or a change of face on an existing permanent sign, on a property with an unoccupied building.~~
- ~~(14) — Allow permanent signs only on buildings, or parts of buildings, that are occupied.~~
- ~~(15) — Regulate the number, height and dimensions of temporary signs.~~
- ~~(16) — In the manufacturing and institutional planning districts allow permanent freestanding monument signs, but not permanent freestanding pole signs.~~
- ~~(17) — In the residential planning districts sign numbers, heights and dimensions for dwelling units shall be restricted and for conditional uses shall be consistent with the use.~~
- ~~(18) — Allow indirect and internal illumination in residential planning districts for conditional uses.~~
- ~~(19) — Allow greater sign diversity in the Central Urban Renewal District's Central Design District for uses on properties abutting the City owned promenade around the Lake of the Commons.~~
- ~~(20) — The wiring for electrically illuminated freestanding signs shall be underground and for wall signs shall be in the wall or a race.~~
- ~~(21) — Adopt sign regulations for the Mixed Use Commercial Overlay District that are consistent with the type and high quality of developments desired in the District. New sign types to be allowed are wall-mounted plaques and inlaid floor signs.~~
- ~~(22) — Adopt Sign Design standards and a Sign Design Review process for freestanding signs in commercial districts that encourage attractive and creative signage with varied design elements such as proportionally wider sign bases or pylons, a mix of exterior materials that have a relationship to building architecture, use of dimensional lettering and logos with halo or internal lighting and is consistent with the high quality of developments desired in commercial districts.~~
- ~~(23) — In Central Commercial and General Commercial planning districts, allow permanent freestanding monument signs on Arterial Streets, and restrict permanent freestanding pole signs to Collector or Local Commercial Street frontages.~~

~~(24) — Create an incentive for improvement of existing freestanding signs and adopt provisions allowing non-conforming freestanding signs in commercial districts to retain non-conforming sign status when structurally altered subject to improved compliance with Sign dimension and Sign Design standards.~~

(Ord. 960-96, §4, 5-28-96; Ord. 1120-02, 11-15-02; Ord. 1176-04, 11-22-04; Ord. 1216-06, 7-24-06; Ord. 1261-08 §1, 6-9-08.; Ord. 1302-10 §1, 5-24-10)

CHAPTER 3- HOUSING AND RESIDENTIAL GROWTH

This chapter replaces Tualatin Development Chapters 4 and 5, which are deleted in their entirety.

Purpose

This purpose of this chapter is to provide the community's goals and policies for housing and future residential growth in Tualatin, which are generally implemented by more specific provisions in the Tualatin Development Code. These goals and policies are based on Tualatin's most recent Housing Needs Analysis (Appendix ~~XXX~~A) and Housing Strategies (Appendix ~~XXX~~B), which are incorporated by reference into the Comprehensive Plan. Strategic actions are also included that reflect policies identified in the Housing Needs Analysis and Housing Strategies that are not implemented by Tualatin Development Code or may require further evaluation.

A Housing Needs Analysis examines a city's existing supply of buildable lands (Buildable Lands Inventory), and compares that with projected population growth, in order to identify housing needs for a 20 year period as well as housing and growth policy recommendations based on those needs. Tualatin's housing and residential growth chapter also incorporates Oregon state and Portland metropolitan regional housing policy. The state's housing policy guidance is provided by Oregon Statewide Planning Goal 10 and Oregon Administrative Rule (OAR) 660 Division 7. The Portland metropolitan region's housing guidance is provided by Metro Urban Growth Management Functional Plan Title 7.

Since the Tualatin Comprehensive Plan's initial adoption in the late 1970s, to present, the City's housing and residential growth have changed tremendously as Tualatin has experienced periods of rapid growth on its way from a small town comprised of mostly single-family housing to a medium-sized city with a diverse mix of housing types. Looking forward, as Tualatin's future housing needs and residential growth outlook continue to evolve, Tualatin is committed to regular periodic updates of its Buildable Lands Inventory and Housing Needs Analysis, which are incorporated by reference, and to the extent necessitated by these updates, updated Comprehensive Plan goals, policies, and strategic actions.

Goals and Policies

- **Goal 3.1: Housing Supply.** Ensure that a 20-year land supply is designated and has urban services planned to support the housing types and densities identified in the Housing Needs Analysis.
 - **Policy 3.1.1 Density.** Maintain a citywide residential density of at least eight (8) dwelling units per net acre.
 - **Policy 3.1.2 Zoning for multifamily.** Provide zoning for multifamily development, which may be located in areas adjacent to transit.
 - **Policy 3.1.3 Commercial activity.** Allow home-based businesses and occupations in all residential zones, subject to regulations to minimize impact to housing supply and uses in commercial and industrial zones. Provide for compatible agricultural uses in areas where significant development barriers are present, or where compatible with permitted residential uses.

- **Policy 3.1.4 Clear and objective review.** Provide for clear and objective review standards for all residential development and redevelopment.
- **Policy 3.1.5 Functional planning.** Consider the development-ready residential land supply as part of ongoing functional planning efforts to provide necessary urban services in support of residential development.
- **Policy 3.1.6 Infrastructure planning.** Evaluate future infrastructure planning for consistency with the Housing Needs Analysis and Housing Strategies.
- **Policy 3.1.7 Coordination.** Coordinate with local, state, and regional governments, districts, and stakeholders to support Tualatin's housing land supply needs.
- **Strategic Actions:**
 - Evaluate opportunities to increase development densities to address deficiencies identified in the Housing Needs Analysis within Tualatin's existing zones by modifying the Development Code.
 - Evaluate opportunities to rezone land to provide additional opportunities for multifamily housing development.
 - Evaluate Tualatin's land supply every two years, and make regular updates to the City's Buildable Lands Inventory and Housing Needs Analysis.
- **Goal 3.2: Housing for All.** Encourage development and preservation of housing that is affordable for all households in Tualatin.
 - **Policy 3.2.1 Housing type diversity.** Support development of townhomes, duplexes, triplexes, quadplexes, cottages, courtyard housing, accessory dwelling units, single story units, senior housing, and extended family and multi-generational housing in all residential zoning districts.
 - **Strategic Actions:**
 - Identify policies to support development of housing affordable to households earning less than 60% of the median family income in Washington County as identified in the most recent American Community Survey.
 - Develop policies to prevent and address homelessness.
 - Develop policies to prevent or mitigate residential displacement resulting from redevelopment and increases in housing costs in Tualatin.
 - Evaluate partnerships with organizations to establish a land bank or land trust.
 - Evaluate system development charge financing opportunities.
- **Goal 3.3: Affordable Housing.** Encourage the establishment of funding sources to support development of affordable housing and related public infrastructure.

- **Strategic Actions:**
 - Evaluate how best to leverage funds from regional, state, and other sources to support development of affordable housing.
 - Evaluate the establishment of local funding sources for affordable housing such as a construction excise tax.
- **Goal 3.4: Redevelopment.** Encourage timely strategic planning and redevelopment in Tualatin to create new mixed-use residential and commercial planning districts.
 - **Policy 3.4.1 Coordination.** Coordinate economic development planning and housing planning.
 - **Policy 3.4.2 Mixed-use commercial.** Support the application of mixed-use commercial designations that in areas of Tualatin that are suitable for a mix of office, retail commercial, and high-density housing.
 - **Strategic Actions:**
 - Evaluate establishment of a new urban renewal district to include a minimum 25% funding set aside for affordable housing for households earning 60% or MFI or less.
 - Evaluate incentivizing redevelopment to include a portion of housing that addresses deficiencies identified in the Housing Needs Analysis.
 - Evaluate policies and/or incentives to support redevelopment of underutilized commercial buildings for housing.
- **Goal 3.5: Housing and transportation.** Encourage development and redevelopment in Tualatin that supports all modes of transportation, including walking, biking, and mass transit.
 - **Policy 3.5.1 Coordinated planning.** Coordinate updates to the Transportation System Plan consistent with housing and residential growth goals, policies, and strategic actions.
 - **Strategic Actions:**
 - Evaluate development of a design and planning framework for neighborhoods that includes a mixture of housing types, neighborhood uses, and amenities, enabling Tualatin residents to access services and amenities through active modes.
- **Goal 3.6: Residential growth.** Residential growth by annexation or expansion to the Urban Planning Area or Urban Growth Boundary will be coordinated with local, state, and regional governments, districts, and stakeholders.
 - **Policy 3.6.1 Consent-driven annexation.** Only property owners may initiate annexation of property within Tualatin's Urban Planning Areas, including cases involving unincorporated "islands" of property surrounded by land annexed previously.

- **Policy 3.6.2 Coordination.** Coordination will be made with local, state, and regional governments, districts, and stakeholders on residential growth.
- **Goal 3.7 Residential growth, and the environment.** Plan for housing and residential growth to minimize and mitigate for environmental impacts.
 - **Policy 3.7.1 Environmental protection.** Housing and residential growth policies will be evaluated for consistency with the environmental protection goals and policies of Chapter 7 (Parks, Open Space, and the Environment).

CHAPTER 4 – ECONOMY, COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Purpose. The purpose of this chapter is to guide employment uses, planning, and development in Tualatin.

Tualatin’s Buildable Lands Inventory and Economic Opportunities Analysis provide a basis for understanding the current trends and projected demand for new commercial and industrial land.

TDC 3.070. – Economics, Housing and Employment.

~~(5) — Employment.~~

- ~~(a) — *Jobs in Portland.* Employment in the City of Tualatin is closely tied to economic prospects in the Portland Metropolitan Area. There has been a rapid growth in the commercial and governmental categories in the Portland area. Employment trends there reflect the shift from blue collar to white collar jobs. In 1970, 20,000 Washington County residents were employed in finance, insurance, real estate, and miscellaneous service jobs, while in 1960 only 4,000 of these jobs were available within the County.~~
- ~~(b) — *Jobs in Washington County.* In 1970 Washington County had 49,600 jobs. Half of the available jobs were in manufacturing, primarily because Tektronix employs 8,500 to 9,000 people in Washington County. Although Tualatin has more land in industrial zones than other communities of its size, future industrial growth can be expected to slow down as the standards for development increase. But, by the year 2000, an estimated 200 acres of future industrial land will be required in Tualatin. With current employment in industry at 1,165, it is projected that by the year 2000 there will be 7,210 industrial employees.~~

CHAPTER 6 - COMMERCIAL PLANNING DISTRICTS

TDC 6.010. – Background.

- ~~(1) — Commercial development in Tualatin has occurred primarily in the downtown area and near the City's two Interstate 5 Freeway interchanges at Lower Boones Ferry Road and Nyberg Street. Downtown development consists mostly of retail, service, and office uses ranging in size from small, locally owned firms to large national chain stores such as K-Mart. Development near the interchanges is predominantly automobile-oriented and includes motels, automobile service stations, and restaurants.~~
- ~~(2) — At present, there are approximately 165 acres of land zoned for commercial use, but only a little over 1/3 of this land is developed. Two factors account for the bulk of the undeveloped commercial land. First, much of this land is in large parcels (ten or more acres) owned by a few major developers such as Schnitzer Investment Corporation. These firms have held their land in anticipation of economic conditions favorable to large-scale commercial development. Second, much of the undeveloped~~

commercial land is in the 100-year flood plain of the Tualatin River and is thus subject to additional development costs necessary to comply with applicable flood plain regulations.

- (3) ~~Despite the large amount of undeveloped commercial land, a number of factors suggest that this land will be needed for commercial use during the planning period. First, the demand for additional goods and services will increase as Tualatin's population increases. Greater concentrations of population and the relatively high incomes of the area's residents will support increasingly specialized types of retail and service establishments. It should be noted that the adjoining communities of Durham, Rivergrove and Lake Grove are predominantly residential in character, with relatively little commercial development. Consequently, growth of these cities will increase the demand for available commercial land in Tualatin, particularly near the Lower Boones Ferry Road interchange with I-5. Second, the Lower Boones Ferry Road interchange area is subject to continued development pressure because of its accessibility for freeway travelers looking for gasoline, food, or lodging on their way to and from Portland. And finally, the City is located adjacent to three of the region's major transportation routes, the Interstate 5 and 205 Freeways and the State Highway 217 Expressway. This access to the remainder of the region and to the Willamette Valley provides an opportunity for larger-scale commercial and freeway-oriented developments.~~
- (4) ~~It should be noted that while most of Tualatin's residents work elsewhere, they will more likely work in the City if diversified job opportunities are available. Tualatin's supply of commercial land will thus eventually create additional diverse job opportunities and hopefully decrease Tualatin residents' needs to travel out of the community to find jobs.~~
- (5) ~~As mentioned above, the area north of the Tualatin River around the Lower Boones Ferry Road interchange is attractive for freeway-oriented commercial development. The present Comprehensive Plan designates most of the area as General Commercial, and considerable development has occurred in the area since 1970. However, a number of industrial firms are located throughout the area as a result of zoning established prior to the adoption of the existing Comprehensive Plan, creating land use conflicts between existing and potential commercial development. This Plan expands commercial use in two areas and preserves for light industrial use those areas that are already committed to industrial development. This was done because it was felt that the City had sufficient industrial land in the Western Industrial District and that proximity to the freeway interchange and the residential character of the area better lent itself to commercial use than industrial use.~~
- (6) ~~As much of the City's commercial land area is visible from the Interstate 5 Freeway and because all residents of Tualatin must pass through a commercial area before reaching their homes, it is important that esthetic design in commercial areas be sensitively handled. Generally, the design of a community's commercial area defines much of the community's character. Fortunately, the City has an Architectural Review process and an Urban Renewal Agency to help prevent inappropriate, unattractive development, but much more could be done to increase the quality of architectural and landscape design in commercial areas. Because much of Tualatin's commercial~~

land is forested, is visible from the freeway, or is adjacent to residential uses, land-extensive commercial uses, such as automobile, truck and machinery sales and rental, would be more appropriately located in the City's Western Industrial District where there are relatively large, flat and un-forested parcels of land. This area will have good access to freeways, and land-extensive commercial uses would not affect the industrial uses planned for this area.

- (7) The Roamer's Rest commercial area is unique in its character and history. It has served the needs of the traveling and recreating public for many years and forms a part of the history of the Portland metropolitan area. It is appropriate to continue the general land use pattern of highway and recreation oriented commercial activity in this area, even including the provision of housing in a mixed-use type of development. A specialized Planning District is necessary to accommodate the desired commercial activity without allowing other uses that are not oriented either to the river or the highway.
- (8) As Tualatin grows in terms of residents and employees, and as these individuals disperse more throughout the City rather than concentrating near the downtown area, there is an ever-increasing demand for commercial services in close proximity to the people. This demand is primarily for day-to-day shopping and service needs such as small grocery purchases, hair cutting and styling, etc. The creation of neighborhood commercial centers, through the use of the new Neighborhood Commercial (CN) Planning District, will not only provide these services to the residents and employees, it will work to reduce traffic by eliminating trips to the downtown commercial areas. This concept is not seen as having any negative impact on the downtown area, as the types of goods and services to be provided are small and limited in nature. It is critical, however, that the design of neighborhood commercial uses be such that they are of a residential character and enhance rather than detract from neighborhoods.
- (9) The provision of medical services to health care customers has changed rapidly since 1970. New equipment and procedures are now used as a result of fast-developing medical technology. More services and new community outreach activities are provided to customers. The doctor/hospital concept has evolved into a health care provider/medical center system. Stand-alone hospitals cannot now provide the facilities and services expected and needed by health care customers. In their place are multi-use medical centers providing a full range of medical facilities and health care services. The Meridian Park medical facility at SW 65th Avenue and SW Borland Road is an example of the conversion from individual hospital to full service medical center. In addition to the traditional hospital facilities, community outreach programs such as personal counseling, weight control, post-operative rehabilitation and substance abuse counseling are provided. Doctors now prefer their offices adjacent to the hospital building, rather than in a distant office district or in a downtown location as in the past.

A medical center should be located in a Medical Center Planning District. Medical centers are major employment centers which provide a stable employment base that is not as vulnerable to economic swings as most commercial and industrial employment centers. Meridian Park Hospital is a major employment center in Tualatin. It serves the City's residents as well as thousands of people in the south metropolitan Portland area

~~and beyond. The City of Tualatin has but one medical center providing a large number of medical facilities and health care services. It will expand in the future. A Medical Center District is provided to ensure that today's medical services and tomorrow's new medical technology will be available to the residents of Tualatin and the surrounding area.~~

~~(Ord. 592-83, §25, 6-13-83; Ord. 849-91, §3, 11-25-91; Ord. 827-91, §1, 3-25-91)~~

~~TDC 6.020. - Assumptions.~~

~~The following are general assumptions used to formulate this Plan:~~

- ~~(1) Demand for the City's commercial land will increase.~~
- ~~(2) Large-scale commercial enterprises will find Tualatin an increasingly attractive location.~~
- ~~(3) The City will become a commercial center serving a population much larger than its own.~~
- ~~(4) Retail commercial enterprises will locate primarily in the City's downtown area.~~
- ~~(5) Freeway service establishments and offices will locate adjacent to the City's freeway interchanges or will be visible from the Interstate 5 Freeway.~~
- ~~(6) Demand for hospital-related commercial development will occur near Meridian Park Hospital.~~
- ~~(7) The creation of residential and employment concentrations away from the downtown core will create the need for neighborhood commercial centers. These centers are intended to provide for day-to-day shopping and service needs and are not intended to be serious competition with businesses in the downtown area.~~

~~(Ord. 592-83, § 26, 6-13-83)~~

~~TDC 6.030. - Objectives.~~

Goals and Policies.

- **Goal 4.1: Encourage commercial development that provides employment opportunities, as well as access to goods and services for residents, employees, and the general community.**
 - **Policy 4.1.1 Location. Locate and design areas that allow commercial development in a manner that increases access to goods and services while minimizing traffic impacts, including the location of commercial services where accessible through transit and active transportation modes, the encouragement of mixed use development, and small neighborhood commercial nodes.**

- **Policy 4.1.2 Critical services.** Provide for the continued development of major medical services and other critical infrastructure within the City of Tualatin.
- **Policy 4.1.3 Design.** Encourage functional and attractive commercial development through standards for site design and landscaping.
- **Policy 4.1.4 Mixed Use.** Encourage mixed use commercial and residential development.

~~The following are general objectives used to guide the development of this Plan:~~

- ~~(1) Encourage commercial development.~~
- ~~(2) Provide increased employment opportunities.~~
- ~~(3) Provide shopping opportunities for surrounding communities.~~
- ~~(4) Locate and design commercial areas to minimize traffic congestion and maximize access.~~
- ~~(5) Continue to utilize specific and enforceable architectural and landscape design standards for commercial development.~~
- ~~(6) Encourage developers to consider solar access when designing commercial development projects.~~
- ~~(7) Provide for limited and carefully designed neighborhood commercial centers.~~
- ~~(8) Provide for the continued development of major medical services facilities in the City of Tualatin, especially at the Meridian Park Hospital site. The Medical Center Planning District shall be applied only to a property, or a group of contiguous properties, of no less than 25 acres and shall have frontage on an arterial as designated in TDC Chapter 11, Tualatin Community Plan.~~
- ~~(9) To work with the applicable jurisdictions and agencies to develop the Durham Quarry Site and Durham Quarry Area with high-quality development. It is appropriate to apply an overlay district on the Durham Quarry Site and Durham Quarry Area to allow mixed commercial/residential uses. It is appropriate to enter into an intergovernmental agreement with the City of Tigard and Washington County to allow the City of Tualatin to review and decide land use applications and building permit applications for the portion of the Durham Quarry Site in the City of Tigard.~~

~~(Ord. 592-83, §27, 6-13-83; Ord. 827-91, §2, 3-25-91; Ord. 1062.00, §2, 12-11-00; Ord. 1133-03, 3-24-03; Ord. 1062-00, 1-03-01)~~

~~(Ord. 1191-05; 6-27-05; Ord. 1321-11 §5, 4-25-11; Ord. No. 1418-19, § 1, 4-22-19)~~

~~**TDC 7.010. - Background.**~~

- ~~(1) Tualatin's relationship to road and rail access has provided a favorable environment for industrial development. The City's industrial area is bisected by two railroads, the Burlington Northern and the Southern Pacific, and is served by the Interstate 5~~

~~Freeway which, in turn, provides access to the Interstate 205 Freeway and the State Highway 217 Expressway. These transportation facilities provide good multi-mode access to the whole of the Portland Metropolitan Area, the Willamette Valley, and to national markets. Because the area has good access to the transportation system, large areas of land have been zoned for industrial use, both in the City and west of the City in Washington County.~~

TDC 7.015. – Manufacturing Planning Area Overview.

~~This section describes the history and nature of the Manufacturing Planning Area.~~

- ~~(1) The Industrial Planning Area is located in the southeastern portion of Washington County and immediately west of the developed portion of the City of Tualatin. It is within the Urban Growth Boundary and was annexed to Tualatin in November, 1982, except for a few individual parcels.~~
- ~~(2) The Industrial Planning Area is served by Pacific Highway (Highway 99W) as a direct route to Portland. It also is tied directly by Tualatin-Sherwood Road, and indirectly by Tualatin Road and Herman Road, to Interstate 5 with direct ties to the east via Interstate 205. It is crossed by Southern Pacific and Burlington Northern railroad lines.~~
- ~~(3) The area lies in the relatively flat lowlands of the Tualatin Valley, with farmland scattered throughout. Although the area is currently rural and suburban in nature, increasing pressure for development is occurring. This is noted by the construction of several new industrial uses within the planning area during the last ten years and the rapid growth of industrial use in the western portions of the City.~~
- ~~(4) The first settlement in the area was established in the mid-1800's. By the 1850's, all the land along the Tualatin River bank had been claimed and settlement began in earnest. The Technical Memoranda of The Tualatin Development Code provides a more detailed history of the City and its surrounding area.~~
- ~~(5) The Industrial Planning Area encompasses approximately 1,096 acres. Coupled with the industrial land that was already in the western portion of the City, the total Western Industrial District has 1,775 acres of land.~~
- ~~(6) The Tualatin area has experienced tremendous growth in the last decade. Population increased rapidly due to several factors, including land availability and buildup of employment opportunities through industrial development.~~
- ~~(7) The economy of the planning area is tied directly to that of Washington County and the Portland metropolitan area. At this time only 12 percent of Tualatin residents work in the City, while approximately 75 percent of the employees within the community live outside. Again, the City has determined that it is a community goal to expand as a regional employment center, increasing its percentage of total jobs in the region, and at the same time, providing additional residential and commercial opportunities so that more people can both live and work in Tualatin.~~

~~(Ord. 592-83, §29, 6-13-83. Ord. 1026-99, §6, 8-9-99)~~

TDC 7.016. – Planning Context.

This section describes the legal and political context for the planning work leading to the adoption of the Industrial Planning Area Plan Amendment.

- ~~(1) — *Introduction.* The preparation of the West Tualatin Industrial Planning Area Plan Amendment is not an isolated planning effort. There are many other policies on the local, regional and state level that provide the framework for this planning effort.~~
- ~~(2) — *Local Plans.* Of primary importance is the City's comprehensive plan, the Tualatin Community Plan. This plan amendment must be set in a direction that complies with and helps to implement the goals, policies and objectives of that document. Since the plan was adopted on October 22, 1979, the City has continued to experience a high rate of growth and has maintained an aggressive posture toward economic development. The addition of these industrial lands to the City is a direct result of the Goals and Objectives of the Plan. This amendment is designed to continue the advances that the Plan charted and the City has followed.~~
- ~~(3) — *Regional Plans.*
 - ~~(a) — The Industrial Planning Area and the entire City are part of the Metropolitan Service District (METRO), a regional government with jurisdiction for the urban portion of the tri-county metropolitan area. METRO is authorized by state law (ORS 197) to: 1) establish regional planning goals; 2) develop various functional plans for the district concerning housing, transportation, solid waste, drainage, and other region-wide issues; and 3) ensure that member jurisdictions conform to any regional planning elements which have been adopted by the METRO Council.~~
 - ~~(b) — METRO is responsible, specifically, for regional transportation planning and for defining and maintaining a regional Urban Growth Boundary (UGB). The UGB essentially delineates urban lands from rural and natural resource lands. Designed to include those lands needed to accommodate growth to the year 2000, the UGB must be respected and supported by METRO counties and cities in order for their comprehensive plans to achieve compliance with LGDC Goal 14—Urbanization. The UGB forms the southwest boundary of the Industrial Planning Area.~~
 - ~~(c) — Another regional planning effort that helps define this plan amendment is the work of Washington County embodied in the Comprehensive Framework Plan. This plan "allocates" the growth anticipated within the County to various geographic areas. This growth, in terms of both resident population and employment, was "assigned" on the basis of land availability, opportunities for economic development, transportation and utility availability, and other locational factors. The City will use these allocations as one of the bases for developing this plan amendment.~~
 - ~~(d) — In order to require and maintain effective coordination between Washington County and its various cities, including Tualatin, Urban Planning Area Agreements (UPAAs) have been drawn up. These identify areas of mutual planning interest and establish procedures allowing the cities and the County to~~~~

~~exchange information and comments on development and to coordinate planning for development in these areas.~~

~~(4) *Statewide Planning Goals.* Finally, at the State level, are the Statewide Planning Goals and Guidelines adopted by the Land Conservation and Development Commission (LCDC). The comprehensive plans of all cities and counties in the state must be directed towards meeting the goals. This amendment will address each of these goals as appropriate. However, it is not organized goal by goal, rather, it follows the format of the existing Community Plan and will deal with each goal in that framework. The Goals include:~~

- ~~(a) Citizen Involvement;~~
- ~~(b) Land Use Planning;~~
- ~~(c) Agricultural Lands;~~
- ~~(d) Forest Lands;~~
- ~~(e) Open Spaces, Scenic and Historic Areas, and Natural Resources;~~
- ~~(f) Air, Land and Water Resources Quality;~~
- ~~(g) Areas Subject to Natural Disasters and Hazards;~~
- ~~(h) Recreation;~~
- ~~(i) Economy of the State;~~
- ~~(j) Housing;~~
- ~~(k) Public Facilities and Services;~~
- ~~(l) Transportation;~~
- ~~(m) Energy Conservation;~~
- ~~(n) Urbanization.~~

~~(Ord. 592-83, §30, 6-13-83)~~

TDC 7.017. -- Planning Concept for the Manufacturing Planning Area.

~~This section describes the general intentions or concept for the Manufacturing Planning Area Plan:~~

~~(1) *Land Use Pattern.*~~

- ~~(a) Washington County has been working for many years in determining appropriate locations and configurations for various land uses throughout the County. The basic concept decisions have involved the major delineation between rural and urban land uses, and the appropriate locations for the various urban uses. These concepts, which are included in the Comprehensive Framework Plan, are based on professional analysis and input from a series of public hearings held in the fall of 1981. The conclusions for the basic concept all indicated that industrial development was and continues to be the most appropriate land use for the study area.~~

~~(b) With the annexation of the Industrial Planning Area to the City of Tualatin, the responsibility for determining this planning concept has shifted from the County to the City. However, Tualatin has determined that the County's basic analysis and conclusions are sound, and will continue to support and plan for future industrial use in this area. This is recognized as being totally in compliance with the City's goal of becoming a major employment center, and forms a natural extension of the existing industrial areas bordering the western edge of the former City limits.~~

~~(2) *Housing and Employment Allocations.*~~

~~(a) Allocations of new housing units and employment opportunities in terms of residential, commercial and industrial acreage have been made for each community planning area within the entire METRO UGB by METRO with the cooperation of each local government. This distribution of potential growth is necessary to show how future growth can be made compatible with the development concept and consistent with state, regional, and local plans and regulations.~~

~~(b) These area allocations together reflect the total County's share of the regional growth estimated for the year 2000 and beyond. For the existing unincorporated area of the County within the UGB (i.e., all land inside the UGB but outside the City limits of all cities in the county) approximately 90,000 additional people, 39,500 new homes, and 38,800 new jobs are expected by the year 2000. This allocation applies to the incorporated study area as it was prepared prior to the annexation.~~

~~(c) The Tualatin Development Code contains population projections that formed a basis of that planning effort and are also used in this process.~~

~~Those projections indicated that, if market trends are followed, the City of Tualatin will have a population of 28,721 by the year 2000, or an increase of 22,331 from the year 1980. This indicates that the City, meaning all lands within the total planning area, will absorb 24.8 percent of the growth that is projected for the unincorporated portions of the County within the UGB.~~

~~(d) The growth allocations are basically intended to be a planning tool that assures that the projected growth is accommodated in a manner that provides for adequate housing, public facilities and services and employment opportunities, "spreading" the need to absorb this growth fairly throughout the metropolitan area. Every jurisdiction has a legal responsibility to allocate enough land to meet the projected needs. Each community is to designate land in various use categories to accommodate the acreage totals assigned to it by METRO for a variety of housing densities and employment opportunities.~~

~~(e) In order to help assure that the rapidly changing needs for housing options were being met, the LGDC adopted an administrative rule setting certain "standards" for planning for new housing within the Portland metropolitan area, (known as the Metro Housing Rule). The City must provide the opportunity for a new residential construction mix of 50 percent detached units to 50 percent attached units. In~~

~~addition, the housing rule established an average residential density target for new construction of at least eight units per net buildable (acre).~~

~~(f) The County draft of the plan for the study area included an allocation of 8,372 new employees. This is distributed mostly at a density of five employees per acre. The City finds that this density projection is extremely low based on the current pattern in the area which is approximately 15 employees per acre. With the acreage available, the transportation and utility facilities available, and the very supportive attitude of the City, industrial land uses are anticipated that will generate three or more times the number of employees within the industrial planning area within the planning period.~~

~~(g) Therefore, the City recognizes the employment allocations of the County, but, finding them too small, will not be bound by them in planning for the industrial area or in encouraging and fostering economic development.~~

~~(Ord. 592-83, §31, 6-13-83; Ord. 1026-99, §7, 8-9-99)~~

TDC 7.020. – Assumptions.

