



2040 SHERWOOD COMPREHENSIVE PLAN

THRIVING AND DIVERSIFIED ECONOMY

BACKGROUND REPORT



MAY 1, 2019

Introduction

In past years, Sherwood has been one of the fastest growing cities in Oregon. While a bedroom community in the Portland/Vancouver Metropolitan Region, Sherwood's population grew from about 3,000 residents in 1990 to nearly 20,000 residents in 2019. Despite this record growth, Sherwood maintains an exceptional quality of life, driven by access to renowned schools, quality medical services, high level of public safety, a unique park and recreation system, a revived central business district, and excellent cultural facilities and community events.

Located only 14 miles from downtown Portland in southwest Washington County, the City's economy is inextricably linked with the entire region. While Sherwood has a diverse economy, with Retail Trade (17%), Accommodation and Food Services (13%), and Manufacturing (11%) sectors accounting for 41% of Sherwood's employment, over 90% of Sherwood residents commute outside of the city for work. Despite a highly skilled and educated population and an availability of light industrial land for development, Sherwood has not produced high revenue-generating employment land and the high-wage jobs that would support and benefit current and future residents. Sherwood is challenged with constraints on infrastructure development and capacity, a location on the geographic fringes of the Metro region, and a historic high growth rate of residential development. This limits the viable development of employment land, and as a result, the City struggles with an unbalanced tax base. Projected City budget shortfalls create concern that the City will not be able to maintain or increase level of services to its citizens and businesses in the future. In order to get the services Sherwood needs and desires, the City's tax base needs to expand the supply and development of revenue-generating employment land, which is one of the greater contributors to the City's tax base. Expanding existing businesses and attracting new employment to Sherwood— particularly the right kind of jobs in the right places —will provide opportunities for industrial and commercial development with higher wage jobs and help balance the City's tax base.

This is a top priority for City Council, and the City of Sherwood is renewing efforts to facilitate and help build a self-sustaining, vital and vibrant local economy. To support these efforts and guide future growth and development, the City of Sherwood is undertaking an update to its Comprehensive Plan, which includes the incorporation of an updated Economic Development Strategy and Economic Opportunities Analysis for the 2019-2039 planning horizon. Sherwood's Comprehensive Plan was last updated in 1990 and is no longer an accurate representation of Sherwood today.

Planning for Economic Development in Oregon

Oregon has a set of 19 Statewide Planning Goals, which serve as the foundation of the state's land use planning program that is implemented at the local level through the Comprehensive Plan. Statewide Planning Goal 9 is called Economic Development and seeks to "provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens." Goal 9 requires that Comprehensive Plans "contribute to a stable and healthy economy" and that they be based on "inventories of areas suitable for increased economic growth and activity."

Economic Development in Sherwood

To comply with Goal 9 and as a key requirement to a Comprehensive Plan update, the City of Sherwood prepared an Economic Opportunities Analysis (EOA) for the 2019-2039 planning forecast. An EOA is used to help develop Comprehensive Plan goals and policies that are consistent with the EOA and which reflect City priorities and strategies (see Attachment A for the economic element of the City's current Comprehensive Plan). This EOA was prepared concurrently during the City's Comprehensive Plan Visioning Process in 2018. The visioning process resulted in a Vision Statement and three goals that relate to the Comprehensive Plan Economy chapter and guided the development of policies outlined in the EOA.

The EOA update includes a number of components to meet the requirements of Goal 9, including an Economic Trends Analysis, a Target Industry Analysis, a Forecast of Employment Land Need, and an Evaluation of Employment Land

Supply (the Buildable Land Inventory). The EOA includes specific recommendations for the City's employment areas, including the Tonquin Employment Area and Old Town Sherwood (part of the Town Center). These employment areas have undergone their own planning efforts in recent years, briefly summarized below.



2018 Sherwood Comprehensive Plan Visioning Process

In 2018, the City conducted a Visioning Process for the Comprehensive Plan Update. The Process resulted in a vision for Sherwood in the year 2040, as well as three goals for the future state of Sherwood's economy:

Thriving and Diversified Economy

In 2040, the Sherwood economy has grown to include a variety of businesses big and small that offer stable employment opportunities, higher-wage jobs, and balance the tax base to protect and maintain Sherwood's quality of life. Sherwood provides great destinations and experiences for both residents and visitors.

Goals:

1. Accelerate the growth of local businesses and attract new businesses that balance the City's tax base, provide stable, high wage jobs and capitalize on Sherwood's location and high-quality of life to create destinations and experiences for both residents and visitors of Sherwood.
2. Prioritize and promote economic development to balance the city tax base by providing and managing a supply of land to target growth industries and accelerate Sherwood's desired economic growth.
3. Plan and provide adequate infrastructure efficiently and timely to accelerate employment growth.

The plan identifies three unique sub-districts, each with their own development expectations and characteristics:

Old Town – Envisioned to support somewhat higher density development than exists there today, with high quality mixed-use development that respects the historic character of the area.

Langer Drive Commercial District - South of Highway 99W and Tualatin-Sherwood Road, future redevelopment within existing shopping centers will gradually transform the area into a walkable, active shopping district with more pedestrian-oriented buildings that continue to attract regional and national businesses.

Central Neighborhoods - Residential neighborhoods within the Town Center will focus on improving bicycle and pedestrian connections. The current mix of housing types and densities is expected to remain stable over time, with modest increases in density in limited locations.

To guide future planning, development and public investments within the Town Center to achieve the vision, the plan recommends key policies including encouraging the development of the appropriate scale and mix of housing and commercial uses within the Town Center, improving the transportation network to increase access and improve safety for all modes, and target programs to facilitate a greater awareness of the unique attributes of the Town Center.

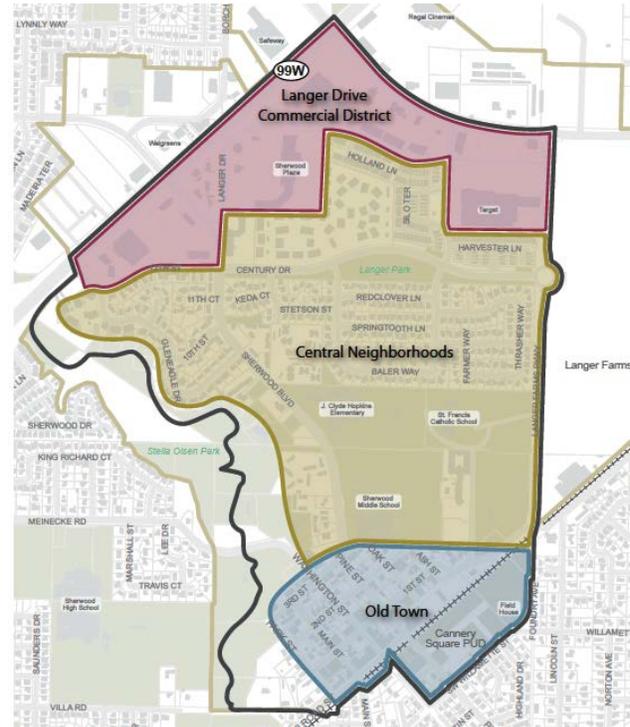


Figure 2. Sherwood Town Center Sub-Districts.