The following are general assumptions used to formulate the Plan:

- ~~(1) The City can be expected to use a minimum of 25 acres of industrial land annually.~~
- ~~(2) Traffic access and sewer and water service problems associated with the Western Industrial District will be remedied as the area is developed.~~

~~(Ord. 592-83, §32, 6-13-83)~~

CHAPTER 7 - MANUFACTURING PLANNING DISTRICTS

~~(2) Most of the existing industrial land use in the Tualatin area is located between or adjacent to the Burlington Northern and Southern Pacific rail lines. Smaller pockets of industrial land occur immediately north of downtown Tualatin and in the vicinity of the Lower Boones Ferry Road/Interstate 5 Freeway interchange. The amount of land zoned for industrial use is substantial. The amount actually used is small. Data developed in the Phase I Technical Memoranda, together with supplementary information developed by the City's economic consultants, indicate that the Portland region annually absorbs 240 acres and Tualatin can be expected to utilize nine to 15 acres of industrial land per year. There are 1,975 acres of industrially zoned land within the Tualatin Study Area, and 304 acres are currently being used. The City contains 650 acres of industrially zoned land, with 577 of those acres now vacant. While some of Tualatin's industrially zoned land is poorly drained or has weak foundation soils, the majority of the industrially zoned land is either buildable or can be made buildable. Subtracting existing industrial uses and the worst drained areas, the City has approximately 450 acres of vacant industrial land within its City limits. While this industrial land supply exceeds that needed to meet the City's needs for the year 2000, few land parcels that were originally planned for industrial use were converted to other uses in the Plan. This was because industries that owned the land were committed to future development of their particular sites, and because most of~~

~~the area is impacted by existing scattered industrial development. Additionally, the City wishes to maximize industrial development within the City to produce revenue for public amenities in the City. A surplus of additional industrial land will help to maintain Tualatin's competitiveness in the industrial land market.~~

- ~~(3) The existing scattered distribution of industrial uses is a problem because it restricts choice of land use alternatives and makes it expensive to provide appropriate urban services such as public water and sewer service and fire protection. Consequently, this Plan emphasizes the short-term concentration of industrial development within the City limits.~~
- ~~(4) Industrial development in Washington County will affect Tualatin's industrial future. This area west of the City now contains scattered industrial development without public water or sewer services and minimum fire protection. While current County zoning allows only uses that have a minimum capital equipment investment and are not labor-intensive, the amount of industrially zoned land exceeds 1,000 acres, and the aggregate effect on traffic could impact the development of industrial land within the City. This is because most traffic traveling to and from this outlying industrial area must pass through the City's Nyberg Street/Tualatin-Sherwood Road corridor to reach the region's freeway system. As stated in the Transportation Plan, additional transportation access must be developed to minimize the effect of industrial development west of Tualatin. The proposed I-5-Norwood Road interchange would help to alleviate a portion of this problem. Additionally, it is anticipated that, because land values for land without standard urban public services are approximately ½ those values inside the City, there will be pressure to develop inexpensive County land before land in the City. More industrial growth west of the City could eventually place the City's roadway system at capacity before it has developed its proportionate share of industrial land, thus making it difficult to develop the remainder of the City's industrial land. In other words, the continued availability of inexpensive County industrial land could place City industrial land at a competitive disadvantage in the industrial land marketplace.~~
- ~~(5) Despite the problems described above, it is expected that lower-intensity industrial growth will continue to occur in Washington County west of the City, and that there will be increasing pressure to convert this land to full industrial development. Consequently, this area is eventually expected to become a part of the City of Tualatin, if the problems of transportation access can be solved. Consequently, it is an objective of this Plan to study methods of eventually accommodating, within the City, the industrial growth that is expected to occur in this area.~~
- ~~(6) Specific problems related to the development of land inside the City include poor drainage, poor north/south roadway access, lack of sewer and water services, and noise and other environmental problems. The central portion of the industrial area between Herman and Tualatin/Sherwood Roads is poorly drained and contains the Hedges Creek Marsh, the largest wetland area in Washington County. The Plan proposes the preservation of a portion of this approximately 80-acre natural area and anticipates the definition of an area surrounding the Marsh in which industrial development would be allowed. Currently, industrial traffic in Tualatin's central industrial area must travel long distances through downtown or on Cipole Road to~~

~~travel from southern to northern industrial areas. As many local industries utilize each others' services, it is inconvenient and uneconomic to continue this arrangement of roadways. Consequently, the Transportation Plan proposes a new north-south roadway through the central industrial area in the 102nd—104th corridor. Lack of sewer services in the northwestern portion of the City's main industrial area also has been a handicap to industrial development. Two newly formed local improvement districts, one for new roadway, sewer and water improvements in the 102nd—104th corridor, and one for a major interceptor sewer paralleling Tualatin and Herman Roads, have been implemented to solve the major utility and traffic circulation problems in the industrial area. Industrial noise and odors have already begun to affect adjacent residential areas. One of the objectives of this Plan element and other elements is to develop specific and enforceable design standards that minimize future environmental conflicts between industrial, commercial and residential land uses.~~

- ~~(7) One of the most efficient methods of minimizing industrial impacts on commercial and residential uses is to restrict the types and location of uses that are allowed in the City's industrial districts. The types of industrial uses contemplated by the Plan eliminate those uses which are considered most obnoxious, such as creosote treatment of products, manufacture of harmful chemicals, forge plants, and auto wrecking. Uses that are allowed will be in the medium-to-light intensity range, although they will be specifically referred to as "light" and "general" for ease of understanding. The light industrial uses are arranged in the Plan to be adjacent to residential areas to minimize environmental conflicts as much as possible. Because industrial processes change rapidly due to new technology, it is also intended that some industrial uses proposed in the general use category may be appropriate in a lighter use area, if properly designed to mitigate adverse environmental impacts.~~
- ~~(8) While most of Tualatin's industrial land is located between Tualatin Road and Avery Street in the western portion of the City, there are small amounts of industrial land located in the northern portion of the City and lying on either side of the Lower Boones Ferry Road/Interstate 5 Freeway interchange. The Plan has maintained, as industrial use, those areas that are now committed to industrial development. However, some land previously zoned industrial has been converted to a commercial designation because of the residential character of the area and proximity to the freeway. The industrial land in this area is designated on the Plan as light industrial because of the area's proximity to commercial and residential areas.~~
- ~~(9) In December 2002 METRO expanded the Urban Growth Boundary adding land west of Cipole Road and south of the north right-of-way line of SW Pacific Highway for industrial development to assist in meeting the overall regional need for a 20-year supply of industrial land.~~
- ~~(10) In December 2002 and June 2004 Metro expanded the Urban Growth Boundary to include 382 acres of land south of SW Tualatin Sherwood Road in the area east of a future 124th Avenue. 302 acres of this area were designated by Metro as Regionally Significant Industrial Area (RSIA) and the remaining acreage was designated Industrial. The area was addressed in the Southwest Tualatin Concept Plan and was accepted by the City in October 2010.~~

~~(11) In 2004, Metro expanded the Urban Growth Boundary to include the Basalt Creek Planning Area. The portion of this area within the City Urban Planning Area is generally south of SW Norwood Road and SW Helenius Street, east of 124th Avenue, west of I-5, and north of Basalt Creek Parkway. This area was addressed in the Basalt Creek Concept Plan and was accepted by the City in August 2018.~~

~~TDC 7.030. – Objectives~~

- **Goal 4.2** Encourage new industrial development in ways that strengthen the local tax base and support Tualatin’s industrial lands as a major local and regional employment center.
 - **Policy 4.2.1** Preserve and protect, with limited exceptions, the City's existing industrial land.
 - **Policy 4.2.2** Fully develop planned industrial areas, providing full transportation, sewer, and water services prior to or as development occurs.
 - **Policy 4.2.3** Cooperate with Washington County, Metro, and the State of Oregon to study the methods available for providing transportation, water, and sewer services to growing industrial areas.

- **Goal 4.3** Manage industrial impacts to the environment and other uses
 - **Policy 4.3.1** Cooperate with the Department of Environmental Quality and Metro to meet applicable air quality standards.
 - **Policy 4.3.2** Protect residential, commercial, and sensitive industrial uses from the adverse environmental impacts of industrial use.
 - **Policy 4.3.3** Protect adjacent land uses from noise and adverse environmental impacts by adopting industrial noise and environmental impact standards.
 - **Policy 4.3.4** Protect environmentally sensitive areas, including the Hedges Creek Wetland and Tonquin Scablands from adverse impacts of adjacent development.
 - **Policy 4.3.5** Encourage industrial firms to use co-generation as a means to utilize waste heat from industrial processes and consider solar access when designing industrial facilities.
 - **Policy 4.3.6** Protect wooded and other natural areas by requiring their preservation in a natural state or by integrating the major trees into the design of the parking lots, buildings, or more formal landscaping areas of an industrial development. If it is necessary to remove a portion or all of the trees, require mitigation.
 - **Policy 4.3.7** Administer specific and enforceable architectural and landscape design standards for industrial development.

- **Policy 4.3.8** Provide truck routes for industrial traffic that provide for efficient movement of goods while protecting the quality of residential areas.

(Ord. 592-83, 6-13-83; Ord. 1212-06, 6-26-06; Ord. 1321-11 §6, 04-25-11)

~~TDC 7.030. Objectives.~~

~~The following are general objectives used to guide development of the Plan and that should guide implementation of the Plan's recommendations:~~

- ~~(1) Encourage new industrial development.~~
- ~~(2) Provide increased local employment opportunity, moving from 12 percent local employment to 25 percent, while at the same time making the City, and in particular the Western Industrial District, a major regional employment center.~~
- ~~(3) Improve the financial capability of the City, through an increase in the tax base and the use of creative financing tools.~~
- ~~(4) Preserve and protect, with limited exceptions, the City's existing industrial land.~~
- ~~(5) Cooperate with Washington County, METRO, and the State of Oregon to study the methods available for providing transportation, water, and sewer services to the Western Industrial District.~~
- ~~(6) Fully develop the Western Industrial District and the Southwest Tualatin Concept Plan Area (SWCP), providing full transportation, sewer, and water services prior to or as development occurs.~~
- ~~(7) Improve traffic access to the Western Industrial District and SWCP area from the Interstate 5 freeway and State Highway 99W through regional improvements identified in the 2035 Regional Transportation Plan.~~
- ~~(8) Cooperate with the Department of Environmental Quality and METRO to meet applicable air quality standards by 1987.~~
- ~~(9) Construct a north/south major arterial street between Tualatin Road and Tualatin-Sherwood Road and SW Tonquin Road in the 124th Avenue alignment to serve the industrial area.~~
- ~~(10) Rebuild the Tualatin Road/Pacific Highway intersection to allow for substantially greater traffic flows.~~
- ~~(11) Provide truck routes for industrial traffic that provide for efficient movement of goods while protecting the quality of residential areas.~~
- ~~(12) Protect residential, commercial, and sensitive industrial uses from the adverse environmental impacts of industrial use.~~
- ~~(13) Protect adjacent land uses from noise impacts by adopting industrial noise standards.~~

- ~~(14) Continue to protect the Hedges Creek Wetland and Tonquin Scablands from adverse impacts of adjacent development.~~
- ~~(15) Continue to administer specific and enforceable architectural and landscape design standards for industrial development.~~
- ~~(16) Encourage industrial firms to use co-generation as a means to utilize waste heat from industrial processes and consider solar access when designing industrial facilities.~~
- ~~(17) Protect wooded areas identified on the Natural Features Map found in the Technical Memorandum by requiring their preservation in a natural state or by integrating the major trees into the design of the parking lots, buildings, or more formal landscaping areas of an industrial development. If it is necessary to remove a portion or all of the trees, the replacement landscape features shall be subject to approval through the Architectural Review process.~~

~~(Ord. 592-83, 6-13-83; Ord. 1212-06, 6-26-06; Ord. 1321-11 §6, 04-25-11)~~

CHAPTER 30 – TUALATIN URBAN RENEWAL PLAN

~~Tualatin has employed Urban Renewal Areas in the Tualatin Central Urban Renewal Plan (1984) and Leveton Tax Increment Plan (1985). Future Urban Renewal Areas may be employed to spur economic development, support infrastructure, and provide housing opportunity accessible to job centers.~~

TDC 30.010. – Urban Renewal Plan.

~~The Tualatin Urban Renewal Plan, 1975, as amended by the Tualatin Central Urban Renewal Plan, 1984, 1987, 1992, 2002, 2006, and 2009 and thereafter referred to as the "Tualatin Central Urban Renewal Plan," is hereby adopted as part of the Tualatin Community Plan and is incorporated by reference into the Tualatin Development Code.~~

~~(Ord. 730-87, §3, 9-14-87; Ord. 881-92, §3, 11-9-92; Ord. 882-92, §3, 12-14-92; Ord. 1108-02, 4-22-02; Ord. 1213-06, 7-10-06; Ord. 1290-09 §1, 10-12-09)~~

TDC 30.020. – Leveton Tax Increment Plan.

~~The Leveton Tax Increment Plan, 1985, as amended on June 26, 1989, December 12, 1994, March 23, 1998, November 22, 1999, and April 8, 2002, is adopted as part of the Tualatin Community Plan and is incorporated by reference into the Tualatin Development Code.~~

~~(Ord. 674-85 §3, 8-12-85; Ord. 778-89 §2, 7-10-89; Ord. 935-94 §1, 12-12-94; Ord. 1036-99 §1, 11-22-99; Ord. 1105-02, 4-8-02)~~

CHAPTER 5- OTHER LAND USE

Purpose. The purpose of this chapter is to guide the development of uses other than residential, industrial, commercial, open space, and mixed-use development, such as utilities and institutional uses:

TDC 3.060. -- Land Use.

- (1) ~~In August, 1977, an updated survey of existing land use within the Study Area was conducted by City staff. This was done by a combination of driving the area, utilizing previously developed land use information, and checking against aerial photographs. This information is mapped and summarized in the Technical Memoranda and is included in Tables 3-1, 3-2 and 3-3 of this Plan. As of September 1977, approximately 46 percent of the land within the City was urbanized, while only 15 percent of the land outside of the City was urbanized.~~
- (2) ~~Also inventoried and analyzed was the amount of land in the Study Area zoned in various categories compared to land actually in use. Within the City limits, approximately 45 percent of residential land, 48 percent of commercial land, and only 19 percent of industrial land is being utilized.~~
- (3) ~~An analysis was conducted to identify the amounts and locations of buildable land remaining within the Study Area:~~
- (a) ~~East.~~ Generally, most of the buildable land remaining within the City limits is located east of the I-5 Freeway. Since this area has not received City services, development has been only in those areas which connect to a sanitary facility.
- (b) ~~South.~~ In the southern Tualatin area, much buildable land remains outside of the City limits in prime residential areas. Services to this area are close to potential new development and were the basis for the inclusion of this area within the Immediate Growth Boundary.
- (c) ~~West.~~ In the west Tualatin area, most of the remaining buildable lands would easily serve industrial uses. Presently, lack of sewer and water services and flooding problems have caused this area to remain undeveloped. Until these problems are solved, industrial growth will be limited in this portion of the City. Additional residential growth can be accommodated in the west Tualatin area north of Tualatin Road and west of 105th Avenue.

Table 3-1
Existing Land Use Area
September 1977

	Approximate Acreage⁴

Land Use	Within City	Outside City, Within Study Area	Total
NON-URBANIZED LAND	1,214.02	2,341.31	3,555.33
RESIDENTIAL			
—RA Agriculture, Residential²	62.22	203.50	265.72
—LDR Low-Density Residential	498.80	.00	498.80
—MDR Medium-Density Residential	12.29	.00	12.29
—HDR High-Density Residential	19.34	.00	19.34
—M Mobile Home, Trailer Parks	14.22	24.42	38.64
Total Residential	606.87	227.92	834.79
COMMERCIAL			
—LC Local Commercial	.00	.00	.00
—CC Central Commercial	26.14	.00	26.14
INDUSTRIAL³			
—LI Light Industrial	22.24	19.38	41.62
—HI Heavy Industrial	101.46	161.74	263.20
—Total Industrial			
PUBLIC FACILITIES			
—ES Elementary School	30.58	.00	30.58
—HS High School	.00	.00	.00

CG Civic Center	1.21	.00	1.21
H Hospital	48.31	.00	48.31
T Cemetery	-	-	-
S Sewer Plant	.55	.00	80.65
W Water Reservoir	-	-	-
Total Public Facilities	80.65	.00	80.65
PARK AND OPEN SPACE			
Private Recreation Area	.00	9.56	9.56
NP Neighborhood Park	3.00	.00	3.00
CP Community Park	20.58	.00	20.58
RP Regional Park	.00	.00	.00
Total Parks	23.58	9.56	33.14
SEMI-PUBLIC/OTHER			
Churches	.92	7.59	8.51
PGE Substation	2.07	.00	2.07
Golf Course	134.08	.00	2.07
Total Semi-Public/Other	137.07	7.59	144.66
Grand Total Urbanized	1,027.08	431.98	1,459.06
TOTAL LAND AREA	2,241.10	2,773.29	5,014.39

1. This land use summary does not include major street right-of-ways.
2. RA uses were computed at an average of one acre per unit, based upon existing patterns in the study area.
3. An approximation of that portion of industrial land actually in use was made, since industries usually include substantial reserves for expansion.

**Table 3-2
Existing Zoned Area Summary
September 1977**

Zoning Category	Approximate Acreage ⁴		
	Within City	Outside City, Within Study Area	Total
RA1 Residential, Agriculture (Clackamas County)	195.97	189.80	385.77
SR Suburban Residential (Golf Course)	134.08	.00	134.08
R7 Low Density Residential	863.50	84.19	947.69
R15 Low Density Residential	.00	.00	.00
R30 Low Density Residential	.00	.00	.00
A-1 High Density Residential	162.65	.00	162.65
A-2 Medium Density Residential	13.50	.00	13.50
PUD Planned Unit Development	106.59	.00	106.59
Total Residential	1,476.29	273.99	1,750.28
CC Central/Retail Commercial	59.82	.00	59.82
GC General Commercial	54.72	4.50	59.22
Total Commercial	114.54	4.50	119.04
M-1 Heavy Manufacturing	455.68	.00	455.68

M-2 General Manufacturing	.00	.00	.00
M-3 Light Manufacturing	144.97	.00	144.97
M-4 Industrial Park	49.62	.00	49.62
Total Industrial	650.27	.00	650.27
FP Flood Plain District	.00	.00	.00
MAE Manufacturing Extensive (Washington County)	.00	1,197.63	1,197.63
MA2 Intensive Manufacturing (Washington County) (Similar to M-1)	.00	127.38	127.38
RS1 Suburban Residential (Washington County) (Similar to SR)	.00	954.00	954.00
RU4 Urban Residential (Washington County) (Similar to R7)	.00	63.32	63.32
RU20 Urban Residential (Washington County) (Similar to A-2)	.00	98.58	98.58
AF5 Agricultural and Forest District	.00	53.89	53.89
Total Other Categories	.00	2,494.80	2,494.80
Grand Total¹	2,241.10	2,773.29	5,014.39

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1. These figures do not include most of the right-of-way area in the City for streets.

**Table 3-3
Comparison: Existing Land Use vs. Zoned Land**

	Within City	Outside City, Within Study Area

Category	Land Use	Zoned	% Utilized	Land Use	Zoned	% Utilized
Low-Density Residential	575.25	1,059.47 ^A	54.30%	203.50	1,291.31	15.80%
Medium-Density Residential	12.29	120.09 ^B	10.20%	24.42	98.58	24.80%
High-Density Residential	19.34	162.65	11.90%	.00	.00	.00%
Total	606.87	1,342.21	45.20%	227.92	1,389.89	16.40%
Central-Commercial	26.14	59.82	43.70	.00	.00	.00
General-Commercial	29.07	54.72	53.10	5.79	4.50	126.60 ^C %
Total	55.21	114.54	48.20%	5.79	4.50	126.60 ^C %
Light-Industrial	22.24	194.59	11.40%	19.38	1,197.63	1.60%
Heavy-Industrial	101.46	455.68	22.30%	161.74	127.38	126.90 ^C %
Total	123.70	650.27	19.00%	181.12	1,325.01	13.70%
Public-Facilities	107.22	^D				
Semi-Public-Facilities	137.07	^D				

-

A. ~~134.08 acres zoned SR have been deleted since its use in the golf course.~~

B. ~~This figure includes the Schnitzer PUD, not yet built.~~

C. ~~Reflects a condition of non-conforming uses.~~

~~D.— Public and semi-public facilities are located within various zoning categories as conditional uses.~~

~~CHAPTER 8 – PUBLIC, SEMI-PUBLIC AND MISCELLANEOUS LAND USE~~

~~TDC 8.010. – Background.~~

- ~~(1) — There are several land uses that do not neatly fit into the normal residential, commercial or industrial land use categories. These are uses such as government offices, utility facilities, schools, churches and retirement homes. TDC 8.020 to 8.060 define the objectives for these miscellaneous facilities.~~
- ~~(2) — Trends in land development, particularly related to religious institutions, schools, and public parks, have shifted over time, away from development of relatively small structures and facilities located on relatively small lots, which serve a single purpose, towards large campus-style developments consisting of multiple structures or facilities located on large parcels of land, which often serve multiple purposes and provide multiple services. Religious institutions, schools, and parks are also increasingly exhibiting a trend towards constantly changing programs, uses, and facility improvements to reflect and respond to shifting demographic patterns and evolving needs of the community they serve. The particular needs of, and the City's assumptions and objectives for, development of large campus-style institutional uses which may not readily conform with development patterns and standards in normal residential, commercial or industrial land use categories are set forth in TDC 8.090 and 8.100.~~

~~(Ord. 849-91, §4, 11-25-91; Ord. 1216-06, 7-24-06)~~

~~TDC 8.020. – General Government Services.~~

~~This category includes a variety of dissimilar uses from general offices to public works shops. The objectives for the location of these uses are to:~~

- ~~(1) — Locate, when possible, general government offices in the Urban Renewal Area, preferably in a common building on the City's proposed Civic Center site.~~
- ~~(2) — Locate facilities such as the City's Operations Center in the City's western industrial area.~~

- **Goal 5.1 Location of public services and utilities.** Locate public services and utilities in a manner that minimizes negative impacts and enhances public benefits.
 - **Policy 5.1.1 Government Services.** Locate government offices in a central location that serves the public, except operations functions, which may be appropriately located in the industrial districts. (
 - **Policy 5.1.2 Public safety.** Locate facilities such as utilities and other critical infrastructure to minimize the risk of hazards the facility may pose to surrounding uses, or risks that natural or other hazards may pose to the facility and surrounding uses alike.

- **Policy 5.1.3 Compatibility.** Encourage attractive design, screening, and use of landscaping to moderate visual impacts of utilities and public facilities with their urban design context.
- **Policy 5.1.4 School siting.** Locate schools to complement neighborhood park facilities and integrate the location of schools with surrounding residential neighborhoods. Locate schools to support multi-modal access and to avoid impacts from industrial or other uses that could be harmful to student health.
- **Policy 5.1.5 Child care siting.** Allow the location of child care facilities within commercial, residential, and light industrial areas consistent with state law.
- **Policy 5.1.6 Wireless facilities.** Allow the siting of wireless communication facilities consistent with federal and state law, while encouraging design measures to mitigate visual impacts of facilities and encourage safety and sound construction. Encourage siting strategies that reduce redundant facilities.
- **Policy 5.1.7 Intergovernmental cooperation.** Cooperate with local school districts to plan adequate facilities. Actively involve school districts where school capacity or regulations applicable to school facilities may be considered. Cooperate with regional, state, and federal agencies in planning for medical facilities, solid waste.
- **Goal 5.2 Location of residential facilities, medical facilities, and religious institutions.** Allow flexibility to allow residential facilities, medical facilities, and religious institutions in residential, commercial, and mixed use areas while managing impacts between uses.
 - **Policy 5.2.1** Allow the location of religious institutions as retirement homes and hospitals in commercial and residential planning districts, subject to conditional use approval, and allow congregate care facilities, assisted living facilities and residential care facilities and hospitals as permitted uses in the Medical Center District.
 - **Policy 5.2.2** Allow residential facilities and residential homes as permitted uses in all residential planning districts.
 - **Policy 5.2.3** Limit the siting of residential facilities, retirement homes, and medical services in industrial areas.
 - **Policy 5.2.4** Ensure that service uses with the potential for increased traffic impacts are appropriately served by surrounding transportation infrastructure.
- ~~(1) Prohibit uses such as residential facilities, retirement homes and hospitals in industrial planning districts.~~

- ~~(2) Allow uses such as churches, retirement homes and hospitals in commercial and residential planning districts, subject to conditional use approval, and allow congregate care facilities, assisted living facilities and residential care facilities and hospitals as permitted uses in the Medical Center District.~~
- ~~(3) Allow residential facilities and residential homes as permitted uses in all residential planning districts, and allow residential facilities as a conditional use in planning districts where multiple family development is a conditional use.~~
- ~~(4) Locate uses such as churches, retirement homes and hospitals that are in residential planning districts adjacent to arterial or collector streets and close to the City's park areas.~~
- ~~(5) Cooperate with the appropriate federal, state and regional agencies to assess health care services for the area.~~
- ~~(6) Provide Institutional Planning District areas of the City that are of an appropriate size, have access to a collector or arterial street, and are served by adequate public facilities in order to accommodate churches, or religious institutions, as permitted uses.~~

TDC 8.030. – Utility Facility.

~~This category includes land uses such as public utility facilities, e.g., water reservoirs, water and sewerage pump stations, pressure reading stations; electrical substations; telephone exchange or switching facilities; and natural gas pumping facilities owned, operated and maintained either by a public agency or for profit entity. These facilities generally cannot be placed in a single planning district, but must be placed to best serve the utility system. Consequently, these uses may be located in any planning district, but must meet the following objectives:~~

- ~~(1) Be designed attractively to blend with adjacent development, particularly in residential areas.~~
- ~~(2) Be located and designed, if of a hazardous nature, to protect adjacent development from potential harm or damage.~~
- ~~(3) Subject aboveground utility facilities, i.e., buildings, tanks, fencing, screen walls and landscaping, to review through the City's Architectural Review process.~~

~~(Ord. 965-96, §1, 12-9-96).~~

TDC 8.040. – Schools.

- ~~(1) This category includes land uses associated with services generally provided by the public school system, although in some cases educational services may be provided by religious or business organizations. The objectives for these facilities are to:

 - ~~(a) Cooperate with local school districts to plan for adequate educational services commensurate with the growth of the City.~~~~

- ~~(b) Locate elementary school sites, wherever possible, adjacent to neighborhood park sites, and integrate the location of such schools into the residential neighborhoods they are designated to serve.~~
 - ~~(c) Locate junior high or high school sites adjacent to arterial or collector streets.~~
 - ~~(d) Locate all schools providing primary and secondary education as far as possible from commercial and industrial districts, unless the education provided would be vocational in nature.~~
 - ~~(e) Locate vocational schools in commercial or industrial districts commensurate with the type of education being provided.~~
 - ~~(f) Work collaboratively with the Tigard-Tualatin School District, the City of Tigard, Washington County and other interested parties to address the requirements of Senate Bill 908 passed by the 1993 Legislature (Oregon Revised Statutes 195.110). The City of Tualatin shall work collaboratively to revise the Tigard-Tualatin School District's School Facility Plan adopted November 2, 1995.~~
 - ~~(g) The City shall enter into an intergovernmental agreement with the Tigard-Tualatin School District to agree, to the greatest extent possible, on the criteria for the capacity of school facilities.~~
 - ~~(h) The City accepts these school facility capacity criteria as set forth in the School Facility Plan as its own for purposes of evaluating applications for a comprehensive plan amendment or for a residential land use regulation amendment.~~
 - ~~(i) The City shall provide notice to the Tigard-Tualatin School District when considering a plan or land use regulation amendment that significantly impacts school capacity.~~
- ~~(2) It should be noted that a discussion of public schools in the Tualatin area occurs within TDC 3.080(8) of this Plan. The general locations of neighborhood elementary school/park sites are indicated on the Park, Greenways and Bikeways Map contained in TDC Chapter 15, Parks and Recreation.~~

(Ord. 964-96, §3, 6-24-96)

~~TDC 8.050. - Churches, Retirement Homes, Residential Facilities and Hospitals.~~

~~This range of land uses has varied locational requirements because of the frequency of use, the nature of the use, and other factors. None of these uses should be located in an industrial planning district. They should be located in commercial and residential districts, with certain restrictions. Congregate care facilities, assisted living facilities, residential care facilities, and hospitals should also be located in the Medical Center District. Because their locational possibilities and character are so varied, they should be considered as conditional uses in all commercial and residential planning districts, except where such a requirement would violate land use or other provisions of Oregon state statutes or federal laws such as the Fair Housing Amendments Act of 1988,~~

~~should be located with good access to arterial or collector streets, and should be close to the City's park areas. Churches, or religious institutions, should be considered as permitted uses in the Institutional Planning District. Congregate care facilities, assisted living facilities and residential care facilities and hospitals should be considered as permitted uses in the Medical Center District. Consequently, the objectives for these uses are to:~~

- ~~(1) Prohibit uses such as residential facilities, retirement homes and hospitals in industrial planning districts.~~
- ~~(2) Allow uses such as churches, retirement homes and hospitals in commercial and residential planning districts, subject to conditional use approval, and allow congregate care facilities, assisted living facilities and residential care facilities and hospitals as permitted uses in the Medical Center District.~~
- ~~(3) Allow residential facilities and residential homes as permitted uses in all residential planning districts, and allow residential facilities as a conditional use in planning districts where multiple family development is a conditional use.~~
- ~~(4) Locate uses such as churches, retirement homes and hospitals that are in residential planning districts adjacent to arterial or collector streets and close to the City's park areas.~~
- ~~(5) Cooperate with the appropriate federal, state and regional agencies to assess health care services for the area.~~
- ~~(6) Provide Institutional Planning District areas of the City that are of an appropriate size, have access to a collector or arterial street, and are served by adequate public facilities in order to accommodate churches, or religious institutions, as permitted uses.~~

~~(Ord. 827-91, §4, 3-25-91; Ord. 849-91, §5, 11-25-91; Ord. 970-97, § 1 and 2, 2-10-97; Ord. 1133-03, 3-24-03; Ord. 1216-06, 7-24-06)~~

~~**TDC 8.060. -- Solid Waste Disposal Sites.**~~

- ~~(1) Solid waste disposal is a regional concern requiring regional solutions. The City recognizes MSD's responsibility and authority to prepare and implement a solid waste management plan, supports the MSD "Procedures for Siting Sanitary Landfills," and will participate in these procedures as appropriate.~~
- ~~(2) The City contains one identified solid waste site north of Bridgeport Road. This site is known as the "Durham Pits" site, as identified in an MSD report entitled "Disposal Siting Alternatives."~~

~~**TDC 8.070. -- Day Care Facilities.**~~

~~Because day care is needed both by residents and employees who commute into the City, day care facilities should be located in areas convenient for commuters as well as residents, including commercial, residential, and some industrial areas. Day care centers should be located with good access to arterial or collector streets, and should be close to the City's park areas. Day care facilities should not be located close to~~

~~automobile service stations, or where they will be surrounded by industrial uses. However, industrial perimeter areas where they can easily serve both residents and employees of nearby firms are suitable. The impact of a day care center on a residential neighborhood, in terms of noise and traffic generation, differs from that of residences and should be reviewed before it is permitted there. Consequently, the objectives for day care centers are to:~~

- ~~(1) Facilitate creation of adequate child care facilities within the community by limiting local requirements, recognizing the role of the state's Children's Services Division in certifying such facilities. Accordingly, day care centers should be allowed as permitted uses in commercial and light industrial areas.~~
- ~~(2) Encourage family day care providers to operate in residential and commercial areas by permitting them outright.~~
- ~~(3) Protect residential areas from potential adverse impacts of day care centers through the conditional use process.~~
- ~~(4) Locate day care centers adjacent to arterial or collector streets and close to the City's park areas.~~
- ~~(5) Allow child day care centers as a conditional accessory use in the Institutional Planning District in order that residents utilizing the services of the school, church or park in the Institutional Planning District may also have access to on-site day care services, while still ensuring that any potential impacts are adequately mitigated through the conditional use process.~~

~~(Ord. 849-91, §6, 11-25-91; Ord. 1216-06, 7-24-06)~~

~~TDC 8.080. – Wireless Communication Facilities.~~

~~This category includes land uses that transmit or receive radio frequency signals through the airwaves. The objectives for these facilities are:~~

- ~~(1) To minimize the visual impacts associated with wireless communication facilities.~~
- ~~(2) To provide a wide range of locations for wireless communication facilities.~~
- ~~(3) To encourage creative approaches in locating wireless communication facilities that will blend with their surroundings.~~
- ~~(4) To coordinate the review of new wireless communication facilities with the Federal Communication Commission, Federal Aviation Administration and Oregon Department of Transportation Aeronautics Division.~~
- ~~(5) To comply with the requirements of the 1996 Federal Telecommunications Act.~~
- ~~(6) To encourage co-location of wireless communication facilities to reduce the number of facilities in the community.~~

~~(Ord. 965-96, §2-12-9-96)~~

~~TDC 8.090. – Institutional Planning District Assumptions.~~

~~The following are general assumptions used to formulate this Plan:~~

- ~~(1) The City recognizes that religious institutions, schools, and public parks play an important role in the community by providing a multitude of services and hosting a wide variety of activities.~~
- ~~(2) Religious institutions, schools, and public parks can have particular land development needs to accommodate large-scale campus-style improvements, which may not readily conform with development patterns and standards in normal residential, commercial or industrial land use categories.~~
- ~~(3) The City's population is projected to continue to grow. Demand for large campus-style religious institutions, schools, and public parks, designed to serve multiple purposes and provide multiple services to the community, will increase as the City's population continues to increase.~~
- ~~(4) Development of large-scale campus-style religious institutions, schools, and public parks in normal residential, commercial or manufacturing planning districts results in consumption of large parcels of land in those planning districts, and thereby precludes utilization of land in those districts for the primary purposes for which they are intended, which is housing, retail, office, and manufacturing uses. Creation of an Institutional Planning District helps to preserve land in residential, commercial, and manufacturing districts for the primary purposes for which those districts are intended.~~

~~(Ord. 1216-06, 7-24-06)~~

CHAPTER ~~16~~6 – HISTORIC PRESERVATION

CHAPTER 6 – HISTORIC PRESERVATION

TDC 3.050. – Historical and Cultural Resources.

~~Few reminders of the first settling and growth of Tualatin remain.~~

- ~~(1) — *Identified.* Most of the buildings with historical value are in the downtown area. The Tualatin Urban Renewal Plan identifies seven structures: four residences, one commercial building, a church, and the old City Hall. The Urban Renewal Plan has designated a portion of the downtown as a historic district.~~
- ~~(2) — *Unidentified.* There are numerous opportunities to identify historical sites by markers and remember early settlers by naming new developments for them. Avery Street could be publicly recognized as an old Indian trail. Preservation of the old structures and sites acknowledges them as a cultural resource.~~

TDC 16.010. – Background.

Purpose. The purpose of this chapter is to guide the conservation of historic resources in the City of Tualatin. The City’s Historic Resource Technical Study and Inventory (1993) provides the basis for identifying historic and cultural resources within the City of Tualatin.

~~Tualatin's history is directly tied to the agricultural based economy which historically supported the majority of its residents. The development patterns from this agricultural base left a scattering of residential dwellings and structures on the landscape with a small core area for retail activities. This pattern continued until the 1970's when rapid growth came to the area. From the 1970's to 1991 the City experienced rapid growth in residential, commercial and industrial activities. The once thriving agricultural economic base was transformed into a suburban extension of the Portland Metropolitan area. Along with this economic prosperity came the loss of many of the historic resources which once identified the community.~~

~~The City of Tualatin Comprehensive Plan—Phase I—Technical Memoranda developed in 1979 identified seven structures in the central area of downtown. These structures were subsequently given historic status and regulations pertaining to modifications, demolitions and alterations for the designated resources were adopted and integrated into the Tualatin Development Code. The Technical Memoranda further indicated additional historic resources are located in Tualatin and that urban development would cause the loss of these resources. The report concluded that the City should investigate ways to preserve the history of the community.~~

~~_(Ord. No. 844-91, §1, 10-14-91)~~

TDC 16.020. – Assumptions.

~~The following are general assumptions used to formulate the Historic Preservation Plan:~~

- ~~(1) The demand for the City's residential, commercial and industrial land will continue and will create pressure to demolish and remove historic resources.~~
- ~~(2) Residential, commercial and industrial development has caused a number of the historic resources in the City to be demolished, relocated or altered.~~
- ~~(3) The City has historic resources which have not been identified or inventoried.~~
- ~~(4) Alterations have occurred to buildings, structures and sites which have diminished their value as historic resources.~~
- ~~(5) A mechanism needs to be established to provide an ongoing survey of the City's historic resources.~~
- ~~(6) Many of Tualatin's historic resources have been lost due to an inadequate comprehensive plan element concerning historic preservation.~~
- ~~(Ord. No. 844-91, §2, 10-14-91)~~

- **Goal 6.1: Preservation.** Promote the historic, educational, architectural, cultural, economic, and general welfare of the public through the identification, preservation, restoration, rehabilitation, protection and use of those buildings, structures, sites and objects of historic interest within the City.
 - **Policy 6.1.1** Strengthen the economy of the City by encouraging property owners to preserve historic resources for tourists, visitors and residents.
 - **Policy 6.1.2** Identify and preserve diverse architectural styles reflecting periods of the City's historical and architectural development, encourage complementary design and construction for alterations affecting historic resources and encourage relocation of historic resources over demolition.
 - **Policy 6.1.3** Identify and resolve conflicts between the preservation of historic resources and alternative land uses.
 - **Policy 6.1.5** Integrate the management of historic resources into public and private land management and development processes.
 - **Policy 6.1.6** Upon annexation, potential historic resources located outside of the City, but within the City's planning area shall proceed through the significance review, conflicting use and economic, social, environmental and energy analysis.
 - **Policy 6.1.7** Identify and list additional properties to the current list of protected historic resources. Review the impacts on landmarks when public improvement projects are proposed.
 - **Policy 6.1.8** Retain landmarks on parcels which cannot be partitioned or subdivided by preserving and not demolishing or relocating them. Retain landmarks located on parcels which can be partitioned or subdivided by property owners and developers integrating the resource into proposed lot configurations and development proposals.

- **Policy 6.1.9 Encourage adaptive use.** Allow conflicting uses where necessary to encourage preservation and maintenance of historic resources. Favor relocation over demolition.
- **Goal 6.2: Education.** Foster community and neighborhood pride and sense of identity based on recognition and use of historic resources.
 - **Policy 6.2.1 Encourage public awareness, understanding and appreciation of the City's history and culture.** Promote the enjoyment and use of historic resources appropriate for the education and recreation of the people of Tualatin.

~~The objectives of the Historic Preservation Plan are to:~~

- ~~(1) Promote the historic, educational, architectural, cultural, economic, and general welfare of the public through the identification, preservation, restoration, rehabilitation, protection and use of those buildings, structures, sites and objects of historic interest within the City;~~
- ~~(2) Foster community and neighborhood pride and sense of identity based on recognition and use of historic resources;~~
- ~~(3) Strengthen the economy of the City by encouraging property owners to preserve historic resources for tourists, visitors and residents;~~
- ~~(4) Encourage public awareness, understanding and appreciation of the City's history and culture;~~
- ~~(5) Promote the enjoyment and use of historic resources appropriate for the education and recreation of the people of Tualatin;~~
- ~~(6) Identify and preserve diverse architectural styles reflecting periods of the City's historical and architectural development, encourage complementary design and construction for alterations affecting historic resources and encourage relocation of historic resources over demolition;~~
- ~~(7) Enhance property values and increase economic and financial benefits to the City and its inhabitants;~~
- ~~(8) Identify and resolve conflicts between the preservation of historic resources and alternative land uses;~~
- ~~(9) Integrate the management of historic resources into public and private land management and development processes;~~
- ~~(10) Carry out the provisions of Statewide Planning Goal 5;~~
- ~~(11) Prepare a report describing the comprehensive history of the City's past; and~~
- ~~(12) Identify and list additional properties to the current list of protected historic resources.~~

- ~~(13) Upon annexation, potential historic resources located outside of the City, but within the City's planning area shall proceed through the significance review, conflicting use and economic, social, environmental and energy analysis;~~
- ~~(14) Review the impacts on landmarks when public improvement projects are proposed;~~
- ~~(15) Retain landmarks in the Low Density Residential (RL) Planning District on parcels which cannot be partitioned or subdivided by preserving and not demolishing or relocating them;~~
- ~~(16) Retain landmarks located on parcels which can be partitioned or subdivided in the Low Density Residential (RL) Planning District by property owners and developers integrating the resource into proposed lot configurations and development proposals;~~
- ~~(17) Allow conflicting uses and/or adaptive reuse of the Sweek House and Smith/Boone House while maintaining the architectural integrity of the two structures and discourage relocation or demolition;~~
- ~~(18) Allow conflicting uses to develop on the undeveloped portion of the Winona Cemetery property while maintaining the existing cemetery;~~
- ~~(19) Allow adaptive reuse of the structure at 6825 SW Childs Road and discourage relocation and demolition;~~
- ~~(20) Encourage adaptive reuse of landmarks in commercial planning districts and discourage relocation and demolition;~~
- ~~(21) Encourage conflicting uses on the Isaac Ball site while maintaining the architectural integrity of the landmark;~~
- ~~(22) Allow conflicting uses on the Little White House site and encourage relocation over demolition;~~
- ~~(23) Allow conflicting uses on the Smith Row House site, and encourage relocation over demolition;~~
- ~~(24) Preserve the Cipole School while allowing conflicting uses to occur on undeveloped portions of the site; and~~
- ~~(25) Allow conflicting uses in manufacturing planning districts and encourage relocation over demolition.~~

~~(Ord. No. 844-91, §3, 10-14-91. Ord. No. 894-93, §2, 5-24-93)~~

CHAPTER 7 - PARKS, OPEN SPACE, ENVIRONMENT

Purpose. The purpose of this chapter is to guide the conservation of natural resources and open space areas, as well as the development of recreational areas and trails.

TDC 3.030.—Natural Resources.

Renewable and nonrenewable natural resources were listed along with an inventory of soil types, air pollution potentials, and noise pollution potentials.

(1)—Geology.

- ~~(a)—Uplands. The southern half of the Study Area consists of irregular uplands varying from 250 feet to 550 feet in relief, with several small creeks draining to the north. These uplands grade into a northward-sloping terrace at an estimated elevation of 250 feet.~~
- ~~(b)—Low-Lying Areas. Columbia River Basalt underlies the valley and is covered with a fine-grain sedimentary material consisting of silts and clays. Flood-deposited sand, gravel and boulders occur over some parts of the area.~~
- ~~(c)—Tualatin River. The Tualatin River originates on the eastern slope of the Coast Range. The watershed averages 40 miles long and 25 miles wide, draining 711 square miles before entering the Willamette River. About 1/2 of the watershed is in the valley, where the stream is flat with wide flood plains.~~
- ~~(d)—Drainages. Numerous minor drainages into the Tualatin River within the Study Area have required the development of a Drainage Plan for the City of Tualatin. Major drainage basins within the Study Area are Hedges Creek and Nyberg Creek. Saum Creek and Athee Creek also have substantial drainage areas within the planning area. The majority of drainage structures within the City of Tualatin are open ditches and creeks combined with culverts at road crossings.~~
- ~~(e)—Wetlands. Wetlands are mapped as areas of shallow groundwater tables subject to frequent inundation that have developed vegetation tolerant of abundant soil moisture. Wetlands are often transition areas between uplands and waterways. These areas commonly store flood waters, provide wildlife habitat, and supply primary protection to the adjacent waterway ecosystems. Hedges Creek Wetland is the largest wetland area in Washington County. The Army Corps of Engineers regulates any filling or dredging of the Hedges Creek Wetland.~~

(2)—Fish. A wide variety of fish live in the Tualatin River system. The river supports both migratory fish and resident fish populations.

- ~~(a)—Migratory. Migration lasts from late August to early September. During low water periods, flow of the Tualatin River is diverted for irrigation and municipal water use upstream from the Oregon Iron and Steel Company Dam. When low flow periods extend into October and November, migratory fish are prevented from~~

~~entering the Tualatin River. Increased flow from impoundment of the Scoggins Dam has improved fish passage conditions.~~

- ~~(b) — *Resident.* Warmwater fish caught near the City of Tualatin are primarily large-mouth bass, bluegill, brown bullhead and black crappies. Crayfish are a good indicator of water quality. The crayfish population declined during the late 1950's and early 1960's.~~
- ~~(3) — *Wildlife.* Within the Study Area, there are a variety of habitats that support diverse wildlife fauna. The habitats are composed of a mosaic of forest, grasslands, wetlands, and farm land. The diverse and little-disturbed habitats provide living space for a wide variety of wildlife species. The Technical Memoranda contains a detailed list of species of wildlife in the Study Area from the Oregon Department of Fish and Wildlife. The areas of particular importance to wildlife species are wetlands and riverbank habitats along the Tualatin River and its tributaries.~~
- ~~(a) — *Hedges Creek.* The large wetland directly west of the Tualatin City Center and south of the Southern Pacific Railroad line is one of the most important ecologically significant natural areas. This area has generated considerable interest because of its extensive wildlife and water fowl habitat in close proximity to Portland.~~
- ~~(b) — *Saum Creek.* Saum Creek, located at the eastern end of the Study Area, contains both deciduous and coniferous forest land and is characterized by forests along the Creek.~~
- ~~(c) — *Tualatin River.* The Tualatin River and its flood plain from the western boundary of the Study Area to just past its junction with Fanno Creek has been identified as a wetland and marsh area. The River itself is an important fish migration route. The river and its associated vegetation are important natural habitats.~~
- ~~(d) — *Tualatin River National Wildlife Refuge.* The U.S. Fish and Wildlife Service established the refuge to protect, enhance, and manage an area of high quality and diverse habitats for a variety of migratory birds and resident fish and wildlife. The 3090-acre refuge is located in an area adjacent to the western city limits of Tualatin and includes the Rock Creek drainage and Onion Flats area adjoining SW Cipole Road. One tributary of Rock Creek originates within Tualatin's city limits in an area designated General Manufacturing. The refuge is of particular importance to Tualatin and the metropolitan region as a fish and wildlife habitat and valuable open space.~~
- ~~(4) — *Vegetation.* Vegetation plays a crucial role in the natural processes. It furnishes living space and food for animals, cleanses the environment by acting as a filter for dust and air pollutants, and binds the soil to prevent erosion.~~
- ~~(a) — *Uplands.* Both, conifer forest and mixed conifer/deciduous forest are found on the upland areas. Cleared uplands support pasture or field crops.~~
- ~~(b) — *Lowlands.* Lowlands are characterized by riverbank forests, swamp or marsh.~~
- ~~(5) — *Soils.* Soil types have been mapped from aerial photographs obtained from the Soil Conservation Service. Soils are classified into eight broad groups designated by~~

~~Roman Numerals I through VIII, indicating progressively greater limitations for crop production. Soil classification expresses the suitability of soils for most kinds of field crops.~~

~~(a) *Fertility.* Over 95 percent of the soils within the Study Area are within Classes I through IV. The Tualatin Valley is a very fertile area with a long history of agricultural use.~~

~~(b) *Suitability.* Most of the soils in the Study Area are not suitable for farming due to the potential for erosion, high water tables, or their shallow, droughty nature.~~

~~(6) *Water Quality.* In the past, the major water quality problem in the City has been pollution of Tualatin River waters. A 1976 report prepared for the Columbia Region Association of Governments by Portland State University states that "the lower Tualatin River appears to be nutrient enriched, eutrophic but not polluted." The report states that the improved water quality is due primarily to summer low-flow augmentation now allowed by the new Scoggins Dam and improved sewage treatment facilities recently constructed along the River. Consequently, the City's major water pollution problem has been solved. The City could have some water quality problems on Tualatin River tributaries due to erosion during construction. These problems are difficult to quantify. However, the City does have some control options over this potential problem.~~

~~(Ord. 937-95, §1, 1-9-95)~~

TDC 3.040. - Natural Hazards.

~~(1) *Flooding.* The last three miles of the Tualatin River, about five and one-half miles downstream from the City of Tualatin, consists of a narrow gorge with a vertical drop of nearly 40 feet. Natural reefs occurring upstream limit the River's ability to pass flood flows. The reefs create a natural dam, forcing water to back up and flood into the Tualatin Valley.~~

~~(a) *Season.* Flooding usually occurs between mid-November and mid-February, due to rainfall and snow melt. Unlike most Oregon streams, the wide, flat flood plains of the Tualatin Valley store large volumes of water that cause the River to peak slowly and remain above flood stage for several days.~~

~~(b) *Affected Area.* The core area of the City of Tualatin is highly vulnerable to flooding of the Tualatin River. A 100-year frequency flood would cause extensive flooding in the City of Tualatin. It would also flood a large area west and east of the City's downtown and a large area in the northwest portion of the Study Area.~~

~~(c) *Existing Flood Control.* Present flood control projects on the Willamette River do not appreciably affect flood conditions of the City of Tualatin. Upstream flood control measures on the Tualatin River will provide only limited benefits to the Tualatin Valley, as the key physical constraints occur at the natural reefs downstream.~~

- ~~(2) — *Air Pollution.* The major source of air pollution in Tualatin is motor vehicle traffic. Industrial sources are minor. The Durham sewerage treatment plant is the largest single point source of pollution in the area.~~
- ~~(a) — *Existing Air Quality.* Existing air quality in Tualatin is estimated to be well within allowable limits everywhere except in the immediate vicinity of Nyberg Road and the freeway.~~
- ~~(b) — *Future Air Quality.* Projections to 1990 suggest that concentrations of all pollutants will meet standards, due to increasingly effective emission controls on new vehicles.~~
- ~~(3) — *Noise Pollution.*~~
- ~~(a) — Noise created by traffic is currently the City's most serious noise problem. New industrial uses will increase industrial noise pollution potential.~~
- ~~(b) — *Residential.* The control of traffic sounds near residential property needs to be required by ordinance. This can be accomplished through various techniques such as buffering, setbacks and vehicular noise control ordinances.~~
- ~~(c) — *Industrial.* The City's present industrial noise control ordinance is very restrictive and should be reviewed.~~
- ~~(d) — *Railroad.* Specific control measures for railroad noise and vibration should be the subject of a study before action is taken on this potential problem.~~
- ~~(4) — *High Groundwater.*~~
- ~~(a) — *Wetlands.* The high groundwater area approximates the Tualatin River flood plain and encompasses all the present wetland area. There are many areas of high groundwater with levels at or near the surface of the ground. This is particularly true during the winter months, when the river level is high and the wetlands are filled with standing water.~~
- ~~(b) — *Weak soils.* The high groundwater is particularly troublesome in sandy soils, as a "quick" condition may result during excavation for footings and utilities. Organic or plastic clays and peat (all weak soils) may be found almost anywhere throughout the high groundwater area, particularly near present or past wetlands. Since weak soils can result in extraordinary construction requirements and methods, any new construction in the high groundwater area should include a detailed soils investigation and report by a qualified soils engineer or engineering geologist.~~
- ~~(c) — *Springs.* Springs are prevalent along a line that approximates the southern boundary of the high groundwater area and at other areas identified in the Technical Memoranda. Any construction there requires special treatment to provide for drainage of the springs.~~

~~3.080 (9) — *Parks.*~~

- ~~(a) — *Developed.* The only developed City park within the corporate City limits is the 23-acre Tualatin Community Park and a new 6.48-acre nature park. The Community Park provides for a broad range of activities for all ages and includes the Tualatin Community Center. Both parks are in the process of being improved.~~
- ~~(b) — *Undeveloped.* There are eight existing City park sites which are currently being developed.~~
- ~~(c) — *Future.* Conceived as recreational possibilities for neighborhood and broader community use, 14 sites were inventoried. These sites are scattered throughout the urbanized areas of the City. Each site is unique in its own fashion, i.e., setting, topography, views, vegetation, access, or natural wildlife resources.~~
- ~~(10) — *Conservation Management Areas.* These areas comprise some of the City's richest natural and scenic assets and should be maintained in their present rural character. Briefly, these areas are:

 - ~~(a) — The wetland marsh, bog and ponds.~~
 - ~~(b) — All the flood plain area generally below the 100-year flood line.~~
 - ~~(c) — All creek and drainageways.~~
 - ~~(d) — The Tualatin riverbank areas.~~~~
- ~~(12) — *School Recreational Facilities:*
 - ~~(a) — These are areas suitable for play areas for small children and some field activities for older children and adults. These sites would have to be developed via a joint use agreement between the City and the Tigard School District.~~
 - ~~(b) — *Existing.* Tualatin Elementary School.~~
 - ~~(c) — *Future.* New elementary school in south Tualatin and any additional elementary school sites.~~~~
- ~~(13) — *Other Recreational Facilities:*
 - ~~(a) — *Private.* The Tualatin Country Club golf course provides a major private recreational facility in the City.~~
 - ~~(b) — *Public.* The City of Tigard maintains Cook Park across the Tualatin River, which is available to residents of Tualatin but has no direct access from Tualatin. The Tigard School District maintains a swim center at Tigard High School that is available for use by Tualatin residents.~~~~
- ~~(14) — *Views:*
 - ~~(a) — Unlike the more distinctly contoured geographic sections of other parts of the urban area, Tualatin does not have spectacular views. Views of scenic areas in Tualatin are very subtle.~~
 - ~~(b) — *Features.* The most important views are of the drainages, bogs and wetlands; the Tualatin River; and outstanding groups of trees.~~
 - ~~(c) — *Location.* The most important view areas are the marsh and wetlands running in an east-westerly direction. In the southern portion of the City, there are~~~~

~~occasional views through the vegetation to Mt. Hood, Mt. Scott, Kerr Mountain, Bull Mountain and Cooper Mountain. Particularly important views of Mt. Hood occur when looking easterly along Nyberg, Sagert and Avery Streets.~~

CHAPTER 15- PARKS AND RECREATION

~~TDC 15.010. – Background.~~

~~(1) Tualatin is fortunate to have significant natural features which provide the City with excellent opportunities for outdoor recreation in attractive settings. The Tualatin River and the area's many small creeks provide opportunities for water-oriented recreation and greenway loops connecting various parts of the City. Several forested and wetland areas remain undeveloped and available for the neighborhood park types of recreation as well as for natural areas. Because of Tualatin's rapid development, the City must aggressively promote the acquisition of park lands before they are developed for other uses.~~

~~(2) It is the basic premise of this Plan that Tualatin should develop the highest-quality park and recreation system to offset the effects of large amounts of industrial and commercial growth that are proposed for the central portions of the City. While the City's commercial and industrial development will be reviewed through the City's Architectural Review process, an atmosphere of intensive development will remain that can be partially offset by large amounts of open space land that are visible and accessible to the public. Additionally, the property values of this new commercial and industrial development should create a favorable financial environment, enabling the City to maintain a reasonable tax rate, while providing a high-quality recreation system.~~

~~(3) The Parks and Recreation Master Plan is adopted by reference as a supporting technical document to the Tualatin Community Plan. The Parks and Recreation Master Plan contains detailed analysis, discussions, and recommendations on community parks, neighborhood parks, greenways, bicycle and pedestrian routes, and recreation programs. The Tualatin Development Code references figures and maps within the Master Plan.~~

~~(Ord. 608-83, §1, 9-26-83; Ord. 948-95, §1, 8-14-95; Ord. 1427-19 , §§ 11, 49, 11-25-19)~~

~~TDC 15.020. – Objectives. Goals and Policies.~~

~~The following are the objectives of the ParkParks and Recreation Master Plan. These objectives are to: Goals.~~

~~More detailed goals and objectives are found in the adopted Tualatin Parks and Recreation Master Plan.~~

- ~~• Goal 1: Expand accessible and inclusive parks and facilities to support community interests and recreation needs.~~

- Goal 2: Create a walkable, bikeable, and interconnected city by providing a network of regional and local trails.
- Goal 3: Conserve and restore natural areas to support wildlife, promote ecological functions, and connect residents to nature and the outdoors.
- Goal 4: Activate parks and facilities through vibrant programs, events, and recreational opportunities for people of different ages, abilities, cultures, and interests.
- Goal 5: Support the arts through programs, parks, and public spaces that reflect Tualatin's identity, heritage, history, and expressive character.
- Goal 6: Promote Tualatin's unique identity, economic vitality, tourism through parks, natural resources, historic preservation, events, programs, and placemaking.
- Goal 7: Manage, administer, and maintain quality parks, facilities, and programs through outstanding customer service, stewardship, and sustainable practices.