The Current State of Sherwood's Economy

As described by Goal 9, the EOA provides “an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends.” The following section summarizes the current state of Sherwood's economy as described by the EOA.

Sherwood Employment Sectors

Sherwood has a variety of employment sectors. The following table shows a summary of covered employment data for the city of Sherwood in 2016. The sectors with the greatest number of employees were Retail Trade (17%), Accommodation and Food Services (13%), and Manufacturing (11%). These sectors accounted for 2,509 jobs or 41% of Sherwood's employment.

The average size for a private business in Sherwood is 9 employees per business, compared to the State average of 11 employees per private business. Businesses with 50 or fewer employees account for roughly 57% of private employment in Sherwood. Businesses with 9 or fewer employees account for 20% of private employment and 4 or fewer account for 10% of private employment.

Sector/Industry	Establishments	Employees	Payroll	Average Pay / Employee
Construction	60	569	\$ 31,381,520	\$ 55,152
Manufacturing	30	693	\$ 33,207,616	\$ 47,919
Wholesale Trade	62	312	\$ 22,593,328	\$ 72,415
Retail Trade	51	1,022	\$ 26,036,704	\$ 25,476
Transportation and Utilities	12	221	\$ 14,517,532	\$ 65,690
Information	10	37	\$ 947,471	\$ 25,607
Finance and Insurance	31	87	\$ 4,715,399	\$ 54,200
Real Estate and Rental and Leasing	28	112	\$ 4,394,547	\$ 39,237
Professional and Technical Services, Mgmt of Companies	60	138	\$ 9,106,105	\$ 65,986
Administrative and Support and Waste Mgmt Services	40	305	\$ 13,401,928	\$ 43,941
Private Education Services	12	73	\$ 1,299,774	\$ 17,805
Health Care and Social Assistance	57	547	\$ 16,787,634	\$ 30,690
Arts, Entertainment, and Recreation	9	191	\$ 2,442,711	\$ 12,789
Accommodation and Food Services	45	794	\$ 14,300,792	\$ 18,011
Other Services	96	275	\$ 6,790,400	\$ 24,692
Government	11	672	\$ 32,107,329	\$ 47,779
Total	614	6,048	\$ 234,030,790	\$ 38,696

Table 1. Covered Employment and Average Pay by Industry, Sherwood City Limits and Tonquin Employment Area, 2016.

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2016.

The following figure shows the employment and average pay per employee for selected industrial sectors in Sherwood. Average pay for all employees (\$38,695) is shown as a light brown line across the graph and average pay for individual sectors as short red lines. The figure shows that Manufacturing; Government; Construction; Wholesale Trade; Administrative and Support and Waste Management; Other Services; and Transportation and Utilities have above average wages. The lowest wages are in Retail Trade and Accommodations and Food Services.

Sherwood developed with more housing than jobs. The largest industries in Sherwood, Retail and

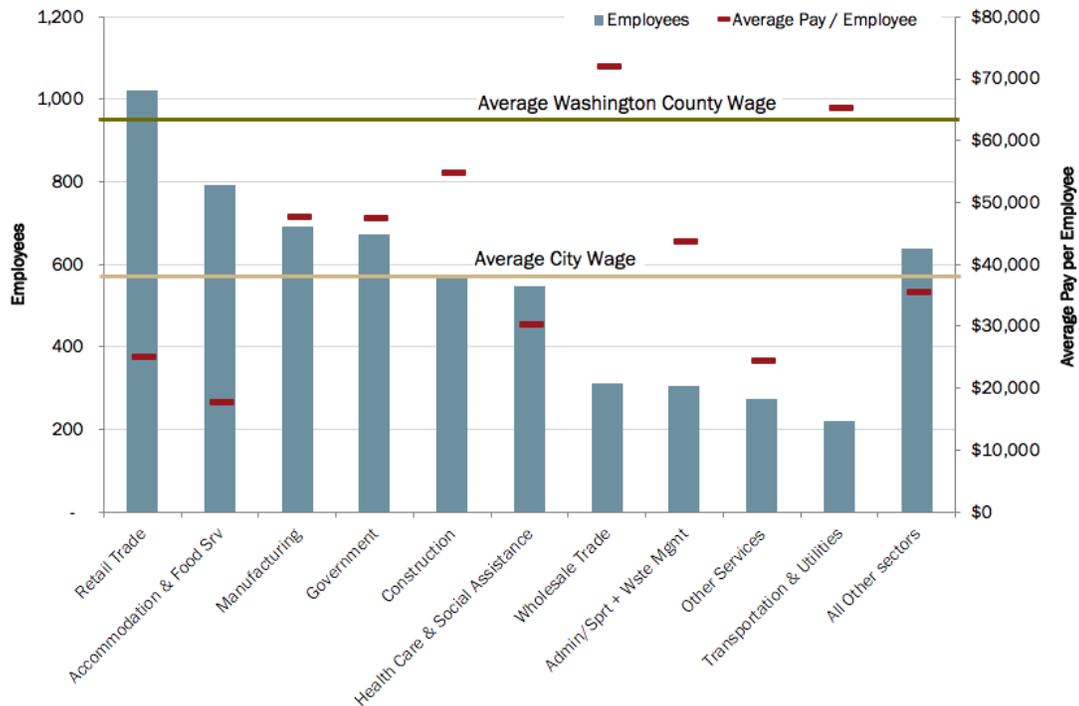


Figure 3. Covered Employment and Average Pay by Industry, Sherwood City Limits and Tonquin Employment Area, 2016.

Source: Oregon Employment Department, Quarterly Census of Employment and Wages, 2016.

Accommodations and Food Services, not only have lower-than average wages but also generate less property tax revenue than industries that make significant investments in buildings or fixed machinery and equipment.

Income and Wages

Income and wages affect business decisions for locating in a city. Per capita income grew most years during the 34-year period, with the exception of a decrease during the recession. Between 1980 and 2016, Oregon's per capita personal income was consistently lower than the U.S. average. In 1980, Oregon's per capita personal income equaled the national average. By 2016, Oregon's per capita personal income reached 89% of the national average. Oregon's relatively low wages make the state attractive to businesses seeking to locate in areas with lower-than-average wages.

Sherwood's wages are below average for the Portland Region and for the nearby cities of Tigard and Tualatin. The primary reason for lower wages at jobs in Sherwood is the mix of jobs in Sherwood, with Retail and Accommodations and Food Services having the largest number of employees in Sherwood but wages below the city average.

At the same time, median household income and median family income in Sherwood are considerably above those of Washington County. This suggests that many residents of Sherwood either work outside of Sherwood (where wages are higher) or have income from sources other than wages (such as investments). The commuting patterns in Sherwood show that only 8% of Sherwood's working residents both live and work in Sherwood.



Figure 4. Average Annual Wage, Covered Employment, Sherwood and Portland region, 2016.

Source: Oregon Quarterly Census of Employment and Wages



Figure 5. Median Household Income, 2012-2016.



Figure 6. Median Family Income, 2012-2016.