- ~~(1) Coordinate this Park and Recreation Plan with the plans of regional, state and federal agencies to achieve consistency among the various plans.~~
- ~~(2) Provide a high-quality park and recreation system to offset the environmental impact of large areas of commercial and industrial development.~~
- ~~(3) Create a park and recreation system that provides diverse recreation opportunity.~~
- ~~(4) Develop an advance land acquisition program that will assure the future availability of land for park and recreation use at the most reasonable cost.~~
- ~~(5) Preserve the scenic value of the Tualatin River by creating a greenway along the entire bank of the River within the City.~~
- ~~(6) Preserve as greenways, specific City creeks and drainage swales to provide sufficient area for stormwater runoff, enhance water quality, preserve fish and wildlife habitat and provide, where appropriate, public pedestrian and bicycle access.~~
- ~~(7) Preserve greenways, as much as possible, in their natural state.~~
- ~~(8) Preserve designated historic resources through public purchase or encouragement of compatible private reuse.~~
- ~~(9) Link the park and recreation system with a system of greenways and bicycle/pedestrian facilities.~~
- ~~(10) Develop design standards for development adjacent to greenways and natural areas.~~
- ~~(11) Preserve and enhance native vegetation in riparian and other natural areas for the purpose of providing favorable habitat for fish and wildlife. Encourage developers to preserve areas of natural vegetation, wherever possible, to provide habitat for wildlife.~~

- ~~(12) — Encourage developers to utilize residential density transfers, landscaping credits, system development charge credits, reduction of minimum setback requirements, and other incentives for greenway, bikeway and pedestrian path purposes.~~
- ~~(13) — Preserve the Hedges Creek Wetlands as a natural area and develop a Wetlands Protection Plan for this area.~~
- ~~(14) — Discourage filling of the Hedges Creek Wetlands located westerly of those wetlands that may be identified by the City's Wetlands Protection District Ordinance until a general plan has been prepared for the remaining wetland area or until a consensus has been achieved among industrial and environmental interest groups and state and federal agencies on any individual request for a wetland fill permit.~~
- ~~(15) — Develop a system of neighborhood parks that are geographically well distributed to serve the City's population.~~
- ~~(16) — Whenever possible, locate neighborhood parks adjacent to school sites.~~
- ~~(17) — Develop joint use agreements with the Tigard School District for the joint use of school land for neighborhood park facilities.~~
- ~~(18) — Develop comprehensive City recreation programs by activating parks and facilities through vibrant programs, events, and recreation opportunities for people of all ages, ability, cultures, and interests.~~
- ~~(19) — Encourage private donations of land or money, consistent with the Park and Recreation Plan, to augment City park development funds.~~
- ~~(20) — Discourage acquisition of small mini-parks because of relatively high maintenance expenses, except where a specific recreation need has been identified as a priority.~~
- ~~(21) — Develop a Capital Improvements Program to define recreation improvement priorities, financial requirements, and financing methods.~~

~~(Ord. 608-83, §2, 9-2-83; Ord. 894-93, §1, 5-24-93; Ord. 933-94, §8, 11-28-94; Ord. 1427-19, § 12, 11-25-19)~~

Editor's note — Ord. No. 608-83, § 3, adopted September 26, 1983, repealed §§ 15-030—15.070.

TDC 15.100. -- Natural Resources: Wetlands and Natural Areas Plan.

- ~~(1) — In October 1994, the City initiated preparation of the Wetland and Natural Areas Plan as Periodic Review Work Tasks 3 and 4 of the 1993 City of Tualatin Periodic Review as approved by the Oregon Land Conservation and Development Commission (LCDC). The purpose of the plan is to inventory natural resources in the Tualatin Planning Area, identify Significant Natural Resources and provide a plan that preserves, conserves or allows development of the resources. The natural resources include wetlands, stream and riparian areas, and open spaces which consist of upland forests and meadows, and unique geologic areas and features such as the Tonquin Scablands. The Plan recommends requirements for protecting Significant~~

~~Natural Resources designated in the Natural Resource Protection Overlay District as Greenways and Natural Areas.~~

~~(2) The Wetlands and Natural Areas Plan consists of:~~

- ~~(a) An inventory of natural resources within Tualatin's Planning Area, The City of Tualatin Natural Resource Inventory and Local Wetlands Inventory (December, 1995).~~
- ~~(b) Significant Natural Resource Criteria. (TDC 72.011)~~
- ~~(c) Significant Natural Resource List (TDC 72.013) and Map 72-3.~~
- ~~(d) Significant Natural Resource management programs such as the TDC Chapter 15.110 Objectives, the Natural Resource Protection Overlay District (NRPO), and shift of density provisions for residential Planning Districts.~~
- ~~(e) Wetlands and Natural Areas Plan Designations Map, (Natural Resource Protection Overlay District Map 72-1, TDC).~~
- ~~(f) Goal 5 Natural Resource Planning Analysis Conflicting Uses and Economic, Social, Environmental and Energy consequences of a decision to protect or not protect a significant resource. (Winterowd Planning Services Report, 1997).~~

~~(Ord. 979-97, 7-14-97; Ord. 1427-19 , § 13, 11-25-19)~~

~~TDC 15.110. - Wetlands and Natural Areas Plan Objectives~~ ~~Parks, Open Space, Environment Goals and Policies~~

- ~~**Goal 7.1** Identify and protect significant natural resources that promote a healthy environment and natural landscape that improves livability, and to provide recreational and educational opportunities.~~
 - ~~**Policy 7.1.1** Protect significant natural resources that provide fish and wildlife habitat, scenic values, water quality improvements, storm-water management benefits, and flood control.~~
- ~~**Goal 7.2** Balance natural resource protection and growth and development needs.~~
 - ~~**Policy 7.2.1** Provide incentives and alternative development standards such as reduced minimum lot sizes and building setbacks for property owners to preserve the natural resource while accommodating growth and development.~~
 - ~~**Policy 7.2.2** Allow public facilities such as sewer, stormwater, water and public streets and passive recreation facilities to be located in significant natural resource areas provided they are constructed to minimize impacts and with appropriate restoration and mitigation of the resource.~~

- **Policy 7.2.3** Except in Wetland Natural Areas, allow public boating facilities, irrigation pumps, water-related and water-dependent uses including the removal of vegetation necessary for the development of water-related and water-dependent uses.
- **Policy 7.2.4** Except in Wetland Natural Areas, allow the replacement of existing structures with structures in the same location that do not disturb additional riparian surface.

~~The following are the objectives of the Wetlands and Natural Areas Plan. The objectives are to:~~

- ~~(1) Identify and protect significant natural resources that promote a healthy environment and natural landscape that improves livability.~~
- ~~(2) Protect significant natural resources that provide fish and wildlife habitat, scenic values, water quality improvements, storm-water management benefits, and flood control.~~
- ~~(3) Protect significant natural resources that provide recreational and educational opportunities.~~
- ~~(4) Balance natural resource protection and growth and development needs.~~
- ~~(5) Provide incentives and alternative development standards such as reduced minimum lot sizes and building setbacks for property owners to preserve the natural resource while accommodating growth and development.~~
- ~~(6) Allow public facilities such as sewer, stormwater, water and public streets and passive recreation facilities to be located in significant natural resource areas provided they are constructed to minimize impacts and with appropriate restoration and mitigation of the resource.~~
- ~~(7) Except in Wetland Natural Areas, allow public boating facilities, irrigation pumps, water-related and water-dependent uses including the removal of vegetation necessary for the development of water-related and water-dependent uses.~~
- ~~(8) Except in Wetland Natural Areas, allow the replacement of existing structures with structures in the same location that do not disturb additional riparian surface.~~

(Ord. 9779-97, §7, 7-14-97; Ord. 1427-19, § 14, 11-25-19)

CHAPTER 8 - TRANSPORTATION

Purpose. This chapter reflects the City’s current Transportation System Plan as it applies to development activities and city actions. The Transportation System Plan guides transportation planning, policy, and investment for Tualatin.

TDC 3.080. – Public Facilities and Services.

- (1) ~~*Transportation.* The following is a summary of the current condition of the transportation modes serving Tualatin from the 2012 Tualatin Transportation System Plan Update (TSP) Technical Memorandum, December 2012):~~
- ~~(a) *Pedestrian:* Pedestrian facility needs include: fill sidewalk gaps on several arterials and collector streets; narrow or obstructed sidewalks; wide or angled crosswalks at intersections; and difficult crossing on major roadways (SW Boones Ferry Road, SW Tualatin-Sherwood Road, and roadways in the downtown core). Most of the pedestrian crashes reported in the 5-year crash study time frame occurred on SW Boones Ferry Road, generally when a vehicle failed to yield for pedestrians. Most crashes occurred when a vehicle was turning.~~
 - ~~(b) *Bicycle:* Existing bicycle facilities in Tualatin have a few gaps and challenging connections such as: difficult left-turn maneuvers; constrained environment; difficult areas with low bike visibility; bike lanes outside of turn lanes; obstacles within the bike lanes; and gaps in the network. In addition to these needs, there are a number of high-crash locations. Most crashes result in an injury to the bicyclist, and most occur on a dry roadway surface in daylight conditions. High-crash locations include SW Boones Ferry Road and SW Tualatin-Sherwood Road, as well as the SW Nyberg Road interchange ramps at I-5.~~
 - ~~(c) *Multi-Use Paths:* Additional bicycle and pedestrian connections over the Tualatin River are needed to connect with existing regional paths, as well as to provide alternate routes to the one existing Ki-a-Kuts bridge that is exclusively for bicycles and pedestrians (from Tualatin Community Park to Durham City Park in Durham). Additionally, many of the existing multi-use paths are fragmented and do not connect; signs and other way-finding guides are needed to inform bicyclists or pedestrians how to move among the various pathways, and from the pathways to on-street facilities. The planned multi-use path network is only half constructed; once the system is complete, the multi-use path network will be more comprehensive.~~
 - ~~(d) *Transit:* TriMet does not provide transit service within all areas of Tualatin or on all major corridors. No transit service is provided on SW Tualatin-Sherwood Road or SW Tualatin Road, and many residents in the western portion of the City live more than a mile from the nearest transit line. Many residents who do live near a bus line are not served by transit at regular intervals during the day. Because of the limitations of service during off-peak hours, non-commuting trips may be more difficult to complete using transit in Tualatin. Community feedback indicated the following specific needs for transit: service connecting the west side of Tualatin~~

~~to the downtown core; Park-and-rides in the west and south areas of Tualatin; extended service hours, including weekend service; and more direct connections to places other than downtown Portland.~~

- ~~(e) *Roadways:* Some of the existing roadways do not meet City, County, or State design standards. Further, a number of major roadways intersect with other roadways at a skew. This creates sight distance limitations and, thus safety concerns.~~

~~The two most highly-traveled roadways are SW Tualatin-Sherwood Road and SW Nyberg Road with over 20,000 vehicles per day. SW Tualatin Road and SW Boones Ferry Road corridors have 10,000 vehicles daily at multiple locations. Additionally, SW Tualatin-Sherwood Road carries a large amount of heavy vehicles, around 11.5 percent, with SW Boones Ferry Road carrying 8.4 percent heavy vehicles (compared with the average road in the Portland Metro area, which typically carries 2-4 percent heavy vehicles). Appendix B of the TSP Technical Memorandum (December 2012) provides a full description of existing (2011) roadway conditions, while Appendix C provides a description of future (2035) forecasted roadway conditions.~~

~~In the existing conditions analysis only two intersections—SW Martinazzi Avenue and SW Sagert Street, as well as SW Teton Avenue and SW Tualatin Road, were found to have greater congestion than mobility standards allow. In the future (2035) the number of intersections not meeting operations standards grew to twelve.~~

~~Key needs identified for the street system include: improved roadway connectivity; improved travel time along congested corridors; intersection improvements; and upgrading roadway geometries. Additionally, safety is a concern for the community, and safety issues were identified at the following intersections: SW Tualatin-Sherwood Road and SW Boones Ferry Road, and SW Nyberg Street and I-5 southbound off-ramps.~~

- ~~(f) *Freight Routes:* The needs of the freight system are consistent with those identified in the Street System Plan. Projects that address needs related to truck routes, either directly or by providing alternate routes that improve traffic operations along truck routes, serve the needs of the freight system.~~

- ~~(g) *Rail:* Portland and Western Railroad (PNWR) owns and operates two freight rail lines within the City. One track (running north-south) accommodates both freight and the WES commuter rail, and an east-west line runs along the south side of SW Herman Road. As of November 2012 the east-west line carries one train daily in each direction, and the north-south has two freight trains daily in addition to the WES trains. PNWR has no current plans to increase freight service through Tualatin. Although the east-west track runs adjacent to manufacturing areas, no rail sidings or other access to businesses are planned.~~

- ~~(h) *Pipelines and Transmission Systems:* A natural gas transmission pipeline and a gasoline pipeline cross through the City. There is no anticipated need to increase~~

~~pipeline capacity or construct new pipelines through the City, and therefore no such improvements are proposed in the TSP.~~

- ~~(i) **Air:** There are no airports within the City of Tualatin, although several airports are located within 30 miles of the City: the Aurora State Airport, Hillsboro Municipal Airport, and Portland International Airport. These airports meet the commercial, freight, and business aviation needs of Tualatin residents. No plans are proposed to construct airport facilities within the City of Tualatin; existing airports are anticipated to continue serving the citizens of Tualatin adequately.~~
- ~~(j) **Water:** The Tualatin River is the only large waterway within the City of Tualatin. The river is used primarily for recreation and is open for canoeing and kayaking. Therefore, the TSP does not include any specific policies, programs or projects for the Tualatin River as part of the transportation network. However, several projects are proposed in other sections of the TSP Technical Memorandum (December 2012) to increase access to the river for recreation purposes.~~
- ~~(11) **Bikepaths and Footpaths:**~~
 - ~~(a) An existing bike and footpath system has been implemented in some sections of the City.~~
 - ~~(b) Future extensions of the existing bike and footpath systems were proposed to provide the City with a complete network of trails. This system was mapped in over-lay fashion as part of the Technical Memoranda.~~

CHAPTER 11 – TRANSPORTATION

TDC 11.600. – Background.

- ~~(1) The Tualatin Transportation System Plan (TSP) establishes a long-range vision for the combination of projects, programs, and policies that will achieve Tualatin's transportation goals. To do this, the TSP looks at the needs of its residents, businesses, employees, and visitors – now (Year 2012), and what is expected for the future (Year 2035). TSPs are required by the state of Oregon for all cities with populations greater than 2,500 people. The current TSP (December 2012) is a major update of the TSP that was adopted in 2001, with analysis completed in 2000. The TSP considers the diverse needs of all users of the City's transportation network, and sets out recommendations that will serve the needs of transit riders, bicyclists, pedestrians, freight traffic, and drivers.~~

~~The TSP has been prepared in compliance with state, regional, and local plans and policies, including the Oregon Highway Plan (OHP), the state Transportation Planning Rule (TPR), Metro's Regional Transportation Plan (RTP), Metro's Regional Transportation Functional Plan (RTFP), Washington and Clackamas Counties Transportation System Plans, and Tualatin's Comprehensive Plan. The TSP presents a vision specific to the City's transportation future, while remaining consistent with these state, regional, and local plans. Plan elements will be implemented by the City, private developers, and regional, or state agencies.~~

~~(2) — *Regulatory Requirements.* The TPR (OAR 660-012), developed by the state Department of Land Conservation and Development (DLCD) in accordance with state law, and Oregon Revised Statute (ORS) 197.712 guide preparation of the TSP and require that jurisdictions develop the following:~~

- ~~(a) — A road plan for a network of arterial and collector roads;~~
- ~~(b) — A public transit plan;~~
- ~~(c) — A bicycle and pedestrian plan;~~
- ~~(d) — An air, rail, water, and pipeline plan;~~
- ~~(e) — A transportation financing plan;~~
- ~~(f) — Policies and ordinances for implementing the TSP.~~

~~The TPR requires that alternate travel modes including cycling, walking, and transit, be given equal consideration with automobile travel and states that reasonable effort must be applied in the development and enhancement of alternate modes in Tualatin's future transportation system. Local jurisdictions must also coordinate their plans with relevant state, regional, and county plans and amend their own ordinances to implement the TSP.~~

~~Metro also requires that TSPs meet certain requirements that have been adopted in the RTP and RTFP. Local TSPs must:~~

- ~~(a) — Establish an arterial street network, considering Metro's street design concepts and include a conceptual map of new streets;~~
- ~~(b) — Implement access management standards;~~
- ~~(c) — Include policies, standards, and projects that connect to transit stops;~~
- ~~(d) — Develop a transit plan consistent with the regional transit functional plan;~~
- ~~(e) — Develop pedestrian, bicycle, freight, parking, and transportation system management plans;~~
- ~~(f) — Ensure that regional transportation needs are incorporated into the TSP;~~
- ~~(g) — Include regional transportation goals for mode share and vehicles miles traveled.~~

~~(3) — The TSP Technical Memorandum, December 2012, is adopted by reference as a supporting technical document to the Tualatin Development Code (TDC). The TSP Technical Memorandum (December 2012) was prepared in compliance with the requirements of the TPR and includes the following chapters and appendices:~~

~~Chapter 1: Introduction~~

~~Chapter 2: Modal Plans~~

~~Chapter 3: Implementation~~

~~Policy and Code Language~~

~~Appendix A: Plan and Policy Review~~

~~Appendix B: Existing Conditions and Deficiencies~~

~~Appendix C: Future Transportation Conditions~~

~~Appendix D: Alternatives Analysis~~

~~Appendix E: Transportation Funding and Improvement Costs~~

~~Appendix F: Implementing Ordinances~~

~~Appendix G: Public Involvement Process~~

~~Appendix H: Bicycle and Pedestrian~~

~~The Modal Plans element (Chapter 2) of the TSP Technical Memorandum (December 2012) addresses those components necessary for development of the future transportation network. Chapter two of the TSP Technical Memorandum (December 2012) was adopted as the transportation element of the Tualatin Community Plan in the Spring of 2013. This chapter is intended to provide policy guidance for transportation improvements, which are then implemented by the TDC.~~

~~(4) *Plan Process.* Tualatin began the process to update the TSP in 2011. Staff organized their work into four basic steps:~~

~~*Step 1.* The team (of staff and consultants) identified existing and future needs, opportunities, project goals, and objectives. City staff and the consultant project team assembled existing and collected new data, analyzed the data to identify deficiencies and opportunities, and attended a number of community events to ask about issues with the transportation system to form an understanding of transportation problems to be addressed in the TSP. Additionally, the project website included an issues map where visitors to the website could identify transportation problems within the City.~~

~~*Step 2.* Next the team created a long list of potential solutions and screened and evaluated potential solutions to see how ideas met project goals and objectives. An open house, several Transportation Task Force (TTF; refer to TDC 11.600) meetings, and Working Group meetings helped create and/or evaluate potential solutions. Throughout each of these steps, the project team engaged the community to ensure that each element was appropriate for Tualatin.~~

~~*Step 3.* The team prepared the draft recommendations for projects to be included into the TSP, refining a number of recommendations for the more complex transportation needs, and prioritizing the project recommendations to help both the City and the community define which projects and programs should be implemented first.~~

~~*Step 4.* Finally the team developed the draft and final TSPs for City adoption. This process focused on compiling all recommendations into the TSP document, and~~

~~coordinating with relevant stakeholders in reviewing the TSP for completeness and consistency. These stakeholders included the community, City Council, Tualatin Planning Commission (TPC), Tualatin Parks Advisory Committee (TPARK), Washington County, Metro, Oregon Department of Transportation (ODOT), Clackamas County, adjacent cities, and the state's DLCD.~~

- ~~(5) *Study Area.* In December 2002, Metro expanded the Portland Urban Growth Boundary (UGB). This expansion included lands bordering Tualatin's Planning Area boundary that are intended to develop in the future for industrial uses. Following studies of impacts of these expansions, the city's TSP (2001) was amended to incorporate these new lands.~~
- ~~(a) The City of Tualatin, in conjunction with ODOT, initiated a study of a 23-acre area south of Highway 99W and west of SW Cipole Road in 2004. The Northwest Tualatin Concept plan addressed the impacts of developing this area for industrial uses. A technical analysis was prepared for the Concept Plan, following requirements of the TPR, that specifically addressed the transportation needs associated with developing the concept plan area at urban densities. Development of the Concept Plan was guided by input from an 11-member Technical Advisory Committee (TAC) that met four times during the planning process. The TAC included representatives from the City of Tualatin, ODOT, Washington County, Bonneville Power Administration (BPA), Metro, U.S. Fish and Wildlife Service (representing the Tualatin River National Wildlife Refuge), Portland General Electric (PGE), Clean Water Services (CWS), and TriMet. Mailing to stakeholders and a public open house were used to obtain community feedback on the draft plan. The TSP (2001) amendments relating to the Northwest Tualatin Concept Plan area were accepted by the City Council on June 13, 2005.~~
- ~~(b) The City of Tualatin, in conjunction with ODOT, initiated a study of a 431-acre area south of SW Tualatin Sherwood Road and west of the Portland & Western railroad tracks in 2004. In 2010, the City analyzed this area plus an additional 183-acres south of the Concept Plan area. The Southwest Tualatin Concept Plan addressed the impacts of developing this area for industrial uses, particularly the portion of the area designated as a "regionally significant industrial area." A technical analysis was prepared for the Concept Plan, following the requirements of the TPR that specifically addressed the transportation needs associated with developing the Concept Plan area at urban densities. Development of the Concept Plan was guided by input from a 31-member TAC that met 12 times during the planning process. The TAC included representatives from the Cities of Tualatin, Sherwood, and Wilsonville; Metro; ODOT; DLCD; Washington County; PGE; BPA; CWS; Oregon Department of Geology and Mineral Industries; Coffee Creek Correctional Facility; Tualatin Valley Fire & Rescue (TVF&R); TriMet; Genessee and Wyoming Railroad; and property owners from the Tonquin Industrial Group, the Itel properties area and from Tigard Sand & Gravel. Mailings to stakeholders and four public open houses were used to obtain community feedback on the draft plan. The TSP (2001) amendments relating to~~

~~the Southwest Tualatin Concept Plan area were accepted by the City Council on October 11, 2010.~~

- ~~(c) The study area for the current Tualatin TSP (2012) is comprised of the Tualatin Planning Area boundary, with one addition—the Basalt Creek planning area between Tualatin and Wilsonville. This area outside of the Planning Area Boundary, but within the study area, was included because of the transportation impact that it could have on the City's transportation network associated with the potential development of residential and employment areas. The study area is shown on several of the TSP's figures, including Figure 11-1 Functional Classification Plan.~~
- ~~(6) *Public Involvement.* The TSP planning process actively engaged the citizens of Tualatin in the production of its TSP. Residents, business owners, employees, and agency partners were encouraged to participate and were provided with multiple ways to share their thoughts—from initial goal development and issue identification to evaluation and screening. The public involvement plan outlined a thorough outreach process, making it easy and fun for the public to share ideas. The process provided meaningful ways to influence outcomes and took advantage of existing communication networks to reach more people.~~
- ~~(a) *Transportation Task Force.* The public involvement plan established a clear decision-making framework for the TSP. The Transportation Task Force (TTF), with input from Working Groups, advised the Tualatin Planning Commission (TPC). The TPC then made a recommendation to the City Council, which then adopted the final TSP Technical Memorandum (December 2012) and any changes to the City's Code. In addition, the TPARK made recommendations on the bicycle and pedestrian elements to the City Council. Each of these organizations received regular project updates from City staff throughout the process and each had representative members on the TTF. These groups were given the opportunity to provide their recommendation before the TTF decisions were forwarded to TPC and the City Council.~~

~~The TTF was formed in November 2011 for the purpose of advising the TPC and City Council about the needs and concerns of the community with regard to transportation. The City Council Citizen Involvement Committee selected TTF members carefully to be representative of neighborhoods, the business community, and the interests of Tualatin's advisory committees. Members and alternates were selected from a pool of applications. Neighboring communities, counties, TVF&R, ODOT, Metro, and TriMet also had representatives on the TTF.~~

~~Additional information about the TTF, Working Groups, and other aspects of the public involvement process for the TSP are included in Appendix G of the TSP Technical Memorandum (December 2012). The Transportation System Plan is adopted as a technical background document to the Comprehensive Plan as described in Part II.~~

~~(Ord. 1151-03, 11-10-03; Ord. 1103-02, 3-25-02; Ord. 1191-05, 6-27-05; Ord. 1321-11 §13, 4-25-11; Ord. 1354-13 §36, 02-25-13)~~

TDC 11.610. –Transportation Goals and Objectives.

~~(1) Over a span of three meetings the TTF prepared a vision for the TSP, conveyed as a set of goals and objectives. In early 2012 they adopted seven principal goals organized into the following goal categories:~~

~~Goal 1: Access and Mobility~~

~~Goal 2: Safety~~

~~Goal 3: Vibrant Community~~

~~Goal 4: Equity~~

~~Goal 5: Economy~~

~~Goal 6: Health and the Environment~~

~~Goal 7: Ability to be Implemented~~

~~These goals and their associated objectives were also discussed by the community at the first open house in February 2012 and by TPC, TPARK, and City Council. The full description of goals and objectives served as the basis for the TSP's evaluation framework. This means that all TSP recommendations were tied back to the underlying vision as established by these groups.~~

~~(2) **Goal 8.1: Access and Mobility.** Maintain and enhance the transportation system to reduce travel times, provide travel-time reliability, provide a functional and smooth transportation system, and promote access for all users.~~

Objectives:

- (a) Improve travel time reliability/provide travel information for all modes including freight and transit.
- (b) Provide efficient and quick travel between points A and B.
- (c) Provide connectivity within the City between popular destinations and residential areas.
- (d) Accommodate future traffic, bicycle, pedestrian, and transit demand.
- (e) Reduce trip length and potential travel times for motor vehicles, freight, transit, bicycles, and pedestrians.
- (f) Improve comfort and convenience of travel for all modes including bicycles, pedestrians, and transit users.
- (g) Increase access to key destinations for all modes.

~~(3) **Goal 8.2: Safety.** Improve safety for all users, all modes, all ages, and all abilities within the City of Tualatin.~~

Objectives:

- (a) Address known safety locations, including high-crash locations for motor vehicles, bicycles, and pedestrians.
- (b) Address geometric deficiencies that could affect safety including intersection design, location and existence of facilities, and street design.
- (c) Ensure that emergency vehicles are able to provide services throughout the City to support a safe community.
- (d) Provide a secure transportation system for all modes.

~~(4)~~ **Goal 8.3: Vibrant Community.** Allow for a variety of alternative transportation choices for citizens of and visitors to Tualatin to support a high quality of life and community livability.

Objectives:

- (a) Produce a plan that respects and preserves neighborhood values and identity.
- (b) Create a variety of safe options for transportation needs including bicycles, pedestrians, transit, freight, and motor vehicles.
- (c) Provide complete streets that include universal access through pedestrian facilities, bicycle facilities, and transit on some streets.
- (d) Support a livable community with family-friendly neighborhoods.
- (e) Maintain a small-town feel.

~~(5)~~ **Goal 8.4: Equity.** Consider the distribution of benefits and impacts from potential transportation options, and work towards fair access to transportation facilities for all users, all ages, and all abilities.

Objectives:

- (a) Promote a fair distribution of benefits to and burdens on different populations within the City (that is, low-income, transit-dependent, minority, age groups) and different neighborhoods and employment areas within the City.
- (b) Consider access to transit for all users.

~~(6)~~ **Goal 8.5: Economy.** Support local employment, local businesses, and a prosperous community while recognizing Tualatin's role in the regional economy.

Objectives:

- (a) Support a vibrant city center and community, accessible to all modes of transportation.
- (b) Support employment centers by providing transportation options to major employers.
- (c) Increase access to employment and commercial centers on foot, bike, or transit.
- (d) Consider positive and negative effects of alternatives on adjacent residential and business areas.

- (e) Accommodate freight movement.
- (f) Facilitate efficient access for goods, employees, and customers to and from commercial and industrial lands, including access to the regional transportation network.

~~(7)~~—**Goal 8.6: Health/Environment.** Provide active transportation options to improve the health of citizens in Tualatin. Ensure that transportation does not adversely affect public health or the environment.

Objectives:

- (a) Provide active transportation options to area schools to reduce childhood obesity.
- (b) Promote active transportation modes to support a healthy public and children of all ages.
- (c) Provide interconnected networks for bicyclists and pedestrians throughout the City for all age groups.
- (d) Consider air quality effects of potential transportation solutions. Protect park land and create an environmentally sustainable community.
- (e) Consider positive and negative effects of potential solutions on the natural environment (including wetlands and habitat areas).

~~(8)~~—**Goal 8.7: Ability to Be Implemented.** Promote potential options that are able to be implemented because they have community and political support and are likely to be funded.

Objectives:

- (a) Promote fiscal responsibility and ensure that potential transportation system options are able to be funded given existing and anticipated future funding sources.
- (b) Evaluate potential options for consistency with existing community, regional, and state goals and policies.
- (c) Strive for broad community and political support.
- (d) Optimize benefits over the life cycle of the potential option.
- (e) Consider transportation options that make the best use of the existing network.
- (f) Conduct the planning process with adequate input and feedback from citizens in each affected neighborhood.

(Ord. 1103-02, 3-25-02; Ord. 1224-06 §2, 11-13-06; Ord. 1354-13 §36, 02-25-13)

~~**TDC 11.620. – Functional Classification Plan.**~~

~~(1) — A city's functional classification plan defines the intended operations and character of roadways within the overall transportation system including standards for roadway and right-of-way width, access spacing, and pedestrian and bicycle facilities. The City~~

~~of Tualatin's functional classification system applies to roadways owned by the City, the County, and the State, and includes principal arterials, major arterials, minor arterials, major collectors, minor collectors, connector, and local roads. Figure 11-1 presents the updated functional classification plan for the City of Tualatin.~~

~~The arterial roadways carry a high number of vehicles including transit and freight vehicles, and provide mobility with few opportunities for local access. Collectors assemble traffic from a neighborhood or district and deliver it to the closest arterial street. Collectors serve shorter trip lengths than arterials and have more local access opportunities. Both arterials and collectors within Tualatin are owned by a variety of agencies including the City, ODOT, and Clackamas and Washington Counties. The roadway owners are responsible for maintenance and upkeep on the roadways and they make decisions on upgrades to their facilities. TSP Technical Memorandum (December 2012) describes the functional classifications and the purpose they are intended to serve in more detail; Appendix A, Plan and Policy Review, of the TSP Technical Memorandum provides a detailed description of the various policies associated with roadway ownership.~~

~~There are a number of existing freight and truck routes through the City designated by the City, the State, and the Federal government. These routes have specific design criteria and mobility standards to ensure that these roadways serve freight traffic.~~

~~(2) — **Policy Area 8.8 Functional Classification Policies.** Functional classification policies support the City's transportation goals and objectives ~~included in TDC 11.610.~~ Policies help provide direction for roadways and roadway classifications.~~

~~(a) — **Policy 8.8.1 Functional Classification Policy 1:** Major and minor arterials will comprise the main backbone of the freight system, ensuring that freight trucks are able to easily move within, in, and out of the City.~~

~~(b) — **Policy 8.8.2 Functional Classification Policy 2:** Continue to construct existing and future roadways to standard when possible for the applicable functional classification to serve transportation needs within the City.~~

~~(3) — **Street Design Standards.** Street design standards by functional classification are included in TDC Section 74.425.~~

~~(4) — The RTP's Regional Street Design System describes typical features of its street design designations. For comparison purposes, Metro's Regional Street Design System map has been recreated in Figure 11-2. The Tualatin TSP's street design standards for roadways shown on the RTP Regional Street Design System map are generally in conformance with the RTP's concepts, particularly in the areas of pedestrian and bicycle lanes, landscape strips, and medians or center turn lanes.~~

~~(Ord. 1151-03, 11-10-03; Ord. 1103-02, 3-25-02; Ord. 1191-05; 6-27-05; Ord. 1354-13 §36. 02-25-13)~~

~~**TDC 11.630. -- Street System Modal Plan.**~~

~~(1) — The street system modal plan consists of several sections: a listing of street urban upgrades and new streets, other intersection-specific or non-capacity streets~~

~~projects, access management policies, and traffic operation standards. This modal plan is included in its entirety in the TSP Technical Memorandum (December 2012) and pertinent sections are included in this chapter of the Comprehensive Plan, this section of TDC Chapter 11.~~

- ~~(2) Summary of Limitations and Needs of Street System. Key needs identified for the street system include:~~
- ~~(a) Improved Roadway connectivity. New roadway connections should be explored to improve east-west connectivity south of SW Tualatin-Sherwood Road and north-south regional connectivity. Metro RTP policies related to a complete street system identify one-mile spacing between major arterial streets with collector streets or minor arterials spaced a half-mile apart.~~
 - ~~(b) Improved travel time along congested corridors. Focus on reducing vehicle delay on key corridors.~~
 - ~~(c) Intersection improvements. Address intersection delay and intersection issues in congested areas.~~
 - ~~(d) Upgrading roadway geometries. City design standards for roadway width, sidewalks, and bicycle facilities should be followed where specific deficiencies have been identified.~~
 - ~~(e) Additionally, safety is a concern for the community. Safety issues were identified at the following intersections:~~
 - ~~(i) SW Tualatin-Sherwood Road and SW Boones Ferry Road~~
 - ~~(ii) SW Nyberg Street and I-5 southbound off ramps.~~
- ~~(3) **Policy Area 8.9 Roadway Policies.** The following establish the City's policies on roadways.~~
- ~~(a) **Policy 8.9.1 Roadway Policy 1:** Implement design standards that provide clarity to developers while maintaining flexibility for environmental constraints.~~
 - ~~(b) **Policy 8.9.2 Roadway Policy 2:** Ensure that street designs accommodate all anticipated users including transit, freight, bicyclists and pedestrians, and those with limited mobility.~~
 - ~~(c) **Policy 8.9.3 Roadway Policy 3:** Work with Metro and adjacent jurisdictions when extending roads or multi-use paths from Tualatin to a neighboring City.~~
- ~~(4) *Local Streets Plan.* The RTP calls for cities to identify all contiguous areas of vacant and redevelopable parcels of five or more acres planned or zoned for residential or mixed-use development and to prepare a conceptual new streets plan map. Figure 11-3 presents the City of Tualatin's Local Streets Plan. The intent of this map is to identify the locations of future street connections and desired connections within future development that promote a connected street system. The endpoints of the connections should be considered fixed, unless the Community Development Director or their designee determines that an alternate connection point is preferable due to safety, operations, improved connectivity concerns, or environmental impacts.~~

~~The routes connecting endpoints may vary, as long as a reasonably direct route between the two points is provided.~~

- ~~(5) — **Access Management.** Access management is important to maintain traffic flow and ensure safety on the City's arterial street network, including SW Tualatin-Sherwood Road, Oregon Highway 99W (OR 99W), and other high-traffic routes. Limiting the number of points where traffic can enter and exit reduces potential conflict points, improves roadway performance, and reduces the need for capacity expansion. The City manages access through Chapter 75 of the TDC; that chapter details where access is permitted on arterial and collector roads within the City. Tualatin must coordinate with Washington and Clackamas Counties and ODOT to manage access on roads the City does not own, including SW Tualatin-Sherwood Road, SW Cipole Road, SW 65th Avenue, SW Borland Road, and sections of SW Boones Ferry Road. Chapter 75 of the TDC, most recently updated in 2012, has specific access standards for each arterial road within Tualatin. It provides recommendations for future changes on specific roads, as well as potential solutions for access issues.~~

~~(a)~~

Policy Area 8.10 Access Management Policies. Access management policies are:

- ~~(i) — **Policy 8.10.1 Access Management Policy 1:** No new driveways or streets on arterial roadways within the City, except where noted in the TDC, **Chapter 75**, usually when no alternative access is available.~~
 - ~~(ii) — **Policy 8.10.2 Access Management Policy 2:** Where a property abuts an arterial and another roadway, the access for the property shall be located on the other roadway, not the arterial.~~
 - ~~(iii) — **Policy 8.10.3 Access Management Policy 3:** Adhere to intersection spacing included in Chapter 75 of the TDC.~~
 - ~~(iv) — **Policy 8.10.4 Access Management Policy 4:** Limit driveways to right-in, right-out (where appropriate) through raised medians or other barriers to restrict left turns.~~
 - ~~(v) — **Policy 8.10.5 Access Management Policy 5:** Look for opportunities to create joint accesses for multiple properties, where possible, to reduce the number of driveways on arterials.~~
 - ~~(vi) — **Policy 8.10.6 Access Management Policy 6:** No new single-family home, duplex or triplex driveways on major collector roadways within the City, unless no alternative access is available.~~
 - ~~(vii) — **Policy 8.10.7 Access Management Policy 7:** On collector roadways, residential, commercial and industrial driveways where the frontage is greater or equal to 70 feet are permitted. Minimum spacing at 100 feet. Uses with less than 50 feet of frontage shall use a common (joint) access where available.~~
- ~~(6) — **Traffic Operations Standards.** This section includes a discussion of standards included in the OHP, ODOT's Highway Design Manual (HDM), and the TPR and City documents for local roadways. Based on the preferred system for operational~~

~~analysis, there are four intersections that do not meet jurisdictional standards after mitigation strategies are included. These intersections that experience operational constraints are in the SW Lower Boones Ferry Road/I-5 interchange area, and are due to the additional motor vehicle trips associated with the widening of SW Boones Ferry Road from SW Martinazzi Avenue to SW Lower Boones Ferry Road.~~

~~The first mitigation strategies developed explored transportation system management techniques (maximizing operations at intersections through signal timing adjustments and/or phasing adjustments). If system management techniques did not achieve acceptable jurisdictional operations, localized capacity improvements were explored (for example, a new turn pocket). Generally these improvements allowed for adequate signal operations under a mitigated scenario.~~

~~There were some intersections located in the downtown core area that were not able to meet jurisdictional standards without the implementation of significant capacity and/or roadway widening improvements. These types of major infrastructure improvements were deemed to be too impactful to the downtown core and were not included in the final preferred system improvements. The downtown Tualatin area is designated a Town Center by Metro, and using that designation, Town Centers are allowed to not meet jurisdictional standards. Alternate standards for Town Centers in the RTP are based on a two-hour peak hour. The standard volume to capacity ratio (v/c) for the first peak hour is 1.1, and for the second peak hour is 0.99. These intersections meet the RTP standards, and there is no need for additional alternate mobility standards.~~

~~(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

TDC 11.640. – Transit Modal Plan.

- ~~(1) — Public transit in Tualatin is envisioned to be multi-faceted by including local and express bus service, commuter rail, potential high capacity transit, and local transit shuttle services. In addition, the community's vision for public transit includes improvements in the quality of transit service, as well as land uses that better complement and encourage use of transit in downtown Tualatin. Figure 11-5 presents the updated transit system for the City of Tualatin.~~
- ~~(2) — *Summary of Limitations and Needs for Transit.* TriMet does not provide transit service within all areas of Tualatin or on all major corridors. No transit service is provided on SW Tualatin-Sherwood Road or SW Tualatin Road, and many residents in the western portion of the City live more than a mile from the nearest transit line. Many residents who do live near a bus line are not served by transit at regular intervals during the day. According to the Conceptual Linking Tualatin Plan (Draft 2012), over 11,000 workers and over 5,000 households (over half of the people living and working in the city) lack regular transit service within a quarter mile of where they live or work. Because of the limitations of service during off-peak hours, non-commuting trips may be more difficult to complete using transit in Tualatin. Community feedback indicated the following specific needs for transit:

 - ~~(a) — Service connecting the west side of Tualatin to the downtown core;~~
 - ~~(b) — Park-and-rides in the west and south areas of Tualatin;~~~~

~~(c) Extended service hours, including weekend service;~~

~~(d) More direct connections to places other than downtown Portland.~~

~~Additional needs for transit stops include direct and safe access to transit stops and bicyclist and pedestrian amenities at stops, especially where transit riders are able to transfer lines or modes.~~

~~(3) (Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

Policy Area 8.11 Transit Policies. The City of Tualatin's policies on public transit are as follows:

~~(a) Transit Policy 1: **Policy 8.11.1** Partner with TriMet to jointly develop and implement a strategy to improve existing transit service in Tualatin.~~

~~(b) Transit Policy 2: **Policy 8.11.2** Partner with the Tualatin Chamber of Commerce to support grant requests that would expand the Tualatin Shuttle services.~~

~~(c) Transit Policy 3: **Policy 8.11.3** Partner with TriMet, Metro, and neighboring communities to plan the development of high-capacity transit in the Southwest Corridor, as adopted in the Metro High Capacity Transit System Plan.~~

~~(d) Transit Policy 4: **Policy 8.11.4** Partner with TriMet, Metro, and neighboring communities to plan development of high-capacity transit connecting Tualatin and Oregon City, as adopted in the Metro High Capacity Transit System Plan.~~

~~(e) Transit Policy 5: **Policy 8.11.5** Coordinate with ODOT and neighboring communities on conversations related to Oregon Passenger Rail between Portland and Eugene.~~

~~(f) Transit Policy 6: **Policy 8.11.6** Develop and improve pedestrian and bicycle connections and access to transit stops.~~

~~(g) Transit Policy 7: **Policy 8.11.7** Encourage higher-density development near high-capacity transit service.~~

~~(h) Transit Policy 8: **Policy 8.11.8** Metro in the RTP calls for increased WES service frequency. The City will coordinate with TriMet, Metro, and ODOT to explore service frequency improvements and the possible inclusion of a second WES station in south Tualatin.~~

~~(i) In addition to the transit policies included here, Bicycle and Pedestrian Policies, **Policy 8.12.7 and Policy 8.12.8** ~~7 and 8, included in TDC 11.650~~, are applicable to transit.~~

~~(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

TDC 11.650. -- Pedestrian, Bicycle, and Multi-Use Path Modal Plan.

~~(1) This modal plan describes pedestrian and bicycle improvements to comfortably and safely accommodate bicyclists and pedestrians within the City. These include multi-~~

use paths, specific bicycle and pedestrian improvements, and street upgrades. Figure 11-4 presents the updated bicycle and pedestrian system for the City of Tualatin.

~~(2) Summary of Limitations and Needs for Bicycle and Pedestrian Facilities. This section summarizes limitations and needs for bicycle and pedestrian facilities, and multi-use paths. A full description of existing conditions and deficiencies for the bicycle, pedestrian, and pathway system can be found in Appendix B of the TSP Technical Memorandum (December 2012).~~

~~(a) Bicycle Facility Needs. Existing bicycle facilities in Tualatin have a few gaps and challenging connections:~~

- ~~(i) Difficult left turn maneuvers;~~
- ~~(ii) Difficult areas with low bike visibility;~~
- ~~(iii) Bike lanes outside of turn lanes;~~
- ~~(iv) Obstacles within the bike lanes;~~
- ~~(v) Gaps in the network; and~~
- ~~(vi) In addition to these needs, there are a number of high-crash locations.~~

~~Most crashes result in an injury to the bicyclist, and most occur on a dry roadway surface in daylight conditions. High-crash locations include SW Boones Ferry Road and SW Tualatin-Sherwood Road; as well as, the SW Nyberg Road interchange ramps at I-5.~~

~~(b) Pedestrian Facility Needs. Pedestrian facility needs include:~~

- ~~(i) Fill sidewalk gaps on arterials and collector streets at:

 - ~~(a) Sections of SW Herman Road;~~
 - ~~(b) Sections of SW Grahams Ferry Road;~~
 - ~~(c) Sections of SW Boones Ferry Road;~~
 - ~~(d) SW Blake Street between SW 105th and SW 108th Avenues;~~
 - ~~(e) SW Sagert Street overpass over I-5; and~~
 - ~~(f) SW 105th Avenue between SW Paulina Drive and SW Blake Street.~~~~
- ~~(ii) Narrow or obstructed sidewalks.~~
- ~~(iii) Wide or angled crosswalks at intersections.~~
- ~~(iv) Difficult crossing on major roadways (SW Boones Ferry Road, SW Tualatin-Sherwood Road, and roadways in the downtown core).~~
- ~~(v) Most of the pedestrian crashes reported in the 5-year crash study timeframe occurred on SW Boones Ferry Road, generally when a vehicle failed to yield for pedestrians. Most crashes occurred when a vehicle was turning.~~

~~(c) Multi-Use Path Needs. Additional bicycle and pedestrian connections over the Tualatin River are needed to connect with existing regional paths; as well as, to provide alternate routes to the one existing Ki-a-Kuts bridge that is exclusively for~~

~~bicycles and pedestrians (from Tualatin Community Park to Durham City Park in Durham). Additionally, many of the existing multi-use paths are fragmented and do not connect. Signs and other way-finding guides are needed to inform bicyclists or pedestrians how to move among the various pathways, and from the pathways to on-street facilities. The planned multi-use path network is only half constructed, once the system is complete, the multi-use path network will be more comprehensive.~~

~~(3) (Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

Policy Area 8.12 Bicycle and Pedestrian Policies. The City of Tualatin's policies on bicycle and pedestrian facilities are as follows:

- ~~(a) *Bicycle and Pedestrian Policy 1:* **Policy 8.12.1** Support Safe Routes to Schools (SRTS) for all Tualatin schools.~~
- ~~(b) *Bicycle and Pedestrian Policy 2:* **Policy 8.12.2** Work with partner agencies to support and build trails.~~
- ~~(c) *Bicycle and Pedestrian Policy 3:* **Policy 8.12.3** Allow wider sidewalks downtown for strolling and outdoor cafes.~~
- ~~(d) *Bicycle and Pedestrian Policy 4:* **Policy 8.12.4** Add benches along multi-use paths for pedestrians throughout the City (especially in the downtown core).~~
- ~~(e) *Bicycle and Pedestrian Policy 5:* **Policy 8.12.5** Develop and implement a toolbox, consistent with Washington County, for mid-block pedestrian crossings.~~
- ~~(f) *Bicycle and Pedestrian Policy 6:* **Policy 8.12.6** Implement bicycle and pedestrian projects to help the City achieve the regional non-single-occupancy vehicle modal targets in Table 11-1.~~
- ~~(g) *Bicycle and Pedestrian Policy 7:* **Policy 8.12.7** Implement bicycle and pedestrian projects to provide pedestrian and bicycle access to transit and essential destinations for all mobility levels, including direct, comfortable, and safe pedestrian and bicycle routes.~~
- ~~(h) *Bicycle and Pedestrian Policy 8:* **Policy 8.12.8** Ensure that there are bicycle and pedestrian facilities at transit stations.~~
- ~~(i) *Bicycle and Pedestrian Policy 9:* **Policy 8.12.9** Create on- and off-street bicycle and pedestrian facilities connecting residential, commercial, industrial, and public facilities such as parks, the library, and schools.~~
- ~~(j) *Bicycle and Pedestrian Policy 10:* **Policy 8.12.10** Create obvious and easy to use connections between on- and off-street bicycle and pedestrian facilities, and integrate off-street paths with on-street facilities.~~

~~(4) *Bicycle Boulevards.* Currently, there are no existing bicycle boulevards in Tualatin, though Washington County has bicycle boulevard policies and design standards.~~

~~Bicycle boulevards are roadways that use a variety of design treatments to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, to create a safer and more comfortable environment for all users. Bicycle boulevards may include a variety of applications ranging from minor street signing enhancements (such as shared lane markings) to larger scale projects (for example, bike-only access at intersections, traffic diverters). Boulevards also incorporate treatments to facilitate safe and convenient crossings where bicyclists must traverse major streets. Traffic controls along a boulevard may assign priority to through cyclists while encouraging through vehicle traffic to use alternate parallel routes.~~

~~Bicycle boulevards work best in well-connected street grids, where riders can follow intuitive and reasonably direct routes. Boulevards also work best when higher-order parallel streets exist to serve through vehicle traffic. Bicycle boulevards are generally located on streets with lower traffic volumes and vehicle speeds, such as minor collectors or local streets passing through residential neighborhoods. Typically a bicycle boulevard would be located on a street where vehicles travel less than 30 miles per hour and average daily traffic volume is less than 3,000 vehicles (in both directions).~~

~~Proposed bicycle boulevards in Tualatin are shown on Figure 11-4. These are all low volume, low speed streets that connect neighborhoods with roadways and trails where bicycle infrastructure investments have been made. As a short-term action, the City should consider signing these roadways as bicycle routes, and monitor usage on an annual basis. As bicycle usage increases, and bicyclists and drivers become more used to sharing travel lanes, further investments could be considered to enhance safety for bicyclists.~~

~~(Ord. 1103-02, 3-25-2002; Ord. 1354-13 §36, 02-25-13; Ord. 1367-14 §1, 02-24-14)~~

~~TDC 11.660. – Freight Plan.~~

- ~~(1) Efficient truck movement plays a critical role in the economic wellbeing and development of Tualatin. Trucks must be able to access commercial, industrial, manufacturing, distribution, and other employment areas both in Tualatin and connecting to the regional system. Future commercial/industrial uses are expected to be located consistent with the land uses identified in the Comprehensive Plan, which matches the current planning district designations, as codified in the TDC.~~
- ~~(2) The freight network illustrated in Figure 11-6 is largely consistent with the functional classification plan (Figure 11-1), which strives to connect industrial and manufacturing uses to the regional and state transportation network via a series of major and minor arterial roadways. The movement of raw materials and finished products via designated truck routes provides for efficient movement of goods while maintaining neighborhood livability, public safety, and minimizing maintenance costs of the roadway system. Federally and state designated truck routes, part of the National Highway System (NHS), have been identified on I-5 and OR 99W. Metro identifies "road connectors" in the RTP freight network on SW 124th Avenue, SW Tualatin-Sherwood Road, SW Lower Boones Ferry Road, and SW Boones Ferry Road. The City of Tualatin designates additional truck routes on roadway facilities~~

~~that connect commercial/industrial districts within the City to major arterials and, ultimately, to OR 99W, I-5, and I-205.~~

- ~~(3) The needs of the freight system are consistent with those identified in the Street System Plan (TDC 11.630). Projects that address needs related to truck routes, either directly or by providing alternate routes that improve traffic operations along truck routes, serve the needs of the freight system. All new roadways should be built to current City design standards to meet the operational needs of trucks on designated truck routes.~~

~~(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

~~TDC 11.670. -- Rail Plan.~~

- ~~(1) Portland and Western Railroad (PNWR) owns and operates two freight rail lines within the City. One track (running north-south) accommodates both freight and the WES commuter rail, and an east-west line runs along the south side of SW Herman Road. As of November 2012 the east-west line carries one train daily in each direction, and the north-south has two freight trains daily in addition to the WES trains described in the Transit section.~~

~~There are 13 gated public railroad crossings in Tualatin and a number of additional driveways or private roads that cross the railroad. The private crossings are stop controlled, but not signalized. Freight trains have the right-of-way at all intersections. The low number of trains does not present a large safety concern in the City, and recent Quiet Zone work done in conjunction with the north-south WES rail line opening added gates at all public crossings.~~

- ~~(2) PNWR has no current plans to increase freight service through Tualatin. Although the east-west track runs adjacent to manufacturing areas, no rail sidings or other access to businesses are planned.~~

- ~~(3) **Policy Area 8.13 Freight Rail Policies.** Following are policies for freight rail:~~

~~(a) *Freight Rail Policy 1: **Policy 8.13.1*** Continue to coordinate with PNWR and TriMet to ensure that railroad crossings are safe and have few noise impacts on adjacent neighborhoods~~

~~(b) *Freight Rail Policy 2: **Policy 8.13.2*** Look for opportunities to shift goods shipments to rail to help reduce the demand for freight on Tualatin's roads.~~

~~(c) *Freight Rail Policy 3: **Policy 8.13.3*** Look for opportunities to create multi-modal hubs to take advantage of the freight rail lines.~~

- ~~(4) *Passenger Rail Policies.* The City of Tualatin's policies on public transit are described in Policy Area 8.11 ~~TDC 11.640~~ as part of the Transit Modal Plan. Those policies that may relate to the existing heavy rail lines in Tualatin include Transit Policies 8.11.3, 8.11.4, 8.11.5, and 8.11.8 ~~3, 4, 5, and 8~~.~~

~~(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

~~(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

TDC 11.680. – Water, Pipeline, and Air Plan.

This section includes the Water, Pipeline and Air Plans.

- (1) *Water Plan.* The Tualatin River is the only large waterway within the City of Tualatin. The river is used primarily for recreation and is open for canoeing and kayaking. Therefore, the TSP does not include any specific policies, programs or projects for the Tualatin River as part of the transportation network. However, several projects are proposed in other sections of the TSP Technical Memorandum (December 2012) to increase access to the river for recreation purposes.
- (2) *Pipeline Plan.* A natural gas transmission pipeline and a gasoline pipeline cross through the City. There is no anticipated need to increase pipeline capacity or construct new pipelines through the City, and therefore no such improvements are proposed in the TSP.
- (3) *Air Plan.* There are no airports within the City of Tualatin, although several airports are located within 30 miles of the City: the Aurora State Airport, Hillsboro Municipal Airport, and Portland International Airport. These airports meet the commercial, freight, and business aviation needs of Tualatin residents. No plans are proposed to construct airport facilities within the City of Tualatin; existing airports are anticipated to continue serving the citizens of Tualatin adequately.

~~(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

- ~~(1) *Water Plan.* The Tualatin River is the only large waterway within the City of Tualatin. The river is used primarily for recreation and is open for canoeing and kayaking. Therefore, the TSP does not include any specific policies, programs or projects for the Tualatin River as part of the transportation network. However, several projects are proposed in other sections of the TSP Technical Memorandum (December 2012) to increase access to the river for recreation purposes.~~
- ~~(2) *Pipeline Plan.* A natural gas transmission pipeline and a gasoline pipeline cross through the City. There is no anticipated need to increase pipeline capacity or construct new pipelines through the City, and therefore no such improvements are proposed in the TSP.~~
- ~~(3) *Air Plan.* There are no airports within the City of Tualatin, although several airports are located within 30 miles of the City: the Aurora State Airport, Hillsboro Municipal Airport, and Portland International Airport. These airports meet the commercial, freight, and business aviation needs of Tualatin residents. No plans are proposed to construct airport facilities within the City of Tualatin; existing airports are anticipated to continue serving the citizens of Tualatin adequately.~~

~~(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)~~

~~TDC 11.690. – Transportation Demand Management.~~

~~(1) The TPR requires all cities with populations greater than 25,000 people to develop a Transportation Demand Management (TDM) Plan. The RTP also requires that TDM strategies be used to encourage alternative transportation modes and achieve higher vehicle occupancy targets. TDM measures are designed to change travel behavior in order to reduce the need for more road capacity and improve performance of the road system. Typical TDM projects include encouraging use of travel modes other than the auto, ride sharing, and measures to reduce the need for travel such as telecommuting policies.~~

~~TDM policies and projects can be cost-effective ways to reduce congestion by encouraging the use of other modes, reducing the need for travel or reducing the number of vehicle miles driven. The City of Tualatin can implement a range of TDM measures to manage travel demand, in conjunction with partner organizations in many cases. Providing bicycle, pedestrian, and transit infrastructure can be effective means to encourage drivers to switch to other modes. Many of the pedestrian, bicycle, and transit improvements proposed in other sections of the TSP can be considered TDM measures as they encourage use of travel modes other than the auto. In addition to these infrastructure projects, a number of strategies are applicable to Tualatin, as discussed in detail in the TSP Technical Memorandum (December 2012).~~

~~(2) **Policy Area 8.14 Transportation Demand Management Policies.** The following policies support other modal plans in the TSP and help Tualatin meet its mode-share targets, as required by the RTP and presented in Table 11-1:~~

~~(a) *TDM Policy 1:* **Policy 8.14.1** Support demand reduction strategies, such as ride sharing, preferential parking, and flex-time programs.~~

~~(b) *TDM Policy 2:* **Policy 8.14.2** Partner with the Tualatin Chamber of Commerce, the Westside Transportation Alliance, major employers, and business groups to implement TDM programs~~

~~(c) *TDM Policy 3:* **Policy 8.14.3** Explore the use of new TDM strategies to realize more efficient use of the City's transportation system~~

~~(d) *TDM Policy 4:* **Policy 8.14.4** Support Washington County's regional TDM programs and policies to reduce the number of single-occupancy vehicle (SOV) trips~~

~~(e) *TDM Policy 5:* **Policy 8.14.5** Promote the use and expansion of the Tualatin Shuttle program.~~

~~(3) **Metro Modal Targets.** Metro in its 2035 RTP established modal targets for how residents in the region will make trips in 2040. These are separated out by regional designations. Tualatin has a number of designations within the City limits, as described in the following sections and shown in Figures 9-4 (Design Type Boundaries) and 11-2 (Metro Regional Street Design System).~~

~~(a) *Town Center.* This designation is consistent with the Town Center Plan study area, centered on the Lake of the Commons and includes land south of the Tualatin River and west of I-5, including the Tualatin Community Park. The~~

~~western Boundary is SW 95th Avenue south to SW Tualatin Sherwood Road, and then southern boundary is SW Tualatin Sherwood Road to approximately SW Boones Ferry Road then continues east near SW Warm Springs Street.~~

- ~~(b) *Corridors.* There are a number of corridors in Tualatin: SW Tualatin Sherwood Road is a regional street, along with 99W, SW 124th Avenue, and SW Tualatin Road. SW Boones Ferry Road is a community street, and SW Tualatin Sherwood Road/SW Nyberg Street in downtown are community boulevards. Regional arterials include 99W, SW 124th Avenue, SW Boones Ferry Road, SW Tualatin Sherwood Road, SW Herman Road, SW Nyberg Street, SW Sagert Street, SW Borland Road, and SW 65th Avenue.~~
- ~~(c) *Employment Land.* Most of western Tualatin is employment land south of SW Tualatin Road and west of the railroad tracks.~~
- ~~(d) *Parks and Natural Areas.* Hedges Creek is designated a park and natural area, along with many of the other greenway areas including Nyberg Creek Greenway, Saum Creek, and other City parks.~~
- ~~(e) *Neighborhoods.* Neighborhood areas include southern Tualatin near SW Boones Ferry Road, northern Tualatin north of SW Tualatin Road, and eastern Tualatin excluding the hospital area and the greenways and parks.~~
- ~~(f) These designations have modal targets associated with them, as seen in Table 11-1. The non-drive-alone modal target for Tualatin is 45–55 percent in the Town Center and Station Community, and 40–45 percent for the employment land, parks and natural areas, and neighborhoods.~~

~~(Ord. 1103-02, 03-25-02; Ord. 1321-11 §15, 4-25-11; Ord. 1354-13 §36, 02-25-13)~~

TDC 11.700. – Transportation System Management.

- (1) Transportation System Management (TSM) measures are designed to increase the efficiency, safety, capacity, and level of service of the transportation system without physically increasing roadway capacity. Typical TSM projects include traffic light synchronization, traffic calming, travel information systems, access management, and parking management strategies. Many of the projects listed in the modal plans—including the Transit, Pedestrian and Bicycle, and Access Management plans—qualify as TSM measures.

Many TSM tools can be implemented inexpensively to help make the existing system work more efficiently. A wide range of TSM strategies are applicable to Tualatin. These are discussed in detail in the TSP Technical Memorandum (December 2012).

(Ord. 1354-13 §36, 02-25-13)

TDC 11.710. – Parking Plan.