Source: U.S. Census Bureau, American Community Survey, 2012-2016 five-year estimate, Table B19113.

Labor Force Participation and Unemployment

The current labor force participation rate is an important consideration in the availability of labor. The labor force in any market consists of the adult population (16 and over) who are working or actively seeking work. The labor force includes both the employed and unemployed. Children, retirees, students, and people who are not actively seeking work are not considered part of the labor force. According to the 2012-2016 American Community Survey, Sherwood has more than 9,700 people in its labor force.

In 2017, the Oregon Office of Economic Analysis reported that 64% of job vacancies were difficult to fill. In the Portland Metro region, 51% of job vacancies were hard to fill. The most common reason for difficulty in filling jobs included a lack of applications (30% of employers' difficulties), lack of qualified candidates (17%), unfavorable working conditions (14%), a lack of soft skills (11%), and a lack of work experience (9%). These statistics indicate a mismatch between the types of jobs that employers are demanding and the skills that potential employees can provide.

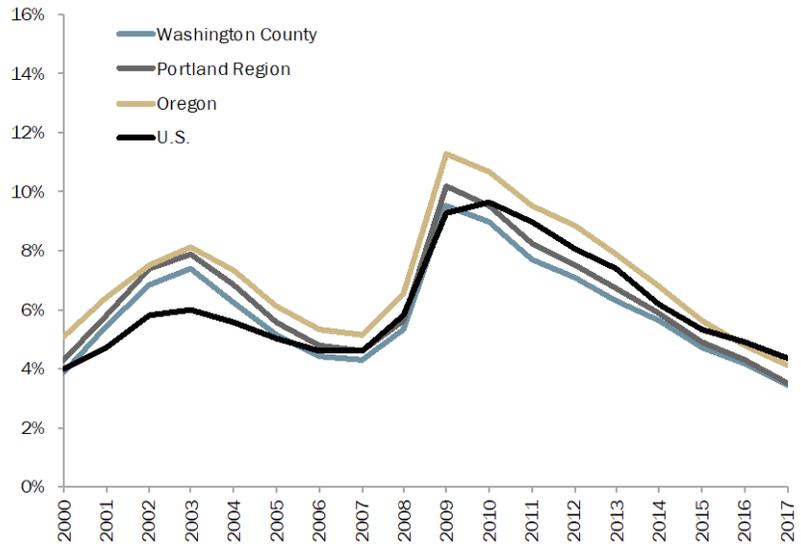


Figure 7. Unemployment Rate, Washington County, Portland Region, Oregon, and US, 2000 – 2017.

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics and Labor Force Statistics.

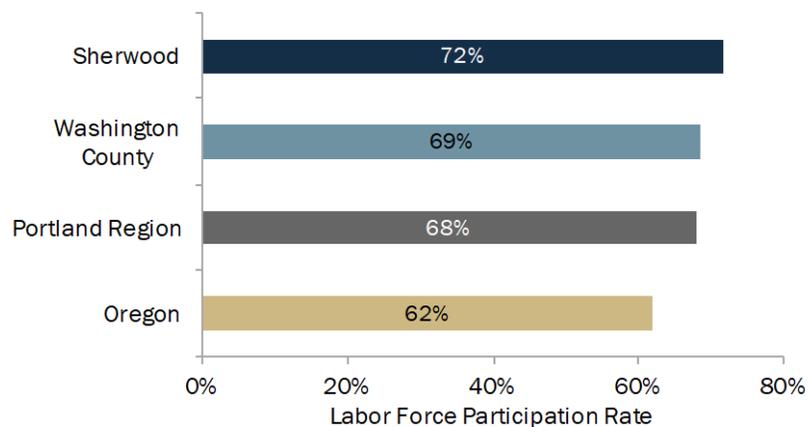


Figure 8. Labor Force Participation, Sherwood, Washington County, Portland Region, Oregon, 2012-2016.

Source: U.S. Census Bureau, American Community Survey, 2010-2016 5-year estimate, Table B23001.

Commuting Patterns

Commuting plays an important role in Sherwood's economy because employers in Sherwood are able to access workers from people living in the city and from across the Portland Metro Region. In the 2012-2016 period, about 23% of Sherwood's residents had a commute of less than 15 minutes compared to 26% of Washington County residents, 23% of Portland Region residents, and 32% of Oregon residents.

About 8% of Sherwood residents also work in Sherwood, and about 13% of all people who work in Sherwood also live in Sherwood. Twenty-two percent of Sherwood residents commute to Portland. Other cities in the Portland region have a larger share of residents that work in the same city, but many still commute outside for employment.

11% of people who work in Sherwood commute from Portland, 5% from Beaverton, and 5% from Tigard. The remaining workers commute from many other cities located across the Portland Metro area.

These findings are consistent with the commuting findings presented in the 2018 Draft Urban Growth Report. That report shows that most jobs in the region are in Multnomah County, with about 46% of workers who live in Washington County commuting to Multnomah County for work.

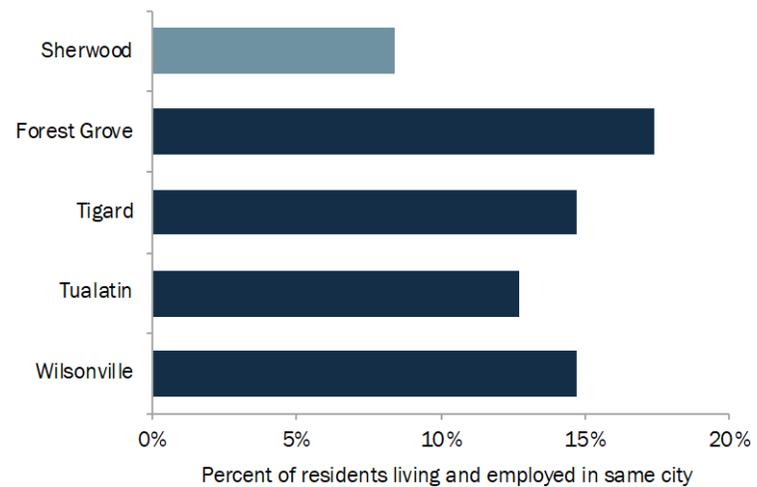


Figure 10. Residents that Live and Work in the Same City, Sherwood, 2015.

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



Figure 9. Places Where Sherwood Workers Lived, 2015.

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



Figure 111. Places Where Sherwood Residents were Employed, 2015.

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

Opportunities for Sherwood's Future Economy

Sherwood's Competitive Advantages

Economic development opportunities in Sherwood will be affected by local conditions as well as the national and state economic conditions addressed above. Economic conditions in Sherwood relative to these conditions in other portions of the Portland region form Sherwood's competitive advantage for economic development. Sherwood's competitive advantages have implications for the types of firms most likely to locate and expand in the area.

While metropolitan area jurisdictions can do very little to influence national and state conditions that affect economic development, they can influence some local factors that affect economic development. Sherwood's primary competitive advantages are location, schools, and quality of life. These factors make Sherwood attractive to residents and businesses that want a high quality of life where they live and work.

The local factors that form Sherwood's competitive advantage are summarized in the subsections below.

Location

Sherwood's population was approximately 19,350 people in 2017. It is a city located in southern Washington County to the southwest of Tigard. Highway 99 runs southwest-northeast through the city. The highway provides access to Newberg in the southwest as well as Tigard in the northeast and Beaverton further north. Sherwood's location will impact the area's future economic development:

- Sherwood has access to 99W and the State's highway system and other transportation opportunities. Highway 99W runs southwest-northeast through the Sherwood UGB, which connects up to Interstate 5 in Tigard—residents can also access Interstate 5 by commuting east through Tualatin or southeast through the unincorporated community of Mulloy.
- Residents and businesses in Sherwood have access to other modes of transportation in Portland, including the TriMet Line 94 which transports passengers from Sherwood to and from Portland, the Portland airport, and Amtrak rail service. Though Sherwood is located in this transportation network, congestion issues on these routes presents barriers for residents commuting in and out of Sherwood, as well as for businesses that need to transport goods and supplies.
- Sherwood is located within Washington County, the second-most populated county in the State, with 595,860 people in 2017. Sherwood is about 17 miles southeast of Portland, the most populated city in Oregon with 639,100 people in 2017. Other nearby and relatively large cities include Beaverton, Tigard, and Lake Oswego. In 2015, about 92% of Sherwood's residents commuted out of the City for work. Residents and City staff have noted that the high-quality of schools is a factor for choosing to live in Sherwood.
- Sherwood is located south of Beaverton and near the South Cooper Mountain expansion area, where residential growth will occur in the near term. The proximity of Sherwood to this residential growth may create demand for services to locate in Sherwood. In addition, this population growth may provide housing for workers at businesses that locate or grow in Sherwood.
- Residents of Sherwood have access to amenities, such as the Tualatin River National Wildlife preserve, that provide a high quality of life. As a city at the edge of the Metro UGB, residents of Sherwood have access to farm land that provides opportunities for agritourism activities.

Sherwood's location, quality of life and schools, and proximity to larger cities in the Portland Region are primary competitive advantages for economic development in Sherwood.

Availability of Transportation

All firms are heavily dependent upon surface transportation for efficient movement of goods, customers, and workers. Access to an adequate highway and arterial roadway network is needed for all industries. Close proximity to a highway or arterial roadway is critical for firms that generate a large volume of truck or auto trips as well as firms that rely on visibility from passing traffic to help generate business.

Businesses and residents in Sherwood have access to a variety of modes of transportation: automotive (99W and local roads); bus (TriMet, Line 94); and air (Portland Airport and Hillsboro Airport). Businesses in Sherwood can ship freight through the Port of Portland via trucks. Sherwood does not currently have active rail access but may have rail access in the future when rail infrastructure is brought into use again.

While Sherwood has automotive access for commuting via 99W as it cuts through Sherwood, this route and other major roads, such as SW Roy Rogers Road and SW Tualatin-Sherwood Road, are frequently congested. This current transportation network is considered a disadvantage for both residents commuting to jobs both in and out of Sherwood and businesses that need a distribution route to access the region.

Sherwood's distance from I-5 is a disadvantage for attracting some types of businesses, such as warehouse and distribution or manufacturers that need close access to I-5 for heavy freight. Sherwood's distance from Portland International Airport is a disadvantage for businesses needing access to commercial air service or freight services offered at the Portland Airport only. Businesses needing access to a general aviation airport, such as those with corporate planes, can use the Hillsboro Airport, which is relatively near Sherwood.

Public Facilities and Services

Provision of public facilities and services can impact a firm's decision regarding location within a region, but businesses generally make locational decisions primarily based on factors that are similar within a region (such as the availability and cost of labor, transportation, raw materials, capital, and amenities). The availability and cost of these production factors are usually similar within a region.

Once a business has chosen to locate within a region, they consider the factors that local governments can most directly affect: tax rates, the cost and quality of public services, and regulatory policies. Economists generally agree that these factors do affect economic development, but the effects on economic development are modest. Thus, most of the strategies available to local governments have only a modest effect on the level and type of economic development in the community. Overall, Sherwood's local public facilities are relatively young and within the expected lifespan of the systems.

Transportation Improvements

The City of Sherwood is bisected by two major transportation corridors that are not city-owned—Tualatin-Sherwood Road (Washington County) and Highway 99 (ODOT). Congestion on these main roads continues to increase, which creates more congestion on local roads within the City of Sherwood. Other than these transportation issues that will need to be addressed at a regional level, most roads that the City maintains are in good condition. The City's Transportation System Plan outlines system plans for Sherwood-owned and maintained roads only, not plans for the regional network, which includes Tualatin-Sherwood Road and Highway 99.

The Tonquin Employment Area Implementation Plan identifies the need for \$14.1 million in transportation improvements to serve the entire TEA. Transportation improvements include improvements on Oregon Street, Blake Road, the intersection of Oregon St. and Blake Rd., Tonquin Court, SW 124th Ave, and SW

Dahike Lane. Of the \$14.1 million, about \$10 million is expected to be invested in the first 20 years of development of the Area.

Water

Sherwood updated its Water System Master Plan in 2015, which evaluated water demand for the city limits and expansion areas within the UGB for a 20-year planning period. The City sources its main water supply from the Willamette River Water Treatment Plant in Wilsonville. The Plan identifies the need to expand the capacity of the existing plant, build new pump stations, and expand or replace water mains to meet future demand.

The Tonquin Employment Area Implementation Plan identifies the need for \$5.4 million in water improvements to serve the entire TEA. Water improvements include the construction of water lines and upgrades to the Willamette River Water Treatment Plant capacity. Of this \$5.4 million, about \$3 million is expected to be invested in the first 20 years of development of the Area.

Overall, there are no limiting factors in the City's water system when considering the location of new businesses in the proposed target industries. The existing supply and planned improvements within the City limits and the expansion areas will meet future water needs for employment uses.

Wastewater

The Sanitary System Master Plan, updated in 2016, identifies current and future capacity and needs of the City's wastewater system. Sherwood's wastewater system is publicly owned, and Clean Water Services provides treatment services. The Plan identifies needed projects to maintain the existing system and future improvements necessary to accommodate growth. These expansions and improvements will meet the needs of developed areas in the City limits as well as the TEA and the Brookman Annexation Area.

The Tonquin Employment Area Implementation Plan identifies the need for \$1.7 million in waste water improvements to serve the entire TEA. Waste water improvements are construction of sewer lines along key streets in the TAC. The entire amount is expected to be invested in the first 20 years of development of the Area.

Stormwater

Sherwood updated its Stormwater System Master Plan in 2016. While Clean Water Services manages stormwater at a district-level, Sherwood manages its local stormwater program, including areas in the City limits and expansion areas such as Tonquin and Brookman. The existing stormwater system does not have any major deficiencies, but the Plan identifies a few deficiencies that the City plans to address as areas are built out. Potential future changes to hydromodification requirements for new development could affect permitting and costs for new development.