- ~~(1) The City owns several public parking lots in downtown Tualatin to support denser development in the City's core area. A separate taxing district has been created to support ongoing maintenance and operations of these parking lots. The City~~

~~completed a study in 2011 which identified that the existing parking supply is sufficient to meet the parking demand in downtown Tualatin.~~

- ~~(2) The RTEFP requires parking policies and a parking plan in a TSP or other planning document. The current TDC includes parking minimums and is compliant with this requirement.~~

~~(Ord. 1354-13 §36, 02-25-13)~~

TDC 11.720. – Implementation.

- ~~(1) The project table for each modal plan in the Tualatin TSP Technical Memorandum (December 2012) includes recommendations for applicable funding sources. Additionally, the relative importance of TSP projects are identified in the project tables, based on community goals, the magnitude of the deficiency or issue that the project addresses, and the ability to secure funding, conduct engineering, and build a project. Appendix E of the TSP Technical Memorandum (December 2012) provides a detailed description of transportation funding and improvement costs for all of the TSP's recommendations.~~
- ~~(2) A variety of established federal, state, regional, and local funding sources are available to fund future transportation projects in the Tualatin TSP Technical Memorandum (December 2012), depending on the eligibility requirements. Implementation of TSP projects will depend on funding and community priorities.~~
- ~~(3) Prioritization. Prioritization of projects within the TSP Technical Memorandum (December 2012) is separated into three categories: short-term, medium-term, and long-term. Short term projects are expected to be built within zero—five years, while medium-term are five—ten years, and long term projects are expected to be built in the 10—20 year time frame. Prioritization is determined based on a combination of the most important projects to implement first, the ease of implementation, and the potential cost—some projects will take a number of years to identify and secure funding. Some projects will also need regional coordination and support, which may take time to secure an agreement. Prioritization is an estimate: long-term projects may be implemented sooner than 10—20 years due to funding becoming available, a high degree of community support or other factors. The suggested priority for projects in the TSP Technical Memorandum (December 2012) is a general guide and not a required timeframe.~~

~~The City will need to periodically update the TSP, and will review the need and timing for longer-term improvements at those times. Prioritizing specific near-term projects will occur annually when the City updates its five-year financial plan and prepares its capital improvement plan (CIP) for the following year. Future road improvements or related transportation projects listed or not listed in the TSP Technical Memorandum (December 2012) are not required to be reviewed and approved through a land use process.~~

The construction of roads, storm drainage, water, sewer, and electrical facilities in conjunction with local development activity should be coordinated if the City of Tualatin

is to continue to develop in an orderly and efficient way. Consequently, the plans proposed in the TSP Technical Memorandum (December 2012) should be considered in light of developing infrastructure sequencing plans, and may need to be modified accordingly.

(Ord. 1103-02, 3-25-02; Ord. 1354-13 §36, 02-25-13)

**Table ~~11-1~~ 8-1
Metro Modal Targets**

2040 Regional Designation	Non-drive-alone Modal Target	2040 Regional Designation	Non-drive-alone Modal Target
Regional Centers Town Centers Main Streets Station Communities Corridors Passenger Intermodal Facilities	45—55%	Regional Centers Town Centers Main Streets Station Communities Corridors Passenger Intermodal Facilities	45—55%
Industrial Areas Freight Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	40—45%	Industrial Areas Freight Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	40—45%

Source: Metro's 2035 RTP

CHAPTER 9 - PUBLIC FACILITIES AND SERVICES

Purpose. The purpose of this chapter is to facilitate the development of citywide public facilities in relationship to other development needs. This chapter includes water, sanitary sewer, and stormwater infrastructure goals and policies.

CHAPTER 12 -- WATER SERVICES

~~3.080 (3) — *Water Service Areas.* As in the case of sewer service, the Tualatin Study Area was divided into four categories of water service availability. The four categories agreed closely with the four categories of sewer service. In addition to showing the degree of water service complexity and expense, the water service overlay depicts main trans-mission lines, reservoirs, water supply sources, and the approximate dividing line between the City's upper and lower water service levels.~~

~~TDC 12.010. -- Introduction.~~

- ~~(1) — In 1979, the City of Tualatin adopted the Tualatin Community Plan. R. A. Wright Engineering Company prepared the water service element. In 1982, the Tualatin Community Plan was reviewed due to the annexation of approximately 900 acres west of the city limits. City staff reviewed the water sewer service element. In 1983 the City Council amended the Plan, including the water service element. The Plan was changed from covering only the city limits to covering the city limits and the area out to the Urban Growth Boundary (UGB)(an "Active Plan").~~
- ~~(2) — In accordance with the Urban Planning Area Agreement between the City and Washington County and an Intergovernmental Agreement between the City and the City of Portland, the City of Tualatin is responsible for providing water service in the City of Tualatin. The City of Tualatin obtains its water from the City of Portland.~~
- ~~(3) — In 1990 and 1999 minor amendments to TDC Chapter 12 were adopted. In 2000 and 2002 the City contracted with CH2M Hill to update the City's water master plan. The 2000 update reflected Tualatin's growth and refined the 1983 plan.~~
- ~~(4) — The 2003 "Report, Tualatin Water Master Plan Update," (the "Master Plan") was the basis for amending the Tualatin Development Code (TDC), Chapter 12, in 2003. The purpose of the 2003 Master Plan was to provide the City with a comprehensive water master plan for future development of the water system. The 2003 Master Plan included a description of the existing water system, the planning criteria, a water system analysis and a capital improvement plan.~~

~~The 2003 Master Plan study area was the same as the Tualatin Community Plan, plus it included the Southwest Manufacturing Business Park.~~

- ~~(5) — The July 2013 Water Master Plan report was prepared as an update to the 2003 Master Plan. Its purpose is to be a comprehensive analysis of the City's water system, to identify system deficiencies, determine future water distribution system supply~~

~~requirements and recommend water system facility improvements that correct system deficiencies and provide for future system expansion.~~

- ~~(6) The July 2013 Water Master Plan anticipates demand as residential growth from redevelopment and infill, within the Town Center area, and industrial and employment growth in the Southwest Concept Plan Area.~~
- ~~(7) The purpose of Chapter 12~~this section ~~is to provide for:~~
- ~~(a) Reinforcement of the existing water system to provide adequate peak and fire-flow capabilities;~~
 - ~~(b) Expansion of the distribution system as areas inside the Urban Growth Boundary are annexed to the City and are developed;~~
 - ~~(c) Expansion of supply and storage facilities for present and future needs; and~~
 - ~~(d) Financing the construction of the foregoing facilities.~~

~~(Ord. 592-83, §53, 6-13-83; Ord. 1152-03, 12-8-03; Ord. 1191-05, 6-27-05; Ord. 1321-11 §31-4-25-11; Ord. 1359-13 §1, 9-23-13).~~

~~Water Services Goals and Policies~~

~~TDC 12.020. – Water Service Policies.~~

~~City of Tualatin water service policies are to:~~

- ~~(1) Plan and construct a City water system that protects the public health, provides cost-effective water service, meets the demands of users, addresses regulatory requirements and supports the land uses designated in the Tualatin Community Plan.~~
- ~~(2) Require developers to aid in improving the water system by constructing facilities to serve new development and extend lines to adjacent properties.~~
- ~~(3) Water lines should be looped whenever possible to prevent dead-ends, to maintain high water quality and to increase reliability in the system.~~
- ~~(4) Improve the water system to provide adequate service during peak demand periods and to provide adequate fire flows during all demand periods.~~
- ~~(5) Review and update the water system capital improvement program and funding sources as needed or during periodic review.~~
- ~~(6) Prohibit the extension of City water services outside the City's municipal boundaries, unless the water service is provided to an area inside an adjacent city.~~
- ~~(7) The July 2013 Water Master Plan is accepted by reference as a supporting technical document to the Tualatin Community Plan.~~

~~Water Services~~

~~The Water Master Plan (2013) is adopted as a background document to the Comprehensive Plan as seen in Part II.~~

- ~~● **Goal 9.1 Water Plan**, construct, and maintain a City water system that protects the public health, provides cost-effective water service, meets the demands of users, addresses regulatory requirements and supports all land uses.~~
- ~~○ **Policy 9.1.1** Require developers to aid in improving the water system by constructing facilities to serve new development and extend lines to adjacent properties. **Policy 9.1.2** Water lines should be looped whenever possible to prevent dead ends, to maintain high water quality and to increase reliability in the system.~~
- ~~○ **Policy 9.1.3** Improve the water system to provide adequate service during peak demand periods and to provide adequate fire flows during all demand periods.~~
- ~~○ **Policy 9.1.4** Review and update the water system capital improvement program and funding sources as needed or during periodic review.~~
- ~~○ **Policy 9.1.5** Prohibit the extension of City water services outside the City's municipal boundaries, unless the water service is provided to an area inside an adjacent city.~~

~~(Ord. 1152-03, 12-8-03; 03; Ord. 1191-05, 6-27-05; Ord. 1321-11 §32, 4-25-11; Ord. 1359-13 §2, 9-23-13).~~

TDC 12.030. -- Design Criteria.

The proposed water supply and distribution system is designed to accommodate the maximum demand that the system is expected to experience. The maximum demand is composed of consumer flows and fire flows.

~~(Ord. 1152-03, 12-8-03).~~

TDC 12.040. -- Population.

The July 2013 Water Master Plan projected a "build out population" of 29,396 residents; including estimates of 2,288 for redevelopment and infill and 1,048 for Town Center residential growth.

~~(Ord. 1152-03, 12-8-03; Ord. 1359-13 §3, 9-23-13).~~

TDC 12.050. -- Consumption.

- ~~(1) Population projections, commercial and industrial zoning acreage, and historical water use data formed the basis for the July 2013 Water Master Plan's future water demand projection.~~
 - ~~(a) The future per capita residential average day demand was assumed to be 90 gallons per capita per day.~~
 - ~~(b) The relationship between the average day demand and other flow rate demands in the system is called the peaking factor. A peaking factor of 2.2 was used in the~~

~~July 2013 Water Master Plan's calculation of combined residential, commercial and industrial maximum day demand.~~

~~(c) Large volume users are typically large multi-family projects and specialized industrial uses. The 2003 Master Plan identified 16 large water uses and they represent about 30% of the total system demand.~~

~~(d) Unaccounted for water is the difference between the total amount purchased wholesale from the Portland Water Bureau and the total amount billed to customers. It includes leakage losses, meter discrepancies, hydrant and main flushing, operation and maintenance uses, fire flow uses, unauthorized connections and unmetered miscellaneous uses.~~

(2) The July 2013 Master Plan's projected average day demand at buildout beyond 2031 for residential uses was 2.65 million gallons per day. The July 2013 Master Plan's projected average day demand at buildout beyond 2031 for commercial and industrial uses was 3.61 million gallons per day. The total system average day demand and maximum day demand were 6.47 and 14.24 million gallons per day, respectively.

~~(Ord. 1152-03, 12-8-03; Ord. 1359-13 §4, 9-23-13).~~

TDC 12.060. - Fire Flows.

~~(1) Fire flow is the amount of water required to fight a fire for a specified period. The Insurance Services Office (ISO) Commercial Risk Services, Inc., classifies a city for insurance rating purposes on the basis of a maximum fire flow requirement of 3,500 gallons per minute (gpm). Fire flow requirements greater than 3,500 gpm are evaluated individually and are not used by the ISO to determine the public protection classification of a municipality. For fire flow analysis the total fire flow requirement is a combination of building fire flow requirements plus system maximum day demand.~~

(2) Fire protection for the City's service area is provided by Tualatin Valley Fire & Rescue. The fire district has adopted fire flow requirements as defined in the 2010 State of Oregon Fire Code. A summary of fire flow recommendations based on the state fire code, fire flow criteria adopted by similar communities and fire flow guidelines as developed by the American Water Works Association is presented in Table 4-2 of the 2013 Master Plan.

Water Services Goals and Policies

- Goal 9.1 Water Plan, construct, and maintain a City water system that protects the public health, provides cost-effective water service, meets the demands of users, addresses regulatory requirements and supports all land uses.
 - Policy 9.1.1 Require developers to aid in improving the water system by constructing facilities to serve new development and extend lines to

adjacent properties. **Policy 9.1.2** Water lines should be looped whenever possible to prevent dead-ends, to maintain high water quality and to increase reliability in the system.

- **Policy 9.1.3** Improve the water system to provide adequate service during peak demand periods and to provide adequate fire flows during all demand periods.
- **Policy 9.1.4** Review and update the water system capital improvement program and funding sources as needed or during periodic review.
- **Policy 9.1.5** Prohibit the extension of City water services outside the City's municipal boundaries, unless the water service is provided to an area inside an adjacent city.

(Ord. 1152-03, 12-8-03; 03; Ord. 1191-05, 6-27-05; Ord. 1321-11 §32, 4-25-11; Ord. 1359-13 §2, 9-23-13).

~~(3) — Fire protection is not dependent on the water distribution system alone. Fire flows greater than 3,500 gpm can be reduced with individual fire suppression systems such as sprinklers, chemical and alarm systems and fire-resistant construction, onsite supply and other methods. Developments with fire flows greater than 3,500 gpm will need to supplement public water system flows through private systems such as those noted in the prior sentence. The July 2013 Master Plan's recommended minimum criteria for fire suppression flows for single family residential is 1,000 gpm, for multi-family is 2,000 gpm and, commercial, industrial and institutional uses is 3,500 gpm for a 3-hour duration.~~

~~(Ord. 1152-03, 12-8-03; Ord. 1359-13 §5, 9-23-13).~~

TDC 12.070. – Method of Analysis.

~~The July 2013 Water Master Plan analyzed the water system based on criteria for water supply, source, distribution system piping, service pressures, storage and pumping facilities in conjunction with the water demand forecasts for 2031 and beyond in Section 3 of the Master Plan.~~

~~The analysis and recommendations in Section 4 of the Master Plan are based on performance guidelines developed in a review of State of Oregon requirements, American Water Works Association (AWWA) acceptable practice guidelines, Insurance Services Office, Inc. (ISO) guidelines and the operational practices of similar water providers. The distribution system analysis was performed using InnoVyze's InfoWater hydraulic network analysis software and an updated system model that relied on geographical information system, updated reservoir and pump station data, and current control valve setting information.~~

~~(Ord. 1152-03, 12-08-03; Ord. 1359-13 §5, 9-23-13).~~

TDC 12.080. – Existing System.

- (1) ~~The City of Tualatin entered into an agreement with the City of Portland in the early 1980's to obtain water from the Bull Run watershed via the Washington County Water Supply Line. In emergencies the City can obtain small quantities through interties with the cities of Tigard, Lake Oswego, Sherwood and Wilsonville. Water from the Willamette River can be used for domestic purposes if Tualatin's voters approve of its use. Water quality from the Bull Run Reservoir, the Portland Water Bureau Columbia South Shore wellfield and the Tualatin distribution system meets or exceeds all U.S. Environmental Protection Agency water quality requirements.~~
- (2) ~~The City's water system is composed of three service levels (Levels A, B, and C) supplied by gravity and pumps and storage reservoirs. The system is primarily within public rights-of-way, is looped and is monitored and controlled by a central telemetry system.~~
- (3) ~~Service Level A is the lowest in elevation and is supplied directly from the Supply Line and by gravity from the 1971 2.2 million gallon enclosed steel tank Avery Reservoir. A new reservoir site was acquired in 2003 southwest of the SW Tualatin-Sherwood Road/SW Cipole Road inter-section. Service Level B is the second lowest in elevation and is supplied by gravity from the 1971 and 1989 2.2 and 2.8 million gallon enclosed steel tank reservoirs on SW Norwood Road. A new reservoir site was acquired in the 1990's southwest of the SW 108th Avenue/SW Cottonwood Street intersection. Service Level C is the highest in elevation and is supplied by gravity from the 1981 0.8 million gallon enclosed steel tank reservoir southeast of the Norwood Road overpass over I-5.~~
- (4) ~~The City has three pump stations. Stations one and two pump a back-up supply from Level A to Level B. Station three pumps from Level B to the C reservoir.~~
- (5) ~~The July 2013 Water Master Plan identifies 13.0 million gallons of water storage capacity in five reservoirs. The 2013 Master Plan recommends increased storage capacity in Service Areas A and B in the future.~~

~~(Ord. 592-83, §54, 6-13-83; Ord. 1152-03, 12-8-03; Ord. 1359-13 §7; 9-23-13).~~

TDC 12.090. – Proposed Improvements.

The water distribution and storage system with existing and proposed waterlines and reservoirs is illustrated in Map ~~429~~-1. The proposed short-term, medium-term and long-term capital improvements for the system recommended in the July 2013 Water Master Plan are in Master Plan Table 7-1 and shown mapped on Plate-1 in Appendix A of the Master Plan.

~~(Ord. 592-83, §55, 6-13-83; Ord. 1023-99, §8, 6-28-99; Ord. 1152-03, 12-8-03; Ord. 1359-13 §8, 9-23-13).~~

TDC 12.100. – Source of Supply.

~~The City's sole water supply is purchased wholesale from the Portland Water Bureau (PWB) through a 10-year wholesale water supply contract signed in 2006. Under the~~

~~terms of the agreement, the City is obligated to purchase a minimum annual volume of water equal to 4.4 million gallons per day (mgd).~~

~~The City operates a single aquifer storage and recovery (ASR) facility. ASR operations allow the City to store surplus drinking water in a groundwater aquifer during low demand periods (fall through spring) and then recover the water from a groundwater well during high-demand periods (summer). The aquifer has an effective recovery capacity of approximately 90 mg and is connected to Service Area B for both injection and recovery.~~

~~As a member of the Willamette River Water Coalition (WRWC), the City has access to surface water supply capacity from the Willamette River under OWRD Permit S-49240. In May 2002, the City Charter was amended to require that before Willamette River water is used for drinking purposes, a vote must approve such use.~~

~~(Ord. 592-83, §56, 6-13-83; Ord. 1152-03, 12-08-03; Ord. 1359-13 §9, 9-23-13).~~

~~TDC 12.110. – Pressure Levels.~~

- ~~(1) The City of Tualatin has three service levels designated as A, B, and C on Map 12-1. The Bridgeport Service Area serves commercial customers in the Bridgeport Village shopping center.~~
- ~~(2) Service Level A includes approximately the northern 50% of the City extending east and west covering elevations from 110 feet to about 200 feet. Service Level B includes approximately the middle 40% of the City extending east and west covering elevations from about 180 feet to 280 feet. Its southern extent is Ibach Street and Ibach Street extended west to the railroad tracks and extended east to I-5. There are isolated areas above 280 feet, but these contain a very limited number of houses. The boundaries of Service Level C are Ibach Street on the north, I-5 on the east, the UGB on the south and the railroad tracks on the west.~~
- ~~(3) Substantial development has occurred over the years. Future development is expected to occur in Level A on the remaining vacant manufacturing lands, in the Town Center area (redevelopment), in the Durham Quarry area and east of I-5 (Redevelopment of the Trailer Park of Portland). Future development in Level B is expected in the area of Legacy Meridian Park Hospital and the SW Concept Plan Area. Future development in Level C is expected in the SW Grahams Ferry and SW 408th Avenue residential areas.~~

~~(Ord. 1152-03, 12-8-03; Ord. 1359-13 §10, 9-23-13).~~

~~TDC 12.111. – Service Level A.~~

- ~~(1) Service Level A has adequate existing storage capacity but will require additional storage in the future. Increased storage volume needs in Service Area A are associated with the Town Center redevelopment and other redevelopment and infill.~~

~~(Ord. 592-83, §58, 6-13-83; Ord. 1152-03, 12-8-03; Ord. 1359-13 §11, 9-23-13).~~

~~TDC 12.112. – Service Level B.~~

~~(1) — Service Level B has adequate existing storage capacity but will require additional storage in the future. Increased storage volume needs in Service Area B are associated with expansion and development in the SW Concept Plan Area which is located largely in Service Area B.~~

~~(Ord. 592-83, §59, 6-13-83; Ord. 1152-03, 12-8-03; Ord. 1359-13 §12, 9-23-13).~~

~~TDC 12.113. – Service Level C.~~

~~(1) — The 2013 Water Master Plan identifies the pending construction of the 1.0 mg C-2 Reservoir to serve Service Area C.~~

~~(Ord. 592-83, §60, 6-13-83; Ord. 797-90, §2, 2-26-90; Ord. 1152-03, 12-8-03; Ord. 1359-13 §13, 9-23-13).~~

~~TDC 12.120. – Storage.~~

~~(1) — The City's Water System consists of five storage reservoirs with a combined storage capacity of 13.0 million gallons. The reservoirs are supplied both directly from the Portland Supply Main and from pump stations.~~

~~(2) — Service Areas A and B have adequate existing storage capacity but will require additional storage in the future associated with expansions and development in the Southwest Concept Plan area. Service Area C will be served by a new C-2 Reservoir and with the uncertainty of actual future development characteristics in the Service Area, the 2013 Master Plan does not recommend construction of additional storage within the planning period.~~

~~(Ord. 592-83, §61, 6-13-83; Ord. 1152-03, 12-8-03; Ord. 1359-13 §14, 9-23-13).~~

~~TDC 12.130. – Reserved.~~

~~Editor's note — Ord. No. 1359-13, § 15, adopted September 23, 2013, repealed § 12.130.~~

~~TDC 12.140. – Method of Financing.~~

~~(1) — The financial plan was based on assumptions related to system revenue and cost growth and the capital improvement plan in the Master Plan. The City should review the funding possibilities for the proposed water system improvements in Table 7-1 of the July 2013 Water Master Plan.~~

~~(Ord. 1152-03, 12-8-03; Ord. 1359-13 §16, 9-23-13).~~

~~CHAPTER 13 – SANITARY SEWER SERVICE~~

~~The Sewer Master Plan (2019) is adopted as a background document to the Comprehensive Plan as seen in Part II.~~

The design of the sewage collection system was established in 1979 and 1983 when the initial system was planned and updated. Since 1983 the planned system has, essentially, been constructed. The 2019 Sewer Master Plan updates the 2002 Sewer Master Plan for the City of Tualatin. This includes updating the 2012 hydraulic model prepared by CWS, reviewing and updating land use assumptions to match City planning projections, updating existing and future system hydraulic capacity deficiencies, developing a concept plan for service to two expansion areas, and reviewing initial project concepts with the updated hydraulic model to develop an improvement list for future land scenarios. Modeling was conducted for current conditions (2017) and planning years 2025, 2035, and buildout.

Projects and cost estimates, including engineering and administration, for the major improvements in Tualatin's sewage collection system are contained in the Sewer Master Plan. No attempt has been made to adjust prices to a future date. The cost figures include only City costs, not Clean Water Services.

~~3.080 (2) — Sewer Service Areas. To assist in determining areas most suited to urban development, a sewer service area overlay was prepared to illustrate the feasibility of providing sewer service throughout the Tualatin Planning Area. The Study Area was divided into four categories of sewer service availability in order of increasing complexity and expense of service. In addition, properties that can be served by existing pumping stations are considered to have gravity-flow service available.~~

TDC 13.010. -- Introduction.

- ~~(1) — In 1979, the City of Tualatin adopted the Tualatin Community Plan. R. A. Wright Engineering Company prepared the sanitary sewer service element. In 1982, the Tualatin Community Plan was reviewed due to the annexation of approximately 900 acres west of the city limits. City staff reviewed the sanitary sewer service element. In 1983 the City Council amended the Plan, including the sewer service element.~~
- ~~(2) — In accordance with the Urban Planning Area Agreement between the City and Washington County and an Intergovernmental Agreement between Clean Water Services (CWS) and the City, the City is responsible for collecting the sewage and CWS is responsible for the major conveyance lines and treatment. CWS's Durham Advanced Waste Water Treatment Plant treats most of the sewage generated in the City limits. Waste generated in the City limits north of the Tualatin River and east of I-5 is treated at the City of Portland's Tryon Creek Waste Water Treatment Plant.~~
- ~~(3) — In 2002, the City contracted with CH2M Hill to update the City's sewer master plan ("Report, Tualatin Sewer Master Plan," December 2002). The update accurately reflected Tualatin's growth and refined CWS's recently completed county-wide master plan system evaluation ("2000 Sanitary Sewer System Master Plan Update"). The City's "Report, Tualatin Sewer Master Plan," December 2002 (the "Master Plan") was the basis for amending the Tualatin Development Code (TDC), Chapter 13 in 2003. The purposes of the City's "Master Plan" were to:~~
- ~~(a) — Further develop the planning done by CWS for the Tualatin area as part of its county-wide planning effort in its 2000 update. Refine the evaluation, focus on Tualatin and address the City's specific planning projections.~~

- ~~(b) Evaluate and recommend current and future infrastructure needs to allow the sewer system to keep up with growth and provide planning level costs.~~
 - ~~(c) Control and eliminate sanitary sewer overflows (SSOs), such as basement flooding, to the extent possible.~~
 - ~~(d) Protect public health.~~
 - ~~(e) Protect water quality of neighborhood creeks, ponds and the Tualatin River.~~
 - ~~(f) Address regulatory requirements.~~
 - ~~(g) Develop a plan that will result in cost-effective sewer service that meets the demands of residential, commercial and industrial customers.~~
 - ~~(4) The 2002 "Master Plan" study area was the same as the Tualatin Community Plan, plus it included the Southwest Tualatin Concept Plan Area.~~
 - ~~(5) Northwest Tualatin Concept Plan 2005 identifies sewer service needs for the study area. This information is new and updates the 2003 Master Plan.~~
 - ~~(6) In 2019, the City approved an updated Sewer Master Plan. The City also adopted the Basalt Creek Concept Plan; the 2019 Sewer Master Plan includes the Basalt Creek Plan Area.~~
- ~~(Ord. 592-83, §63, 6-13-83; Ord. 1150-03, 10-27-03; Ord. 1321-11 §34, 4-25-11; Ord. 1427-19, § 1, 11-25-19)~~

Sanitary Sewer System Goals and Policies

~~TDC 13.015. Sanitary Sewer System Objectives.~~

- ~~(1) Plan and construct a City sewer system that protects the public health, protects the water quality of creeks, ponds, wetlands and the Tualatin River, provides cost-effective sewer service, meets the demands of users, addresses regulatory requirements and supports the land uses designated in the Tualatin Community Plan.~~
- ~~(2) Provide a City sanitary sewer system in cooperation with Clean Water Services (CWS). The City is responsible for the collection system's smaller lines and the 65th Avenue pump station and CWS is responsible for the larger lines, pump stations and treatment facilities.~~
- ~~(3) Work with CWS to ensure the provisions of the intergovernmental agreement between the City and CWS are implemented.~~
- ~~(4) Prohibit the extension of sewer service to areas outside the City limits, unless it is provided to an area inside the city limits of an adjacent city.~~
- ~~(5) Require developers to aid in improving the sewer system by constructing facilities to serve new development as well as adjacent properties. (6) Improve the existing sewer system to provide adequate service during peak demand periods.~~
- ~~(7) Improve the existing sewer system to control and eliminate sanitary sewer overflows such as basement flooding to the extent possible.~~

- ~~(8) The "Tualatin Sewer Master Plan" is adopted by reference as a supporting technical document to the Tualatin Community Plan.~~
- ~~(9) Review and update the "Tualatin Sewer Master Plan" on a regular basis in coordination with CWS.~~
- ~~(10) Perform a cost of service rate study and study funding methods to ensure sufficient City funds exist to construct planned improvements.~~
- ~~(11) Work with CWS to update CWS's and the City's plans and regulations once new sanitary sewer overflow (SSO) and capacity, management, operation and maintenance (CMOM) regulations are published in the Federal Register.~~

- **Goal 9.2** Plan, construct, and maintain a City sewer system that protects the public health, protects the water quality of creeks, ponds, wetlands and the Tualatin River, provides cost-effective sewer service, meets the demands of users, addresses regulatory requirements and supports all land uses.
 - **Policy 9.2.1** Provide a City sanitary sewer system in cooperation with Clean Water Services (CWS). The City is responsible for the collection system's smaller lines and the 65th Avenue pump station and CWS is responsible for the larger lines, pump stations and treatment facilities.
 - **Policy 9.2.2** Work with CWS to ensure the provisions of the intergovernmental agreement between the City and CWS are implemented.
 - **Policy 9.2.3** Prohibit the extension of sewer service to areas outside the City limits, unless it is provided to an area inside the city limits of an adjacent city.
 - **Policy 9.2.4** Require developers to aid in improving the sewer system by constructing facilities to serve new development as well as adjacent properties.
 - **Policy 9.2.5** Improve the existing sewer system to provide adequate service during peak demand periods.
 - **Policy 9.2.6** Improve the existing sewer system to control and eliminate sanitary sewer overflows such as basement flooding to the extent possible.
 - **Policy 9.2.7** Review and update the "Tualatin Sewer Master Plan" on a regular basis in coordination with CWS.
 - **Policy 9.2.8** Perform a cost of service rate study and study funding methods to ensure sufficient City funds exist to construct planned improvements.
 - **Policy 9.2.9** Work with CWS to update CWS's and the City's plans and regulations once new sanitary sewer overflow (SSO) and capacity, management, operation and maintenance (CMOM) regulations are published in the Federal Register.

(Ord.