The Tonquin Employment Area Implementation Plan identifies the need for \$1.9 million in stormwater improvements to serve the entire TEA. Stormwater improvements include construction of stormwater lines and construction of two regional treatment facilities. Of this \$1.9 million, about \$1.5 million is expected to be invested in the first 20 years of development of the Area.

Availability of Vacant, Serviced Land

One of the key inputs for economic development is vacant, unconstrained land with urban services, such as those discussed in the prior sections. Businesses' needs for land vary from: need for an office in an existing building; need for a small site (such as a one-quarter acre site) for a new small building; or need

for a large site (such as a 50-acre site) for one or more large buildings, parking, and other facilities. Businesses consider a range of factors when choosing a location, such as location within the city (and region), access to transportation, location of other businesses, amenities around the site (such as landscaping or access to retail and restaurants), and the characteristics of the site (such as site size and physical constraints)

As per the buildable lands inventory in the EOA, Sherwood has a total 310 acres of unconstrained land, 126 acres of which is vacant and 184 acres of which is potentially redevelopable. About 50% of the City's vacant unconstrained land is in the TEA, and over 50% of the potentially redevelopable land is in either the TEA or the Brookman Annexation Area.

Sherwood has 17 sites in the five to ten-acre size, most of which are industrial use, in the TEA, or in Brookman. Sherwood has four vacant sites larger than 10 acres of unconstrained land. One of these sites is 45 acres in the TEA, and the other three sites are zoned for industrial uses with two sites designated as General Industrial (30 acres total) and one site designated as Light Industrial (12-acre site).

Although Sherwood has vacant unconstrained land that can support a substantial amount of development, much of that land lacks urban services (such as the services discussed in the prior section). The Tonquin Employment Area Implementation Plan documents the infrastructure necessary to support employment growth, as described in the prior section.

Sherwood's vacant unconstrained land base is an advantage for economic development, especially the larger industrial sites in Sherwood and the TEA. The lack of infrastructure to support employment growth is a disadvantage to economic development, as areas without infrastructure, especially the TEA, are unlikely to develop until infrastructure is developed.

Quality of Life

Sherwood's quality of life is a key comparative advantage for economic development. These key, non-economic quality of life factors in Sherwood include:

- **Tualatin River National Wildlife Refuge.** This suburban nature preserve provides residents walking trails and opportunities for wildlife education.
- **Cultural amenities and events.** In addition to the Tualatin River National Wildlife Refuge and other outdoor-recreation opportunities, the City of Sherwood has a robust parks and trail system. The Sherwood Center for the Arts, a new facility located in Old Town, hosts community cultural activities throughout the year. Other amenities available to Sherwood residents are the high-quality sports facilities for local schools, small town character, high-quality neighborhoods with access to amenities, and both community and regional groups.
- **Access to education.** Many residents live in Sherwood because of the high school quality for elementary, middle, and high school students. George Fox University, located in Newberg, and Clackamas Community College, located in Wilsonville, provide access to higher education to residents of Sherwood and the rest of the county.
- **Access to medical care.** Residents of Sherwood can access nearby medical care through the Providence Medical Plaza in Sherwood. About four miles northeast of Sherwood, residents can also access the Kaiser Permanente Tualatin Medical Office.

Sherwood's quality of life makes the city attractive to in-migrants and businesses that are attracted to Washington County.

Target Industries

The characteristics of Sherwood will affect the types of businesses most likely to locate in the city. Sherwood's attributes that may attract firms are: Sherwood's location along Highway 99; quality of public facilities and services; availability of vacant, serviced land; quality of schools; and overall quality of life.

The target industries identified as having potential for growth in Sherwood are:

- **Manufacturing.** Sherwood's attributes, especially its location in the Portland region and proximity to Hillsboro, may attract manufacturing firms, such as:
 - Technology and Advanced Manufacturing, such as semiconductors, electronic communication equipment, computer peripherals, and circuit boards.
 - Machinery Manufacturing (Metals and Machinery), such as food processing machinery, medical devices, component parts for manufacturing, and other specialized machinery for manufacturing.
 - Clean Tech, such as instruments manufacturing, electrical equipment manufacturing, and renewable energy equipment and components.
- **Professional and business services.** Sherwood's high quality of life, access to quality schools, existing population and business base, and proximity to the Portland region may attract professional and business services that prefer to locate in a smaller city like Sherwood, such as:
 - Software and Media, such as software development, data processing, computer systems design, and motion picture and video production.
 - Clean Tech, such as scientific and technical research and services, engineering services, architectural design, and construction engineering services.
 - Athletics and Outdoors, such as design services, professional services and marketing.
 - Other services, such as scientific research or environmental services.
- **Wholesale.** Sherwood's access to Highway 99 may make the city attractive to continued growth of wholesale businesses.
- **Services for visitors:** Emphasis on experiences and destinations in and near Sherwood, especially related to agriculture and wineries, will drive demand for services for visitors including family-friendly events, farmers markets, specialty retail, wine tasting rooms, restaurants, or hotels.
- **Services for residents:** Growth in population in and around Sherwood will drive growth of businesses that serve residents, such as medical services, legal services, financial services, retail, personal services (e.g., barbers), and restaurants.

Regional Business Clusters

Another way to assess the types of businesses that are likely to have future growth in an area is to examine relative concentration and employment growth of existing businesses. This method of analysis can help determine relationships and linkages within industries, also called industrial clusters. The U.S. Cluster Mapper is a database created by the Harvard Business School and the U.S. Economic Development Administration. It provides a snapshot of the business clusters in Washington County. Greater Portland Inc. (GPI) completed a cluster analysis for the Portland region in 2018 as part of the Greater Portland 2020 economic development strategy. The six target clusters it identified—and how these clusters align with U.S. Cluster Mapper results for Washington County—were:

- *Clean Tech. GPI identified Clean Tech as a cluster that accounts for 20% of the total cluster employment in the Portland region, as of 2016. Employment in this cluster increased by about 7% between 2006 and 2016. The average wage in Clean Tech in the Portland metropolitan statistical area was \$86,300 in 2016, which is above the average wage for Washington County.*
- *Computer and Electronics. The Computer and Electronics cluster accounted for the largest share of total cluster employment in the Portland region in 2016 at 24%. The average wage in Computer and Electronics in the Portland metropolitan statistical area was \$132,400 in 2016, above the average wage for Washington County.*
- *Software and Media. GPI identified the Software and Media cluster as an “emerging industry” in the Portland region. Employment in this cluster grew by about 67% between 2006 and 2016 and accounted for 19% of the total cluster employment in 2016. The average wage in Software and Media in the Portland metropolitan statistical area was \$101,700 in 2016, above the average wage for Washington County.*
- *Athletic and Outdoor. GPI identified the Athletic and Outdoor cluster as a “Growing Base Industry.” Employment in this cluster accounted for about 14% of the total cluster employment in the Portland region in 2016, and the Portland region has a higher-than-average average wage in this cluster at \$132,763, compared to the U.S. average at \$49,366. The average wage in the Athletics and Outdoors cluster in the Portland metropolitan statistical area was \$132,800 in 2016, above the average wage for Washington County.*
- *Health Sciences and Technology. Employment in the Health Sciences and Technology cluster grew by about 12% between 2006 and 2016, and GPI identified it as an “Emerging Industry.” The average wage in Health Sciences and Technology in the Portland metropolitan statistical area was \$7,700 in 2016, just above the average wage for Washington County.*
- *Metals and Machinery. GPI identified the Metals and Machinery cluster as a “Growing Base Industry,” and employment in this cluster grew by about 5% between 2006 and 2016. The average wage in Metals and Machinery in the Portland metropolitan statistical area was \$79,900 in 2016, above the average wage for Washington County.*

Buildable Lands Inventory

One of primary goals of the EOA is to project the amount of land needed to accommodate the future employment growth within the Sherwood City Limit and employment land areas in the Urban Growth Boundary (UGB).

The table below shows commercial and industrial land with development capacity (lands classified vacant or potentially redevelopable in Metro's buildable lands inventory and verified by City staff). Sherwood has about 309 unconstrained buildable acres within the planning area, 27 of which are Commercial, 110 are Industrial, and the remaining 172 are in Tonquin Employment Area or Brookman Annexation Area.

Plan Designation	Tax Lots	Total Acres	Total Unconstrained Buildable Acres		
			Acres with No Development Capacity	Constrained Acres	Buildable Acres
Commercial	134	171	117	27	27
General Commercial	31	62	36	10	16
Neighborhood Commercial	2	1	1	0	0
Office Commercial	11	16	6	5	5
Retail Commercial	90	92	74	12	6
Industrial	115	478	277	91	110
General Industrial	66	238	148	19	71
Light Industrial	49	240	129	72	39
Tonquin	25	282	17	111	154
Future Development	25	282	17	111	154
Brookman	4	25	3	4	18
Future Development	4	25	3	4	18
Total	278	956	414	233	309
Percent of Total		100%	43%	24%	32%

Table 2. Employment acres by classification and plan designation, Sherwood City Limits, Tonquin Employment Area, and Brookman Annexation Area, 2018.

Source: Appendix A, Table 21

Note: The numbers on this table may not add up exactly as a result of rounding.

Goal 9 requires that cities provide for an adequate supply of commercial and industrial sites consistent with plan policies. To meet this requirement, Sherwood needs an estimate of the amount of commercial and industrial land that will be needed over the 2019-2039 planning period. Table 3 presents the forecast of employment growth by land use type in Sherwood from 2019 to 2039. Sherwood's employment base was 8,340 employees in 2019. The forecast shows that by 2039, Sherwood will have 11,785 employees, an increase of 3,446 jobs over the next 20 years.

Land Use Type	2019		2039		Change 2019 to 2039
	Employment	% of Total	Employment	% of Total	
Industrial	2,231	27%	3,536	30%	1,305
Retail Commercial	1,314	16%	1,650	14%	336
Office & Commercial Services	4,078	49%	5,657	48%	1,579
Government	717	9%	943	8%	226
Total	8,340	100%	11,785	100%	3,446

Table 3. Forecast of employment growth by land use type, Sherwood City Limits, Tonquin, and Brookman, 2019–2039

Source: ECONorthwest

Note: The shaded percentages denote an assumption about the future change in the share of employment (as a percent of total) by land use type.

The forecast of growth of 3,446 new employees will result in the following demand for vacant employment land: 86 gross acres of industrial land and 85 gross acres of commercial land.

Table 4 compares the supply of suitable employment land with the demand for employment land:

- **Industrial.** Sherwood has a supply of 110 acres of suitable land designated for industrial uses. The employment forecast projects demand for 86 acres of industrial land. Sherwood has more industrial land than the City is projected to need over the 20-year period, with a surplus of 24 gross acres of industrial land.
- **Commercial.** Sherwood has 28 acres of land designated for commercial uses. The employment forecast projects demand for 85 acres of commercial land. Sherwood has less commercial land than the City is projected to need over the 20-year period, with a deficit of 57 gross acres of commercial land.
- **Future Development.** Sherwood has 172 acres of land designated for employment uses in future development designations in the Tonquin Employment Area and Brookman Annexation Area. This supply will likely meet needs for both industrial and commercial demand, resulting in an 140-acre surplus of employment land.

Land Use Type	Land Supply		
	(Suitable Gross Acres)	Land Demand (Gross Acres)	Land Sufficiency (Deficit)
Industrial	110	86	24
Retail Commercial	7	19	(12)
Office & Commercial Services	21	66	(45)
Future Development (Tonquin and Brookman)	172	-	172
Total	310	170	140

Table 4. Comparison of the Capacity of Unconstrained Vacant and Potentially Redevelopable Land with Employment Land Demand by Land Use Type, Sherwood City Limit, Tonquin, and Brookman, 2019-2039.