~~(Ord. 592-83 §66, 6-13-83; Ord. 1150-03; Ord. 1150-03, 10-27-03; Ord. 1191-05, 6-27-05; Ord. 1321-11 §35, 4-25-11; Ord. 1427-19 , §§ 2, 50, 11-25-19)~~

~~TDC 13.020. – Design Criteria.~~

~~The design of the sewage collection system was established in 1970 and 1983 when the initial system was planned and updated. Since 1983 the planned system has, essentially, been constructed. The 2019 Sewer Master Plan updates the 2002 Sewer Master Plan for the City of Tualatin. This includes updating the 2012 hydraulic model prepared by CWS, reviewing and updating land use assumptions to match City planning projections, updating existing and future system hydraulic capacity deficiencies, developing a concept plan for service to two expansion areas, and reviewing initial project concepts with the updated hydraulic model to develop an improvement list for future land scenarios. Modeling was conducted for current conditions (2017) and planning years 2025, 2035, and buildout.~~

~~(Ord. 1150-03, 10-27-03; Ord. 1427-19, § 3, 11-25-19)~~

~~TDC 13.030. – Domestic Flows.~~

~~Using parcel (tax lot) based data for land use, residential flow volumes were calculated by totaling the flow volumes for all residential parcels and dividing that total volume by the most recent population estimates for the City. Diurnal flow and infiltration and inflow (I/I) data were also used. This resulted in an estimated residential water use of 91 gallons per capita per day (gpcd). This value was used for all planning years for parcels currently zoned residential and developed. New residential development flows were calculated for 100 gpcd, based on current City development code requirements.~~

~~(Ord. 1150-03, 10-27-03; Ord. 1427-19, § 4, 11-25-19)~~

~~TDC 13.040. – Nondomestic Flows.~~

~~The model addressed non-domestic flows similar to the domestic flows using parcel (tax lot) based data for land use, diurnal flow curves and infiltration and inflow data. Commercial flows were estimated in total gallons per day. The resulting daily flow rate for each parcel was input directly into the hydraulic model.~~

~~Certain industrial sites currently produce, or were expected to produce, large quantities of wastewater flow. They may significantly affect the performance of the collection system as a whole, and often do not follow standard diurnal flow patterns. The largest flow producers were identified and their diurnal curve data and daily permitted volume, if available, were used in the modeling.~~

~~(Ord. 1150-03, 10-27-03)~~

~~TDC 13.050. – Infiltration/Inflow.~~

~~The infiltration and inflow (I/I) data for the Sewer Master Plan was estimated based on the methodology used by Clean Water Services during the 2012 Durham model calibration task. A portion of the 5-year, 24-hour storm was routed through the service area and added to the average-day diurnal sanitary flows and base infiltration flows developed from monitoring data.~~

~~(Ord. 1150-03, 10-27-03; Ord. 1427-19, § 5, 11-25-19)~~

~~TDC 13.055. – Sanitary Sewer Overflows.~~

~~In accordance with its National Pollutant Discharge Elimination System (NPDES) Permit for the Durham Waste Water Treatment Plant, Clean Water Services (CWS) must prohibit sanitary sewer overflows (SSO) for wet weather conditions up to and including the 5-year return interval, 24-hour duration winter storm event when the new SSO regulations become law in late 2003 or in 2004. The "Master Plan" addressed general capacity management issues, and uses the 5-year, 24-hour winter storm as the wastewater flow criteria.~~

~~(Ord. 1150-03, 10-27-03; Ord. 1427-19, § 6, 11-25-19)~~

~~TDC 13.060. – Existing System.~~

- ~~(1) The City of Tualatin's sewage waste is treated at Clean Water Services' Durham Advanced Waste Water Treatment Plant. The waste is collected and piped to the plant via a network of collectors, trunks and interceptors. The main interceptor transporting waste from Tualatin is the Lower Tualatin Interceptor which is primarily fed by gravity sewers. Five areas are served by pressure mains and pump stations. A brief description of the existing system follows and it is shown on Map 13-1.~~
- ~~(2) Except for the five areas discussed below, the City is served by gravity lines. The main interceptors in this system are the Lower Tualatin Interceptor which conveys sewage from the City to the Durham Advanced Waste Water Treatment Plant, the Nyberg Trunk Line, which runs from the Lower Tualatin Interceptor east under I-5 serving the area east of I-5 and south of the river, the Bluff Cipole Trunk Line and Lateral which extends to the west from the Lower Tualatin Interceptor and the Tualatin-Sherwood Trunk which serves the area west of 99W and north of SW Tualatin Road. The Bluff Cipole Trunk Line is the main interceptor serving the western and southern portions of the Tualatin Planning Area. The five areas currently served by pump stations are as follows:

 - ~~(a) The area east of I-5 and north of the Tualatin River is served by a pump station located at 65th and Childs Road. The pump station discharges into the City of Lake Oswego sanitary sewer system. This area is served by Lake Oswego through a contract agreement with the City of Tualatin.~~
 - ~~(b) The area along Nyberg Street and Borland Road east of I-5 is served by five pump stations. The pump stations pump sewage to the Nyberg Interceptor and then into the Lower Tualatin Interceptor.~~~~

- ~~(c) The area east of I-5 and south of Sagert Street is served by a pump station at the intersection of 65th and I-205. This pump station discharges into the gravity line on SW 65th at the intersection of 65th and Borland.~~
- ~~(d) The south portion of the area west of SW Boones Ferry Road and east of SW Grahams Ferry Road is served by a pump station at the south end of Victoria Woods Subdivision which discharges into the Bluff Cipole Lateral.~~
- ~~(e) The area east of SW Cipole Road, north of SW Herman Road and south of 99W is served by a pump station at SW Cipole Road and Cummins Creek.~~

~~(Ord. 592-83, §64, 6-13-83; Ord. 1150-03, 10-27-03; Ord. 1427-19, § 7, 11-25-19)~~

~~TDC 13.070. -- Proposed System.~~

- ~~(1) The proposed sewage collection system is illustrated in Map 13-1.~~
- ~~(2) The majority of the trunk and interceptor lines were constructed, but some are not of sufficient capacity. The "Master Plan" reviewed the system and recommended improvements. The "Master Plan" focused on sewer system capacity deficiencies. Consistent with CWS's sewer design criteria, it compared peak hydraulic grade lines (HGL's) for each segment of the system with pipe slopes and ground surface elevations. City staff also identified locations requiring maintenance or replacement due to degradation and aging of the system.~~
- ~~(3) Because the system is essentially built and several trunk and interceptor lines are too small, the "Master Plan's" recommendations primarily were to increase trunk and interceptor line sizes.~~
- ~~(4) New collection system pipes and at least one pump station will be needed to serve the Southwest Tualatin Concept Plan Area. The actual configuration will depend on individual development plans, land use type and location, site grading and other factors not known in 2010. The Southwest Tualatin Concept Plan and the Basalt Creek Planning areas have conceptual sewer and pump station layouts that will be dependent on development.~~

~~(Ord. 592-83, §65, 6-13-83; Ord. 635-84, §7, 6-11-84; Ord. 1150-03, 10-27-03; Ord. 1321-11 §36, 4-25-11; Ord. 1427-19, § 8, 11-25-19)~~

~~TDC 13.080. -- Project List and Cost Estimates.~~

~~Projects and cost estimates, including engineering and administration, for the major improvements in Tualatin's sewage collection system are contained in the Sewer Master Plan. No attempt has been made to adjust prices to a future date. The cost figures include only City costs, not Clean Water Services.~~

~~(Ord. 592-83 §66, 6-13-83; Ord. 1150-03; Ord. 1191-05, 6-27-05; Ord. 1427-19, § 9, 11-25-19)~~

TDC 13.090. – Financing Methods.

- (1) ~~Financing the improvements proposed in the Sewer Master Plan will be provided primarily by local improvement districts, connection charges system development charges and revenue bonds, and private investors for residential, commercial and industrial developments. Construction of interceptors and trunks may involve a combination of costs to developers, contributions from Tualatin's sewer fund, and assessments against properties benefited.~~
- (2) ~~The City's sewer utility finances were reviewed in the Sewer Master Plan. It was estimated the capital expenditures for the recommended improvement projects will cause shortfalls. To meet the shortfalls the City can explore additional revenue sources such as revenue bonds. The specific requirements will be determined by a cost of service rate study. The City can also review sewer rates and system development charges with CWS to ensure revenues are sufficient to cover operating expenses, future capital projects and outstanding debt service. Ongoing rehabilitation and replacement projects to repair structural deficiencies as they develop should be considered for inclusion in capital budget planning.~~

~~(Ord. 592-83, §67, 6-13-84; Ord. 1150-03, 10-27-03; Ord. 1427-19, § 10, 11-25-19)~~

CHAPTER 14 – DRAINAGE PLAN AND SURFACE WATER MANAGEMENT

~~3.080 (4) *Storm Drainage.* The Tualatin Drain-age Plan defines and describes areas of inadequate drainage throughout the Tualatin Study Area. The Plan, which was originally prepared in 1972, will need to be updated as part of the City's planning revision work, but the overall drainage patterns have not changed. The City's core area and the area along Boones Ferry Road, south of the core area, are the most critical from the standpoint of drainage. The former will be dealt with in conjunction with Urban Renewal Area improvements.~~

TDC 14.010. – Background.

~~There are ten principal drainage basins for storm water and surface water in the Tualatin Planning Area. Except for a small drainage located in the south part of the City's planning area, the drainages flow to the Tualatin River. Hedges Creek, Nyberg Creek and Saum Creek are tributaries of the Tualatin River and are the larger drainages located within Tualatin's Planning Area.~~

~~Drainage, storm water and surface water runoff in the Tualatin Planning Area are addressed in the Tualatin Drainage Plan, the Surface Water Management Ordinance (SWM Ordinance) (Ord. 846-91), the Northwest Tualatin Concept Plan 2005, The Southwest Tualatin Concept Plan 2010 and TDC Chapter 74, Public Improvements.~~

~~The 1975 Tualatin Drainage Plan defines and describes the existing and planned drainage in the Tualatin Planning Area. The Tualatin Drainage Plan is periodically updated as drainage studies are prepared by the City or for development projects. In September of 1995, the City adopted the Hedges Creek Subbasin Plan (HCS Plan) and incorporated the drainage improvements and drainage pattern modifications in the~~

~~Hedges Creek Subbasin into the Tualatin Drainage Plan. The HCS Plan consists of the drainage and storm water management activities and programs recommended in Chapter I of the Hedges Creek Subbasin Strategies (HCSS) Report prepared by the City and Clean Water Services (CWS).~~

~~CWS began subbasin planning work for the Hedges Creek Basin in 1990, based on two previous storm water and nonpoint source plans, the Tualatin Basinwide Report and Technical Guidelines and the CWS Surface Water Management Plan. The HCSS report incorporates the original Hedges Creek Subbasin Management Plan completed in October 1992 and the Hydraulic Study of the Hedges Creek Marsh report completed in October 1994.~~

~~The surface water management policies and requirements in the SWM Ordinance were adopted by the City and other jurisdictions in the Tualatin River Basin to implement CWS requirements for control of sedimentation and water quality.~~

~~The drainage and surface management development requirements of the Tualatin Drainage Plan and SWM Ordinance are implemented in TDC Chapter 74, Public Improvements.~~

~~(Ord. 1191-05, 6-27-05; Ord. 1321-11 §38, 4-25-11)~~

TDC 14.020. - Drainage Plan.

(1)

The Tualatin Drainage Plan is the City's drainage plan. It was originally prepared by Robert A. Wright, Consulting Engineers in 1972 and adopted in 1975 (Ord. 280-75) and in 1979 as an element of the Tualatin Community Plan (Ord. 491-79). The Tualatin Drainage Plan is referenced in the Technical Memoranda ~~TDC 3.080~~. With the supporting technical material, the Tualatin Drainage Plan provides an overall view of the drainage system, its major problems and their solutions, and is the City's storm water and surface water drainage policy.

~~(2) —~~The Tualatin Drainage Plan was updated in the fall of 1995 by the Hedges Creek Subbasin Plan. The HCS Plan is outlined in Chapter 1 of the HCSS Report and implements the recommended drainage and storm water management activities and facilities. The HCS Plan relies on the technical data and analysis documented in the HCSS report. The HCSS Report and the HCS Plan identify the critical importance of the Hedges Creek Marsh to drainage, storm water management and water quality in the subbasin. The HCS Plan provides for drainage improvements, storm water detention requirements and a number of non-structural activities for better management of water quantity and water quality in the Hedges Creek Subbasin.

~~(3) —~~Map 14-1 is from Figure I-1 of the HCS Plan. It shows the drainage pattern revisions and drainage system improvements for the Hedges Creek Subbasin. The drainage pattern revisions and drainage system improvements shown in Map 14-1 are incorporated into the Tualatin Drainage Plan.

~~(4)~~—The HCSS Report is a comprehensive technical document that provides data and analysis of storm water drainage in the Hedges Creek Subbasin. From an analysis of several alternatives, the report recommended specific management activities and facilities to control water quantity and quality problems associated with urban storm water runoff in the Hedges Creek Subbasin. The HCS Plan incorporates the report's recommended activities and facilities.

~~(5)~~—The Northwest Tualatin Concept Plan 2005 identifies storm water drainage options for the area west of Cipole Road and south of Pacific Highway 99W.

~~(6)~~—The Southwest Tualatin Concept Plan 2010 identifies storm water drainage options for the area south of SW Tualatin-Sherwood Road and east of SW 124th Avenue.

(Ord. 1191-05, 6-27-05; Ord. 1321-11 §~~39~~38, 4-25-11)

TDC 14.030. – Surface Water Management.

~~(1)~~—The Surface Water Management Ordinance (SWM Ordinance) (Ord. 846-91) establishes regulations for soil erosion control, surface water management and water quality. The purpose of the SWM Ordinance is to implement Oregon Department of Environmental Quality (DEQ) and Clean Water Services (CWS) requirements for surface water management and water quality in the Tualatin River basin by reducing sediment and other pollutants reaching the public storm and surface water system. The SWM Ordinance provides requirements for permits, onsite detention, water quality facilities, floodplain and floodway design standards, protection of sensitive areas and vegetated corridors, specifications for building and side sewers, maintenance and inspection of facilities, permit fees, enforcement of violations and other matters related to surface water management and maintaining water quality.

~~(2)~~—HCS Plan requirements for onsite storm water detention for new development in the Hedges Creek Subbasin upstream from the Wetland Protected Area portion of the Hedges Creek marsh are adopted in the SWM Ordinance.

(Ord. 979-97, §3, 7-14-97; Ord. 1321-11 §40, 4-25-11)

TDC 14.040. – Objectives, Goals and Policies.

The objectives of the Tualatin Drainage Plan and Surface Water Management regulations are:

- **Goal 9.3**~~(1)~~ Provide a plan for routing surface drainage through the City, utilizing the natural drainages where possible. Update the plan as needed with drainage studies of problem areas and to respond to changes in the drainage pattern caused by urban development.
 - **Policy 9.3.1**~~(2)~~ Coordinate the City's Drainage Plan and Storm Water Management regulations with the City's Floodplain District, Wetland Protection District and Natural Resource Protection Overlay District regulations and with the plans of USA and other regional, state, and federal agencies to achieve consistency among the plans.

- **Policy 9.3.2**~~(3)~~ Reduce sediment and other pollutants reaching the public storm and surface water system by implementing the Oregon Department of Environmental Quality (DEQ) and USA requirements for surface water management and water quality in the Tualatin River basin. Reduce soil erosion, manage surface water runoff and improve surface water quality.
- **Policy 9.3.3**~~(4)~~ Identify and solve existing problems in the drainage system and plan for construction of drainage system improvements that support future development.
- **Policy 9.3.4**~~(5)~~ Provide standards for surface water management and water quality by which development will be reviewed and approved. Review and update the standards as needed.
- **Policy 9.3.5**~~(6)~~ Clearly indicate responsibilities for maintaining storm water management and water quality facilities.
- **Policy 9.3.6**~~(7)~~ Enforce drainage and storm water management standards.
- **Policy 9.3.7**~~(8)~~ Route storm water runoff from the upper Hedges Creek Subbasin through the Wetland Protected Area marsh which as a wetland provides important drainage, storm water management and water quality benefits.
- **Policy 9.3.8**~~(9)~~ Protect the Wetland Protected Area marsh and its important drainage, storm water management and water quality functions in the Hedges Creek Subbasin.
- **Policy 9.3.9**~~(10)~~ Require new development to provide onsite pollution reduction facilities when necessary to treat storm water runoff prior to entering Hedges Creek and protect the marsh from urban storm water pollutants.
- **Policy 9.3.10**~~(11)~~ To reduce sedimentation and erosive storm water flow volumes, require onsite storm water detention facilities for new development in the Hedges Creek Subbasin upstream from the Wetland Protected Area marsh.
- **Policy 9.3.11**~~(12)~~ Consider opportunities to construct regional pollution reduction facilities to treat storm water runoff prior to entering Hedges Creek and protect the marsh from urban storm water pollutants.
- **Policy 9.3.12**~~(13)~~ Restrict beaver dam activity in the Wetland Protected Area marsh to retain the drainage flow through the marsh area and to reduce flooding between Teton Avenue and Tualatin Road.
- **Policy 9.3.13**~~(14)~~ As outlined in the HCS Plan, the City will assist CWS with non-structural activities including public education programs and water quality and management activity monitoring.
- **Policy 9.3.14**~~(15)~~ Comply with Metro's Urban Growth Management Functional Plan, Title 3.

(Ord. 979-97, §4, 7-14-97; Ord. 1070-01, §1, 4-9-01; Ord. 1321-11 §41, 4-25-1

~~3.080 (5) *Electrical Service.* The Study Area is well served with major Portland General Electric Co. (PGE) transmission lines. Line extensions to newly developing areas do not appear to be a problem.~~

~~(6) *Gas Service.* The Tualatin area is well served by several large-capacity natural gas lines. The Northwest Natural Gas Co. has main trunk lines in the Bonneville Power Administration (BPA) right-of-way west of the Study Area. The City presently has a high percentage of natural gas use, which should be reviewed in light of probable future supply and cost.~~

~~(7) *Telephone Service.* The Tigard-Tualatin area telephone system is presently overloading, causing delays in calling and some dissatisfaction among residents and businesses. The area is served by the General Telephone Co. A new central office is in operation in the Wilsonville area, reducing the overloading of the 638 exchanges. Because of recent and expected future growth in Tualatin, General Telephone Co. is proposing the development of a new central office in Tualatin, or the expansion of their Stafford office to handle the load.~~

~~(8) *Schools.* At this time, the existing Tualatin Elementary School is overcrowded. A new school in south Tualatin is planned to be completed for fall of 1979. This, according to the School District, will relieve the overcrowding. There are no sites now for a third school, although the existing Comprehensive Plan indicates several potential locations. There are three general areas developing for residential use in the City. The southern part of the City will be served by the new school opening in 1979, as well as the existing school, which also serves the central area of the City. The two other areas are east of the freeway and west of the Tualatin Country Club. These should be the areas for future sites, depending upon projected population from future residential development. High school students in Tualatin are currently served by Tigard High School. According to the School District, a major high school in Tualatin is still many years away, but preliminary thinking for a site has begun. One small portion of the Study Area in the far southwest corner of the City is served by the Sherwood School District. A revision of boundaries may be necessary in this portion of the Study Area to conform the Tigard School District boundaries to those of the City.~~

CHAPTER 10 – LAND USE DESIGNATIONS AND ZONING

Purpose. The purpose of this chapter is to define a distinct range of land use designations that directly correspond with zones applied to lands within the City of Tualatin and its Urban Planning Area. This chapter explains the intention and distinguishing characteristics of each land use designation.

CHAPTER 9 – PLAN MAP

~~TDC 9.010.~~ Background.

This Plan section includes the Plan Map, (Map 910-1) classification of planning district boundaries, and brief descriptions of the land uses in each Plan area. ~~The Plan Map is a synthesis of the objectives contained in each Plan element that can be portrayed graphically in map form.~~ The Map is based on an analysis of data contained in the background analyses and technical memoranda, Comprehensive Plan goals and policies, ~~Phase I—Technical Memoranda, Northwest Tualatin Concept Plan 2005 and an analysis of Plan objectives~~ and the Statewide Planning Goals of the Land Conservation and Development Commission.

(Ord. 635-84, §4, 6-11-84; Ord. 1191-05, 6-27-05)

~~TDC 9.020.~~ Planning District Boundaries.

The boundaries between planning districts, as portrayed on the Plan Map, are intended to follow property lines (or extensions thereof), roadways, or natural features such as creeks. Where such definition was not possible, the Map is drawn to scale and district boundaries can be determined by using this scale. It should be noted that property lines shown on the Plan Map were derived from County Assessor's Maps and are therefore relatively accurate. Consequently, the planning districts shown on the Plan shall be considered zoning districts, as normally termed. This eliminates the need for two sets of maps and simplifies the understanding of what land uses may be allowed on an individual property.

~~TDC 9.025.~~ Tualatin Design Type Boundaries.

- (1) Map 910-4, Tualatin Design Type Boundaries, ~~shows the City's final location of the Metropolitan Service District's Growth Concept Design Types. Metro adopted the~~ reflects the general location of the Design Types ~~as part of adopting~~ in the Urban Growth Management Functional Plan (UGMFP) (Metro Code, Chapter 3.07). The UGMFP, Title 1, says, "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: " Map 910-4 shows the location of the applicable Design Types consistent with the general locations shown on the 2040 Growth Concept Map. The boundaries are intended to follow the Planning District Boundaries, property lines, rights-of-way centerlines and water features.

- (2) Rural Reserves and Green Corridors. The City recognizes that green corridors, as described in the 2040 Growth Concept, are critical to interurban connectivity. If the City, at some future date, annexes an area that includes a green corridor, it will be the City's policy to do the following:
- (a) Allow access, in a controlled manner, to the green corridor to maintain the function, capacity and level of service of the transportation facility and to enhance safety and minimize development pressures on rural reserve areas; and
 - (b) Provide appropriate vegetative screening and buffering of adjacent development and limit signage in such a way as to maintain the rural character of the green corridor.

(Ord. 1026-99, §9, 8-9-99)

~~TDC 9.030. -- Area Descriptions.~~

~~Map 9-2 shows Neighborhood Planning Areas, which help to describe the existing fabric of the city and land use pattern. To clarify the Plan Map, the Map has been divided into 14 plan areas, and the following describes, in narrative form, the permitted uses for each plan area. All Plan Areas with the exception of those comprising commercial and industrial lands, provide the framework for neighborhood organizations. It was with this in mind that the plan areas were drawn. Each area, with the exception stated above, was viewed as a potential neighborhood unit, having its own area of interest, comprising a population of 3,000 to 5,000 persons and served, as much as possible, by common facilities such as schools or parks.~~

~~(Ord. 635-84, §5, 6-11-84)~~

~~TDC 9.031. -- Area 1.~~

~~This portion of the Plan comprises the City's central area and is described in the City's adopted Central Urban Renewal Plan. The Central Urban Renewal Plan is a separate plan, but considered an element of this Plan. This Plan has been drafted to minimize any land use conflicts between uses on the periphery of the Central Urban Renewal Area. Map 9-3, "Central Tualatin Overlay Zone Urban Renewal Area Planning Districts," shows the Central Urban Renewal boundary of an overlay zone allowing unique uses and the Core Area Parking District boundary, land use blocks within the Central Urban Renewal Area, minimum lot sizes for blocks within the Central Urban Renewal Area, and the designation of which blocks require a Master Plan to be submitted for development.~~

~~(Ord. 694-86, §1, 5-27-86; Ord. 1109-02, 4-22-02)~~

~~TDC 9.032. -- Area 2.~~

~~Located directly south of Area 1 the Urban Renewal Area and west of the Interstate 5 Freeway (I-5), this area comprises most of the City's residential land west of I-5 and north of Avery Street. Being close to downtown, the area has a higher proportion of multi-family dwellings than other areas, with the northern and eastern portions of the~~

area comprising medium-low, medium-high and high density multi-family residential development. The southern portion of the area is predominantly low density residential. The Tualatin Elementary School is located in the center of the area at the intersection of Boones Ferry Road and Sagert Streets. The northeasterly portion of the area includes large-scale commercial uses that are included in the Schnitzer Investment Corporation Planned Unit Development (PUD). The commercial uses in this section of the PUD are proposed to include primarily headquarters office space for major firms and supporting commercial services such as restaurants. The western side of this area is bordered by a Light Industrial Plan designation, while a portion of the area's northern boundary is bordered by the Burlington Northern Railway tracks and mixed industrial and commercial designations.

~~TDC 9.033. – Area 3.~~

~~This area is characterized by low density residential development. Part of the City's greenway loop system traverses the area. A new neighborhood park is proposed for this area. The area's northwestern corner is bordered by a Light Manufacturing Planning District, while the western and southwestern boundaries are bordered by land outside the Urban Growth Boundary.~~

~~TDC 9.034. – Area 4.~~

~~This area lies south of Avery Street, between the Interstate 5 Freeway and Boones Ferry Road. The predominant land use is low density residential. A new elementary school located east of Boones Ferry Road, between Blake and Ibach Streets, is currently being constructed and will serve students from the south Tualatin area. A large greenway loop passes through this area to connect with the remainder of the loop in Area 3. The area is bordered on the east by the Interstate 5 Freeway and on the south by land outside the Urban Growth Boundary.~~

~~TDC 9.035. – Area 5.~~

~~Located east of the Interstate 5 Freeway, this area is primarily designated for low density residential uses, but contains substantial multi-family and commercial use north of Sagert Street and west of SW 65th Avenue. Meridian Park Hospital is located in this area on the northeast corner of SW 65th Avenue and Borland Road. Commercial land uses are located along the Interstate 5 Freeway, and on Nyberg Street from I-5 to SW 65th Avenue. A major greenway loop surrounds a majority of the area's perimeter, including a greenway shown along the Tualatin River frontage. A new neighborhood park is proposed. The eastern and southern boundaries of this area are adjacent to land outside the Urban Growth Boundary.~~

~~TDC 9.036. – Area 6.~~

~~Encompassing the northwestern quadrant of the City, tThis area's land uses are predominantly low and medium-low density residential. An area designated medium-low density residential paralleling SW 108th Avenue is shown as appropriate for mobile residential unit parks. A greenway extends along the Tualatin River, and a new neighborhood park is proposed. Lands north of Hazelbrook Road are within the 100-year and 10-year flood plain area and thus have restricted development potential.~~

~~TDC 9.037. – Area 7.~~

~~This area comprises the majority of the City's industrial land. The edges of this area are designated light industrial where the area abuts residential use. The central portion of this area is designated heavy industrial and surrounds a portion of the Hedges Creek Marsh, which is proposed for preservation. The eastern portion includes multi-family residential and commercial development, as well as institutional uses including an elementary school. abuts the Urban Renewal Area.~~

~~TDC 9.038. – Area 8.~~

~~This area includes the portion of the City and study area located north of the Tualatin River. Interstate 5 bisects the area and crosses SW Lower Boones Ferry Road at one of the City's two interchanges. The area is characterized by mixed land uses, including mixed use commercial, commercial, industrial, and residential. with commercial and industrial uses being the predominant types of development. Automobile-oriented uses such as motels, restaurants and automobile service stations are concentrated adjacent to the interchange, together with some commercial office buildings. Industrial uses are located further away from the interchange. Except for two mobile home parks, a duplex subdivision (Pipers Run) and mixed residential uses in the Mixed Use Commercial Overlay District on the Durham Quarry Site in the Durham Quarry Area, no new residential development is planned for Area 8. The Plan proposes additional general commercial and light manufacturing uses south of Jean Road, and general commercial, light manufacturing and heavy manufacturing uses north of Jean Road.~~

~~(Ord. 849-91, §7, 11-25-91; Ord. 1062.00, §4, 12-11-00; Ord. 1062-00, 1-03-01)~~

~~TDC 9.039. – Area 9 Leveton Industrial Area.~~

~~The Leveton area is marked by a great diversity of land uses and opportunities. Much of the frontage along Highway 99W has been developed for many years. The largest single undeveloped parcel within the Industrial Planning Area, and, at 217 acres, one of the largest in the entire Portland metropolitan region, is here. There is a great deal of vacant land available in a variety of acreage. The area includes approximately 522 acres of land of which approximately 33 are developed. In 2002 an additional 23 acres were added to the area. A detailed discussion of the existing land uses, and planning issues and considerations is given in the Technical Memorandum and Northwest Tualatin Concept Plan 2005. There are three sub-areas in this area. Each has a different character and is described separately below:~~

- ~~(1) The Highway 99W Frontage—This area is marked by industrial uses as listed in the planning district standards and includes the Quarry Sector subarea and Northwest Tualatin Concept Plan 2005 area. It is important to recognize the character of these properties as industrial, but to assure that the land use does not conflict with or discourage development on nearby properties. The properties are designated General Manufacturing (MG) and Light Manufacturing (ML) on the plan map. The right-of-way area of Highway 99W west of Cipole Road is not developable and is designated as General Manufacturing (CG) on the plan map.~~

- ~~(2) — Herman Road Frontage — This area is largely undeveloped with industrial activities. The General Manufacturing (MG) Planning District is assigned here since this area is well separated from the residential areas. The MG designation will give the area maximum flexibility for development.~~
- ~~(3) — Leveton Property — The Leveton property presents unique planning opportunities that must be protected in order to assure the greatest benefit to the community from development of the property. Neither the ML nor the MG planning districts are appropriate for the property as they include uses that are not compatible with a campus industrial setting. Also, the ML and MG districts have development standards that neither encourage nor mandate the campus environment. It is clear that a special district needs to be created for this property. This plan amendment includes the creation of the Manufacturing Park (MP) Planning District and applies it to the Leveton property as a way to encourage a campus industrial environment.~~

~~This area is predominantly developed with industrial uses, including some industrial activities that pre-date their location's annexation into Tualatin, especially along the 99-W corridor, as well as new industrial development and remaining greenfield sites.~~

~~(Ord. 592-83, §35, 6-13-83; Ord. 1023-99, §1, 6-28-99; Ord. 1191-05, 6-27-05)~~

TDC 9.040. - Area 10 Walgraeve Industrial Area.