Source: ECONorthwest

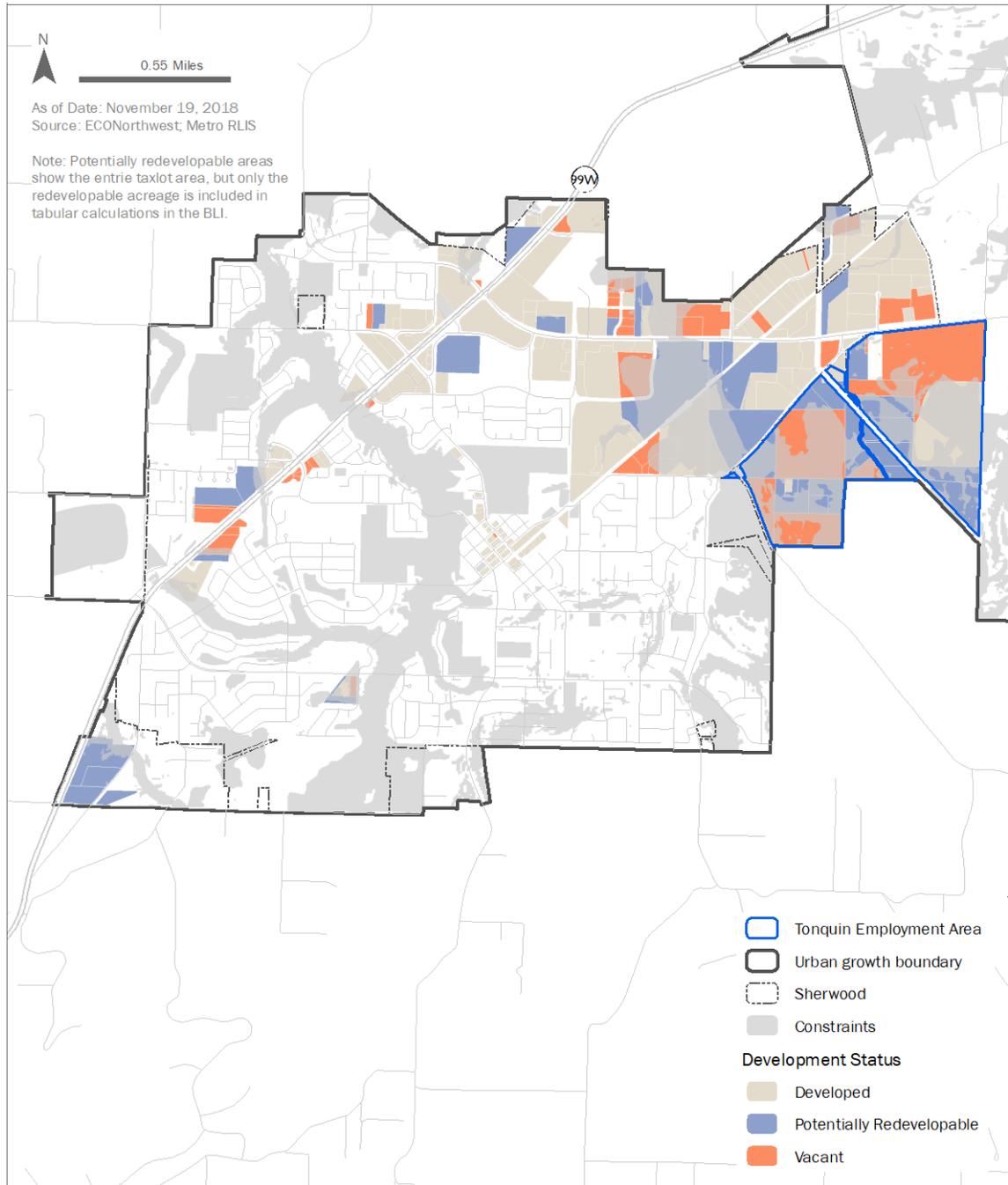


Figure 12. Employment land by classification with development constraints, Sherwood City Limits, Tonquin, and Brookman, 2018.

Considerations for Sherwood's Future Economy

Based on the current state of Sherwood's economy and prospects for its future, the following recommendations outline a path forward for support a thriving and diversified economy in Sherwood.

- **Update the Economy Element of the Comprehensive Plan.** The Economy Element has not been updated in more than a decade. It is recommended that Planning Commission and City Council review revised policies and then adopt revised goals, objectives, and implementation strategies into the Economy Element.
- **Align the City's goals for economic development with planning for infrastructure development.** Aside from ensuring that there is sufficient land to support employment growth, one of the most important ways that the City can support economic development is through planning for and developing infrastructure (e.g., roads, water, sanitary sewer, and storm water systems). It is recommended that the City align its goals for economic development with infrastructure development through updates to the City's Capital Improvements Plan Providing infrastructure in the TEA is necessary to allow employment growth to occur in the TEA. Without infrastructure, much of the TEA will remain undeveloped.
- **Identify opportunities to support the creation, growth, development, and retention of businesses in Sherwood.** Retention and expansion of new and existing businesses, including those that create destinations and experiences for residents and visitors, is one of Sherwood's key opportunities for economic growth. The City can support businesses by understanding businesses' opportunities for growth and expansion and lowering or eliminating the barriers in Sherwood that limit growth and expansion. Some barriers are beyond control of the City, such as access to capital.
- **Work with partners to develop a broad economic development strategy for Sherwood.** The revisions to the Comprehensive Plan presented in the Sherwood Economic Development Strategy focus on land-based policies and actions. The City also needs a broader strategy for economic development that focuses on issues such as communication with existing businesses to identify barriers to expansion, economic development, marketing of Sherwood's businesses and business opportunities, building business and other partnerships, and coordinating economic development efforts with local and regional economic development organizations.

This strategy could be developed through leadership from the city leadership and city staff, with one or more staff members responsible for developing and implementing policies to encourage economic growth. The strategy should identify a focused list of actions that the City Council wants to achieve over a limited time period (e.g., 5 years), with specific assignments to partners and identification of funding sources to implement the actions.

- **Monitor and replenish the total and short-term supply of commercial and industrial land on a regular, periodic basis.** The buildable lands inventory identifies the existing development status of employment land in Sherwood, as well as identifies the existing short-term land supply. While Sherwood will not completely update the buildable lands inventory on an annual basis, City staff should still monitor the development status of these employment lands and replenish short-term supply when possible.
- **Support infill and redevelopment of existing commercial and industrial land.** The buildable lands inventory identifies areas where infill and redevelopment are more probable over the 20-year planning period. Other opportunities for redevelopment may become apparent in the future. It is recommended that the City support and encourage infill and redevelopment to make the most efficient use of employment land in Sherwood. The types of tools that the city offers in support of infill and redevelopment should be consistent with the City's development goals. In areas where the City wants to encourage higher intensity development, such as in Old Town, the

City should offer more support for redevelopment, including financial and regulatory redevelopment incentives.

The combined efforts of these recommendations will help achieve the City's primary goal of balancing the ratio of jobs to housing. While the data suggests that Sherwood does not have a need for more employment land, it is important to note that the projected ratio, at full build out, improves from the current ratio of 31% jobs/69% housing to 40% jobs/60% housing. To ensure that this number is maintained or improved as additional growth occurs in urban growth areas, the City is primed to develop strong, robust and clear economic development polices in the Comprehensive Plan update. This will ensure:

- Regular updates to the EOA and land need (currently recommended in 5-year increments but the City can always update earlier if new development occurs faster than normal in the coming years).
- A jobs/housing balance criterion for new growth areas to ensure that as Sherwood grows, the city improves its ratio.
- Clear goals on the desired ratio of employment land to residential land to guide future land use decisions, concept plans and review of zone change requests.

Finally, it is important to remember that Sherwood's economy has still made progress over the years. When the last EOA was developed in 2006, the City had an existing (2005) ratio of 30% jobs and was projected to get to 32% jobs by 2025, based on an adopted medium-growth scenario. As of 2019, the latest data validates that Sherwood has been moving the dial in the right direction over the past 11 years. It is anticipated that this momentum will continue.

Appendix A – Current Comprehensive Plan Policies and Strategies

In 2006, the Sherwood Urban Renewal Policy Advisory Committee (SURPAC) led an update to the City's Economic Opportunities Analysis, a part of a greater Economic Development Strategy (EDS). During this process, a vision for economic development in Sherwood was developed:

The City of Sherwood will drive economic development and support businesses that provide jobs for our residents by building on our assets and developing the necessary infrastructure to retain existing businesses and support new businesses. Economic development also will be supported by maintaining our livability and character as a clean, healthy, and vibrant suburban community where one can work, play, live, shop and do business.

To implement this vision, the current Comprehensive Plan outlines the following Policies and Strategies:

Economic Development Policies and Strategies

Policy 1: The City will coordinate on-going economic development planning with involved public and private agencies at the state, regional, county and local level.

Strategy:

- The City will cooperate with the Washington County OEDP Committee through the exchange of data and the development and implementation of a County Economic Development Plan.
- The City will develop and update an economic database through a two-way sharing of information between public and private agencies involved in economic planning.

Policy 2: The City will encourage economic growth that is consistent with the management and use of its environmental resources.

Strategy:

- The City will adopt and implement environmental quality performance and design standards for all industrial, commercial and institutional uses.
- The City will seek to attract non-polluting industries to the urban area.
- The City will acquire and preserve the Cedar Creek and Rock Creek greenways and provide bikeway and pedestrian linkages between residential and non-residential areas.

Policy 3: The City will direct public expenditures toward the realization of community development goals by assuring the adequacy of community services and facilities for existing and future economic development.

Strategy:

- The City will develop and implement a 5-year capital improvements program and budgeting system for land acquisition and capital facilities development consistent with the Comprehensive Plan.
- The City will coordinate planning with special districts providing services to the urban area to assure the adequacy of those services to support economic development.
- The City will continue to develop plans and improvement programs for parks, libraries and other "soft" services, recognizing that adequate facilities in these areas are an important component in business attraction and retention.

Policy 4: The City will seek to improve regional access to the urban area as a means to encourage local economic development.

Strategy:

- The City will work with the cities of Tualatin, Tigard, and Wilsonville, MSD, and Tri-Met to improve local access to the Planning Area via Highway 99W and I-5. See transit policies in Chapter 6.

- The City will encourage the maximum use of the railroad corridor, encourage the development of spur service lines where needed and evaluate the feasibility of passenger service.

Policy 5: The City will seek to diversify and expand commercial and industrial development in order to provide nearby job opportunities and expand the tax base.

Strategy:

- The City will encourage the revitalization of the Old Town Commercial area by implementation of 1983's "Old Town Revitalization Plan" and the Old Town Overlay Zone.
- The City will encourage the development of light industrial and office parks.
- The City will seek to attract industries that are labor and capital intensive.
- The City will seek to attract "target" industries which will expand industrial sectors inadequately represented in the urban area in order to diversify and stabilize the local economy.

Policy 6: The City will seek funding through EDA or HUD for the rehabilitation of the Old Town and Washington Hill neighborhoods.

Strategy:

- The City will seek implementation of new and rehabilitated housing goals set in the Regional Housing Opportunity Plan.
- The City will encourage the provision of affordable housing by designating areas within the City for medium density and high density developments, and by participating in State and Federal housing subsidy programs.

In addition to the policies and strategies developed by the Community with the 1990 Comprehensive Plan, the Economic Development Strategy (EDS) developed in 2006 includes the following policies and strategies (referred to as goals and objectives in the EDS).

Policy 1: Support existing businesses and recruit additional businesses that provide local family-wage jobs. Replace any employment land rezoned for other uses with other employment land.

Strategy 1.1: Capture existing workers in Sherwood who now work elsewhere.

Strategy 1.2: Provide locations and support for local jobs for local residents.

Strategy 1.4: Support and build upon manufacturing and other industries likely to produce family-wage jobs.

Policy 2: Support tourism as an economic engine.

Strategy 2.1: Promote the cultural arts and historical attractions as tourism generators.

Strategy 2.3: Continue to promote sporting events (i.e., Sports Town USA) as a tourism engine for Sherwood.

Strategy 2.4: Leverage the presence of the Tualatin River National Wildlife Refuge, and its anticipated 50 to 60 visitors per day, to increase tourism in Sherwood.

Strategy 2.4: Promote Sherwood as the "Gateway to the Oregon wine country."

Strategy 2.5: Address the lack of hotels or other bed and breakfast lodging within the city limits to increase Sherwood's tourism potential.

Policy 3: Develop the infrastructure and services necessary to support economic development in Sherwood.

Strategy 3.1: Identify and protect strategic industrial and other employment sites.

Strategy 3.2: Prioritize infrastructure improvement projects according to their anticipated economic benefit.

Strategy 3.3: Calculate the employment land mix necessary to help the city be self-sustaining in terms of the provision of adequate utilities and services.

Strategy 3.4: Encourage the growth of a variety of restaurants and retail establishments that would cater to business people.

Strategy 3.5: Improve transportation access to support tourism and other economic development strategies.

Policy 4: Develop a local workforce of residents whose skills are compatible with the needs of local businesses.

Strategy 4.1: Identify the workforce needs of local employers.

Strategy 4.2: Provide workforce training for Sherwood residents.

Commercial Planning Designations

General Objectives

1. To provide for commercial activities which are suitable to regional, community and neighborhood demand.
2. To locate commercial activities with safe and convenient access by consumers.
3. To encourage the location of commercial uses in well-planned commercial centers.
4. To provide an adequate amount of serviceable commercial land that meets market demand.

Policies and Strategies

Policy 1. Commercial activities will be located so as to most conveniently service customers.

Strategy:

- Community wide and neighborhood scale commercial centers will be established.
- Commercial centers will be located so that they are easily accessible on major roadways by pedestrians, auto and mass transit.
- Neighborhood commercial centers will be designated in or near residential areas upon application when need and compatibility to the neighborhood can be shown.

Policy 2. Commercial uses will be developed so as to complement rather than detract from adjoining uses.

Strategy:

- Commercial developments will be subject to special site and architectural design requirements.
- The number and locations of commercial use access will be limited along major streets in accordance with the City's Transportation Plan.
- Non-Retail and primarily wholesale commercial uses will be separated from retail uses where possible.
- The older downtown commercial area will be preserved as a business district and unique shopping area.
- A buffer between commercial uses and adjoining greenways, wetlands, and natural areas shall be established.

Policy 3. Highway 99W is an appropriate location for commercial development at the highway's intersections with City arterial and major collector roadways.

Policy 4. The 1983 "Sherwood Old Town Revitalization Plan" and its guidelines and strategies are adopted as a part of the Sherwood Comprehensive Plan.

- The City will continue to encourage implementation of the goals, objectives, strategies and improvement projects outlined in the "Old Town Revitalization Plan."

Industrial Planning Designations

General Objectives

1. To encourage the development of non-polluting industries in designated, well planned industrial areas.

2. To locate industrial development so as to assure its compatibility with the natural environment and adjoining uses.
3. To establish criteria for the location of designated classes of industrial uses.
4. To promote diversification of the City's economic base by promoting business retention and expansion, business recruitment and marketing.
5. To assure that public facilities are extended in a timely and economic fashion to areas having the greatest economic development potential.

Policies and Strategies

In order to address the above general objectives, the following policies for industrial development are established.

Policy 1. Industrial uses will be located in areas where they will be compatible with adjoining uses, and where necessary services and natural amenities are favorable.

Strategy:

- Only non-polluting industries meeting specific performance standards relating to noise, glare, vibration, water, air and land pollution will be allowed. Industrial uses will be subject to special design and site review standards including those assuring proper access, landscaping, buffers, setbacks and architectural design. Buffers shall be established between industrial uses and designated greenways, wetlands and natural areas.
- Industrial uses will be encouraged to locate in industrial planned unit developments.
- Industrial development will be allowed only on suitable land and soils which have adequate support strength.
- Industrial development will be restricted to those areas where adequate major roads, and/or rail, and public services can be made available.

Policy 2. The City will encourage sound industrial development by all suitable means to provide employment and economic stability to the community.

Strategy:

- The City will allocate land to meet current and future industrial space needs which will provide an appropriate balance to residential and commercial activities.
- The City will encourage clean capital and labor intensive industries to locate in Sherwood.
- The City will prohibit the development of large-scale retail uses with significant traffic impacts and large parking requirements on industrially zoned land.