~~The Walgraeve area has excellent development potential. This is described in detail in the Technical Memorandum. It contains a very high percentage of large lots of over ten acres and is largely undeveloped. It contains approximately 380 acres with approximately 86 acres developed. Some of the largest industrial users within the community are in this area. The General Manufacturing (MG) Planning District is to be used in this area, as it reflects many of the existing land uses and gives maximum development flexibility. There are no residential areas adjacent to the Walgraeve area.~~

~~(Ord. 592-83, §36, 6-13-83).~~

TDC 9.041. - Area 11 Koch Industrial Area.

~~The Koch Industrial Area has some of the most intense industrial development of the Industrial Planning Area, and at the same time, some of the most significant land in natural states. A detailed analysis of the area is given in the Technical Memorandum. The area is oriented on a north/south basis generally lying between the Burlington Northern Railroad on the east and the Metro UGB on the west. There are approximately 198 acres of which 54 are developed. The Tri-County Industrial Park, which straddles the rail line, makes up all of the developed property. There are two major sub-areas that are described below:~~

- ~~(1) — The northern half of the property will probably continue to develop in a pattern similar to that found within the industrial park. With proper street and utility improvements, this will form a solid land use foundation for the total industrial planning area. On the western side of the railroad tracks, the existing development has taken place under the provisions of the more intensive County zoning designation. Since the vacant properties in this area are buffered from the residential area, the General~~

~~Manufacturing (MG) Planning District is used. On the eastern side of the tracks, the Light Manufacturing (ML) Planning District is applied, reflecting the existing land uses and the immediate proximity to residential areas.~~

- ~~(2) In March 2011, the industrial land located south of SW Blake Street was removed from the Area 11 Koch Industrial Area and added to the Area 15 Southwest Manufacturing Business Park Area in accordance with the Southwest Tualatin Concept Plan accepted in October 2010.~~

~~(Ord. 592-83, §37, 6-13-83; Ord. 1321-11 §8, 4-25-11)~~

~~**TDC 9.042. – Area 12 Roamer's Rest.**~~

~~This planning area has two distinct portions, the residential area to the west and the commercial area to the east. Includes a mix of residential and commercial uses between the Tualatin River and Pacific Highway/99-W.~~

- ~~(1) The residential area is identified as an ideal and critical location for higher density housing. The flat land, relationship to the river, proximity to major employment centers, and excellent transportation access all lend themselves to a higher density development pattern. As it is necessary for the City to create the opportunity to develop a city-wide average, on vacant, buildable land, of at least eight dwelling units per acre and with a 50:50 ratio of attached to detached units, these properties are critical in meeting this goal. Their higher density pattern offsets lower density patterns for vacant lands in other parts of the community. Table 9-1 shows how the three Residential Planning Areas from the 1983 plan amendment work with the existing density pattern of the City to reach the standards. A "density gradient" approach is used in the Roamer's Rest area, with RML used on the west adjacent to the agricultural lands, RMH in the center portion, and RH in the west adjacent to the commercial area. This pattern allows for a transition from light to intense land uses on the north side of the Highway. Mobile homes are allowed in this RML area.~~
- ~~(2) It has been documented elsewhere in this Plan that the commercial portion of the Roamer's Rest Planning Area is an important community resource. It is important to protect it and encourage its continued use as an area that provides commercial activities relating to the Tualatin River and the Highway. The Commercial Recreation (CR) Planning District is used in this area.~~

~~(Ord. 592-83, §38, 6-13-83).~~

~~**TDC 9.043. – Area 13 Hazelbrook Planning Area.**~~

~~The Hazelbrook area has three main components: the higher density residential area, the single family area, and the commercial facilities.~~

- ~~(1) The higher density residential area is located along the north side of Tualatin Road extending from the commercial area at the highway intersection to approximately the east end of the manufacturing park area to the south. This area is designated for higher residential densities due to its proximity to the major employment center and its excellent transportation access. A density gradient approach is used with the RMH~~

and RML Planning Districts in order to provide for a transition from the commercial uses to the single family areas. This area works well to help meet the City's overall housing objectives, as can be seen in (Table 9-1).

- (2) — North and east of the higher density development is a large area slated for the RL district. Much of the land north of Hazelbrook Road is in the 100-year floodplain. Development will be limited due to this physical limitation and the regulations of the City's Floodplain District. Along and south of the road, however, the lands will be available for low density residential development involving traditional single family subdivisions, and, through the conditional use process, clustered housing styles.
- (3) — A Neighborhood Commercial node is planned for the northeast corner of 115th Avenue and Tualatin Road. This two acre parcel is ideally suited for this type of convenience commercial use. It is on the intersection of an arterial and a collector. It has a relatively square shape and flat topography. Most importantly, it is located at the center of the proposed higher density area and immediately across from a major employment center.

(Ord. 592-83, §39, 6-13-83)

TDC 9.044. - Area 14 Graham's Ferry Planning Area.

The Graham's Ferry area contains three basic components: the higher density area around the Norwood/Boones Ferry intersection, the higher density area on the east side of SW Grahams Ferry Road at SW Helenius Road, and the lower density residential balance of the area.

- (1) — An area with the RML Planning District is planned north of the Norwood Expressway in the vicinity of Boones Ferry Road and on the east side of SW Grahams Ferry Road at SW Helenius Road. This land lends itself to a slightly higher density than traditional single family due to the excellent transportation access and the close relationship to the employment centers in Wilsonville. It is the determination of this Plan that it is appropriate to "spread" the higher density areas throughout the community, rather than concentrating them, such as in the Roamer's Rest and Hazelbrook Planning Areas. The use of the RML District in this area provides for the needed higher densities with a District that will allow development that is similar in character and density to the RL lands.
- (2) — The Tonquin Scablands area has three special provisions. First is the Wetland Protection District. It prohibits building in the defined wetland area and provides a setback from that area. Second is the Greenway and Riverbank Protection (GRP) District. It covers the steep cliff immediately east of the wetlands. The GRP District will allow residential density transfer to developable portions of an affected property. The third provision impacting the Scablands involves the various steep-sided channels between 108th Avenue and Boones Ferry Road. It is the policy of this Plan to protect these areas on a case by case basis as development occurs by prohibiting building within the channels and allowing residential density transfer to other portions of the affected properties.

~~(3) The balance of the Graham's Ferry Planning Area is designated in the Residential Low Density (RL) Planning District. This land will develop either in the traditional single-family subdivision pattern, or, through the conditional use process, in mobile homes or clustered housing patterns.~~

~~(Ord. 592-83, §40, 6-13-83; Ord. 1051-00 §2. 3-13-00)~~

~~**TDC 9.045. Area 15 Southwest Manufacturing Business Park Planning Area.**~~

~~The Southwest Manufacturing Business Park Planning Area is 4431 acres of land for industrial development located in the Tonquin quarry areas west of the Portland & Western Railroad, south of SW Blake Street as far west as a future SW 124th Avenue extension and south to Tonquin Road and includes the land north of SW Blake Street and west of SW 120th Avenue to SW 124th Avenue, extending north to SW Tualatin-Sherwood Road (Shown on Map 9-2). The area was established and is consistent with the Southwest Tualatin Concept Plan (accepted by the City in October, 2010) and as a Metro-designated Regionally Significant Industrial Area (RSIA) consistent with Metro's Urban Growth Boundary expansion decisions of December 2002 and June 2004.~~

~~The SWCP area will be designated as the Manufacturing Business Park (MBP) Planning District and will be a mix of light industrial and high-technology uses in a corporate campus setting, consistent with MBP Planning District development standards. There are three major sub-areas which are described below:~~

- ~~(1) The 302 acre RSIA-designated are (Shown on Map 9-5) requires development as Industrial consistent with Metro Urban Growth Management Functional Plan (MUGMFP) Title IV and must provide at least one 100-acre parcel and one 50-acre parcel for large industrial users within the RSIA.~~
- ~~(2) The properties in the SWCP are located north of SW Blake to SW Tualatin-Sherwood Road will include light industrial uses consistent with the MBP Planning District with some limited, local-serving commercial services in a specific area on both the east and west sides of SW 120th Avenue south of SW Itel Street.~~
- ~~(3) The 50 acre Tigard Sand & Gravel property located south of SW Blake Street already within the Tualatin's Planning Area.~~

~~(Ord. 1321-11, §9, 4-25-11)~~

**Table 9-1
Residential Densities in the Roamer's Rest, Hazelbrook,
and Graham's Ferry Planning Areas**

Area and District	Net Acres	Dwelling Units Per Acre	Dwelling Units	Attached to Detached Ratio

Roamer's Rest				
RML	16.35	10	163	100:0
RMH	8.87	15	133	100:0
RH	13.74	25	340	100:0
Subtotal	38.96	16.32	636	100:0
Hazelbrook				
RL	66.11	5	330	0:100
RML	11.68	10	116	100:0
RMH	19.54	15	293	100:0
Subtotal	97.33	7.59	739	55:45
Graham's Ferry				
RL	201.69	5	1,008	0:100
RML	42.24	10	421	100:0
Subtotal	243.93	5.88	1,429	29:71
Total of Planning Area	380.22	7.37	2,804	52:48
Total of Existing City	283.80	8.95	2,539	62:38
Grand Total—Planning Area and City	664.02	8.05	5,343	57:43

~~TDC 9.046. – Area 16 Basalt Creek Planning Area.~~

~~The Basalt Creek Planning Area is generally located north of Basalt Creek Parkway, south of Helenius Road and Norwood Road, east of 124th Avenue, and west of I-5. The~~

Basalt Creek Planning Area includes a mix of residential zones at various densities, a small neighborhood commercial node, an employment lands, as further described below.

- (1) ~~An area with the RL (Low Density Residential) Zone is planned west of Boones Ferry Road in the approximate area of the Basalt Creek Canyon. An area with the RL Zone is also planned north of Tonquin Loop, south of Helenius Road, west of Grahams Ferry Road and east of 124th Avenue. This land will develop either in the traditional single-family subdivision pattern, or, through the conditional use process in clustered housing patterns.~~
- (2) ~~An area with the RML (Medium Low Density Residential) Zone is planned south of Norwood Road, east of Boones Ferry Road, and west of I-5. An additional area of RML Zone is also planned east of Grahams Ferry Road between the two above described areas of RL Zone. These areas lends themselves to a slightly higher density than traditional single-family due to the excellent transportation access and the close relationship to the employment centers. The use of the RML Zone in this area provides for the needed higher densities with a Zone that will allow development that is similar in character and density to the RL lands.~~
- (3) ~~An area with the RH (High Density Residential) Zone is planned north of Greenhill Road and east of Boones Ferry Road. This land lends itself to a higher density due to the excellent transportation access and the close relationship to the employment centers. The use of the RH District in this area provides for the needed higher densities.~~
- (4) ~~A small area with the CN (Neighborhood Commercial) Zone is planned north of Greenhill Road and east of Boones Ferry Road. This CN Zone is intended to provide locations for commercial uses within close proximity to residential areas, to provide opportunities to serve the needs of residents for convenience shopping and services. This area lends itself to the CN Zone due to the excellent transportation access and the close proximity to abutting residential areas of medium to higher densities.~~
- (5) ~~The balance of the Basalt Creek Planning Area is designated in the MP (Manufacturing Park) Zone. The MP District is intended to be conducive to the development and protection of modern, large-scale specialized manufacturing and related uses and research facilities. This area is located north of Basalt Creek Parkway, south of Tonquin Loop, east of 124th Avenue, west of Basalt Creek Canyon and an area of RML Zone.~~

~~(Ord. 1418-19, § 3, 4-22-19)~~

~~TDC 5.040. – Planning District Objectives.~~

~~Planning District Descriptions.~~

~~This section describes the purpose of each residential-planning-planning district.~~

~~Residential Planning Districts:~~

~~Low Density Residential Planning District (RL).~~

The purpose of the Low Density Residential (RL) district is to provide low density residential areas in the City that include dwellings on individual lots, as well as other land uses and development types compatible with a low density residential environment.

Medium-Low Density Residential Planning District (RML).

This district supports household living uses with a variety of housing types at moderately low densities. This district is primarily oriented toward middle housing types including attached dwellings, multi-family development, and manufactured dwelling parks.

Residential Planning Districts:

- ~~(1) — *Low Density Residential Planning District (RL).* To provide areas of the City suitable for single-family dwellings and manufactured homes. Commonwall dwelling units and small lot subdivisions may be allowed by conditional use permit. Except for retirement housing and nursing and convalescent homes which shall not exceed ten dwelling units per net acre and small lot subdivisions and partitions and subdivisions affected by TDC 40.055, which shall not exceed 7.5 dwelling units per net acre, the maximum density of any residential use in this district shall not exceed 6.4 dwelling units per net acre. The raising of agricultural animals and the construction of agricultural structures may be allowed by conditional use permit in those portions of the District designated on the Plan Map.~~
- ~~(2) — *Medium-Low Density Residential Planning District (RML).* To provide areas of the City suitable for commonwall dwellings such as condominiums, townhouses, duplexes, triplexes, and other multi-family dwellings. Condominiums and small lot subdivisions may be allowed by conditional use permit. Owner occupancy of dwelling units shall be encouraged. Parks for manufactured dwellings shall be allowed in those portions of the district designated on the Plan Map. Except for retirement housing and nursing and convalescent homes which shall not exceed 15 dwelling units per net acre and manufactured dwelling parks with single-wide manufactured dwellings which shall not exceed 12 dwelling units per net acre, the maximum density of any residential use shall not exceed ten dwelling units per net acre. The raising of agricultural animals and the construction of agricultural structures may be allowed by conditional use permit in those portions of the District designated on the Plan Map.~~
- ~~(3) — *Medium-High Density Residential Planning District (RMH).* To provide areas of the City suitable for townhouses, garden apartments and condominium developments. Except for retirement housing and nursing and convalescent homes, which shall not exceed 22.5 dwelling units per net acre, the maximum density of any residential use shall not exceed 15 dwelling units per net acre. The raising of agricultural animals and the construction of agricultural structures may be allowed by conditional use permit in those portions of the district designated on the Plan Map.~~
- ~~(4) — *High Density Residential Planning District (RH).* To provide areas of the City suitable for townhouses, high density garden apartments and condominium developments. Except for retirement housing and nursing and convalescent homes, which shall not~~

~~exceed 37.5 dwelling units per net acre, the maximum density of any residential use shall not exceed 25 dwelling units per net acre.~~

~~(5)~~

~~Medium-High Density Residential Planning District (RMH).~~

~~This district supports a variety of housing types at moderate densities. This district is primarily oriented toward multi-family development and attached homes.~~

~~High Density Residential Planning District (RH).~~

~~This district supports a variety of housing types at moderately high densities. This district is primarily oriented toward multi-family development and attached homes.~~

~~High Density Residential/High Rise Planning District (RH-HR). To provide areas of the City suitable for high density apartment or condominium tower development~~

~~This district supports a wide range of housing types the greatest density of household living in areas with the greatest access to provide a maximum amount of preserved open space. Except for retirement housing and nursing and convalescent homes, which shall not exceed 45 dwelling units per net acre, the maximum density of any residential use shall not exceed 30 dwelling units per net acre. amenities.~~

~~(Ord. 818-91, § 6 & 7, 1-14-91; Ord. 828-91, § 1, 3-25-91; Ord. 868-92, § 2, 5-11-92; Ord. 921-94, § 1, 4-25-94; Ord. 956-96, § 3, 1-8-96; Ord. 956-96, § 3, 2-8-96; Ord. 1026-99, §4, 8-9-99; Ord. 1272-08 §1, 11-10-08)~~

~~**TDC 6.040. - Commercial Planning District Objectives.**~~

~~This section describes the purpose of each commercial planning district.~~

Commercial Planning Districts:

~~(1) — Office Commercial Planning District (CO). To provide areas suitable for professional office uses adjacent to or across from residential areas. Restaurants may be allowed by conditional use permit when designed as an integral part of a major office complex. It is the intent of this district to provide for office development ranging in size from small buildings with one or two tenants to large complexes housing business headquarters offices. In the design of development in this district, care shall be taken to preserve significant natural resources and to provide extensive perimeter landscaping, especially adjacent to residential areas and streets.~~

- (2) *Neighborhood Commercial Planning District (CN)*. To provide locations for commercial uses within close proximity to residential areas. It is to provide for opportunities to serve the needs of residents for convenience shopping and services. Such uses will be limited to professional offices, services, and retail trade that are oriented to the day-to-day commercial needs of the residential neighborhood. Neighborhood commercial uses are intended to be pedestrian oriented and should serve to reduce automobile trips and energy consumption. The purpose is also to assure that such development is of a scale and design so that it is compatible with the residential environment and is an enhancement to neighborhood areas. It is not the purpose of this district to create large scale commercial facilities that will compete with similar uses, such as large grocery or department stores, located in the downtown area.
- (3) *Recreational Commercial Planning District (CR)*. To recognize the unique and valuable physical, scenic, cultural, and historic character of the Roamer's Rest area located between the Tualatin River and Pacific Highway (99W) north of the highway's intersection with Tualatin Road. It is intended to preserve that area by allowing and encouraging commercial and related uses that are oriented to the traveler on the highway or that are oriented toward and relate well with the river.
- (4) *Central Commercial Planning District (CC)*. To provide areas for a full range of retail, professional and service uses of the kinds usually found in downtown areas patronized by pedestrians. Civic, social and cultural functions that serve the general community are also appropriate. The Central Commercial Planning District is almost entirely within the downtown portion of the urban renewal area. The Urban Renewal Plan contains extensive development policies and design standards that apply to this district. These policies and standards are intended to help create a village atmosphere in the downtown area. Multiple-family housing is appropriate in certain areas of this district, as specified in the Urban Renewal Plan.
- (5) *General Commercial Planning District (CG)*. To provide areas suitable for a full range of commercial uses, including those uses that are inappropriate for neighborhood, office or central commercial areas. This district is particularly suitable for automobile/service-oriented businesses, excluding automobile, truck and machinery sales and rental, located along the freeway and major arterials. Because of their location, these uses are highly visible to large numbers of passing motorists. Commercial development along the freeway provides perhaps the only lasting impression of Tualatin for many travelers. Therefore, careful attention shall be given to site and structure design for development in this district, including signs, choice of materials, and landscaping, particularly in and around parking areas. This District is suitable for mixed commercial and residential uses through the Mixed Use Commercial Overlay District on the Durham Quarry Site and in the Durham Quarry Area.
- (6) *Mixed-Use Commercial Planning District (MUC)*. To provide areas suitable for a mix of office, retail commercial, and high-density housing. Development standards in this district shall encourage a range of complementary and integrated uses oriented toward pedestrian activity.

- ~~(7)~~—*Mid Rise/Commercial Office Planning District (CO/MR)*. To provide areas suitable for professional Class A Mid Rise offices. The CO/MR District shall be applied to appropriate lands west of Interstate 5 and south of the Tualatin River. Since the potential application of this district extends over most of the City's incorporated area, considerations such as proximity to established residential districts and preservation of significant views and visual corridors shall be encouraged.
- ~~(8)~~—*Medical Center Planning District (MC)*. To provide areas for major medical centers providing medical facilities and health care services for the residents of Tualatin and the surrounding area, and to provide limited supporting retail and service uses for the convenience of patients, patient visitors and staff. The Medical Center District shall be no less than 25 acres and front on an arterial as designated in ~~TDC Chapter 11, Tualatin Community Plan. in~~ the City's Transportation System Plan.

(Ord. 592-83, §28, 6-13-83; Ord. 783-89, §1, 10-23-89; Ord. 827-91, §3, 3-25-91; Ord. 1026-99, §5, 8-9-99; Ord. 1062.00, §3, 12-11-00; Ord. 1062-00, 1-3-01

~~TDC 7.040. – Manufacturing Planning District Objectives.~~

~~This section describes the purpose of each manufacturing planning district.~~

Manufacturing Planning Districts:

~~(1)~~—*Manufacturing Park Planning District (MP)*.

~~(a)~~—The purpose of this district is to provide an environment exclusively for and conducive to the development and protection of modern, large-scale specialized manufacturing and related uses and research facilities. Such permitted uses shall not cause objectionable noise, smoke, odor, dust, noxious gases, vibration, glare, heat, fire hazard or other wastes emanating from the property. The district is to provide for an esthetically attractive working environment with park or campus-like grounds, attractive buildings, ample employee parking and other amenities appropriate to an employee oriented activity.

~~(b)~~—It also is to protect existing and future sites for such uses by maintaining large lot configurations and limiting uses to those that are of a nature to not conflict with other industrial uses or surrounding residential areas.

~~(c)~~—It also is intended to provide for a limited amount of commercial uses designed for the employees of the primary uses and to provide for a limited amount of retail selling of products manufactured, assembled, packaged or wholesaled on the site ~~provided the retail sale area, including the showroom area, is no more than five percent of the gross floor area of the building not to exceed 1,500 square feet. subject to area limitations.~~

~~(2)~~—*Light Manufacturing Planning District (ML)*.

~~(a)~~—Suitable for warehousing, wholesaling and light manufacturing processes that are not hazardous and that do not create undue amounts of noise, dust, odor, vibration, or smoke. Also suitable, with appropriate restrictions, are the retail sale

of products not allowed for sale in General Commercial areas, subject to ~~the Special Commercial Setback from arterial streets and Commercial Services Overlay as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035, and office~~applicable zoning overlay standards. . Also suitable are accessory commercial uses where any portion of a legally created lot is within 60 feet of a CO Planning District boundary. Also suitable is the retail subject to area limitations for the sale of products manufactured, assembled, packaged or wholesaled on the site ~~provided the retail sale area, including the showroom area, is no more than five percent of the gross floor area of the building not to exceed 1,500 square feet. Also suitable for the retail sale of home improvement materials and supplies provided it is not greater than 60,000 square feet of gross floor area per building or business and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035. Rail access and screened open storage allowed in these areas will conform to defined architectural, landscape and environmental design standards.~~

- (b) ~~The following uses within the Light Manufacturing District shall comply with the following size limits established by Metro. Retail sale, retail service and professional service uses shall be no greater than 5,000 square feet of sales or service area per outlet, or not greater than 20,000 square feet of sales or service area for multiple outlets in a single building or in multiple buildings that are part of the same development project, with the following exceptions:~~
- (i) ~~Application of the Industrial Business Park Overlay District (TDC Chapter 69).~~
 - (ii) ~~The retail sale of products manufactured, assembled, packaged or wholesaled on the site is allowed provided the retail sale area, including the showroom area, is no more than five percent of the gross floor area of the building not to exceed 1,500 square feet.~~
 - (iii) ~~Within the Special Commercial Setback from arterial streets (TDC 60.035) the retail sale of home improvement materials and supplies is allowed provided it is not greater than 60,000 square feet of gross floor area per building or business and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035. Rail Access and screened open storage allowed in these areas will conform to defined architectural, landscape and environmental design standards.~~
- (c) ~~The purpose of this district is to provide sites for manufacturing uses that are more compatible with adjacent commercial and residential uses and would serve to buffer heavy manufacturing uses. The purpose is also to allow the retail sale of products manufactured, assembled, packaged or wholesaled on the site~~ provided the retail sale subject to area, including the showroom area, is no more than five percent of the gross floor area of the building not to exceed 1,500 square feet limitations. Certain heavier manufacturing uses may be allowed as conditional uses.

- ~~(d) In accordance with the Industrial Business Park Overlay District, TDC Chapter 69, selected office and retail uses are allowed to provide services to businesses and employees. The purpose is also to allow certain commercial service uses in the Commercial Services Overlay shown in the specific areas illustrated on Map 9-5 and selected commercial uses subject to distance restrictions from residential areas and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 60.035.~~
- ~~(3) General Manufacturing Planning District (MG).~~
- ~~(a) Suitable for light manufacturing uses and also for a wide range of heavier manufacturing and processing activities. Such areas could be expected to be more unsightly and to have more adverse environmental effects. Rail access and screened open storage would be allowed in this area, conforming to defined architectural, landscape and environmental design standards. Also suitable is the retail sale of products manufactured, assembled, packaged or wholesaled on the site provided the retail sale area, including the showroom area, is no more than five percent of the gross floor area of the building not to exceed 1,500 square feet. Also suitable for the retail sale of home improvement materials and supplies provided it is not greater than 60,000 square feet of gross floor area per building or business and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 61.035~~area limitations.
- ~~(b) The following uses within the General Manufacturing District shall comply with the following size limits established by Metro. Retail sale, retail service and professional service uses shall be no greater than 5,000 square feet of sales or service area per outlet, or not greater than 20,000 square feet of sales or service area for multiple outlets in a single building or in multiple buildings that are part of the same development project, with the following exceptions.~~
- ~~(i) Application of the Industrial Business Park Overlay District (TDC Chapter 69).~~
- ~~(ii) The retail sale of products manufactured, assembled, packaged or wholesaled on the site provided the retail sale area, including the showroom area, shall be no more than five percent of the gross floor area of the building not to exceed 1,500 square feet.~~
- ~~(iii) Within the Special Setbacks for Commercial Uses Area (TDC 61.035) the retail sale of home improvement materials and supplies is allowed provided it is not greater than 60,000 square feet of gross floor area per building or business and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 61.035.~~
- ~~(c) In accordance with the Industrial Business Park Overlay District, TDC Chapter 69, selected office and retail uses are allowed to provide services to businesses and employees. The purpose is also to allow certain commercial service uses in the Commercial Services Overlay shown in the specific areas illustrated on Map 9-5 and allow selected commercial uses subject to distance restrictions from~~

~~residential areas and subject to the Special Commercial Setback from arterial streets as generally illustrated in Map 9-5 and specifically set forth in TDC 61.035.~~

~~(d)~~—The heaviest manufacturing uses that are environmentally adverse or pose a hazard to life and safety will not be allowed.

~~(4)~~—*Manufacturing Business Park Planning District (MBP).*

~~(a)~~—The purpose of the MBP Planning District is to provide an environment for industrial development consistent with the Southwest Tualatin Concept Plan (accepted by the City in October 2010) and as a Metro-designated Regionally Significant Industrial Area (RSIA) consistent with Metro's Urban Growth Boundary expansion decisions of 2002 and 2004.

~~(b)~~—The MBP Planning District will be a mix of light industrial and high-tech uses in a corporate campus setting, consistent with MBP Planning District development standards. The RSIA-designated area requires at least one 100-acre parcel and one 50-acre parcel for large industrial users. ~~The remainder of the area is likely to include light industrial uses with some limited, local-serving commercial services.~~

~~(c)~~—The district is intended to provide for an esthetically attractive working environment with campus-like grounds, attractive buildings, ample employee parking and other amenities appropriate to an employee oriented activity. It also is intended to protect existing and future sites for such uses by maintaining large lot configurations, a cohesive planned-development design and limiting uses to those that are of a nature that will not conflict with other industrial uses or nearby residential areas of the City.

(Ord. 592-83 §34, 6-13-83; Ord. 942-95, 3-27-95; Ord. 1003-98, 4-27-98; Ord. 1026-99, 8-9-99; Ord. 1046-00, 2-14-00; Ord. 1133-03, 3-24-03; Ord. 1212-06; 6-26-06; Ord. 1321-11 §7, 4-25-11)

~~TDC 8.100. – Institutional Planning District Objectives.~~

~~This section describes the purpose of the Institutional Planning District, and includes the objectives used to guide development of the Planning District Standards and to guide application of the planning district to particular areas of the City.~~

Other Planning Districts:

~~(1)~~—*Institutional Planning District (IN).*

~~(1) (a)~~—The purpose of this district is to provide an environment exclusively for, and conducive to, the development and operation of religious institutions, schools, public parks, and related uses, in a manner that is harmonious with adjacent and nearby residential, commercial, or manufacturing planning districts and uses.

~~(2) (b)~~—The district is intended to accommodate large-scale campus-style developments, owned and operated by governmental or nonprofit entities, consisting of multiple

structures or facilities, which may serve multiple purposes and provide multiple services to the community.

~~(3)(c)~~—Permitted and conditional uses shall be developed and operated in a manner that promotes and protects the health, safety, and general welfare of all adjacent and nearby planning districts and uses. Additionally, conditional uses shall be allowed provided that the use is developed and operated in a manner that is consistent with the intent of the planning district, and that promotes and protects the health, safety, and general welfare of all adjacent and nearby planning districts and uses.

~~(4)(d)~~—The district may be applied to land that is able to accommodate large-scale campus-style development and operation of religious institutions, schools, public parks, and related uses, as follows:

- (a) Contiguous land one and one-half acre in size or greater;
- (b) Access to a collector or arterial street;
- (c) Adequate public facilities are available to the property.

(Ord. 1216-06, 7-24-06)