



RESOLUTION 2023-060

ACCEPTING THE SHERWOOD WEST CONCEPT PLAN AS A FOUNDATIONAL TOOL TO BASE FUTURE URBAN GROWTH BOUNDARY EXPANSION DISCUSSIONS THROUGH THE PLAN'S VISION & IMPLEMENTATION

WHEREAS, the completion and acceptance of the Sherwood West Re-Look Project was a City Council Goal for FY 2022-2023; and

WHEREAS, the City is required to prepare a concept plan for an urban reserve area prior to a request to expand the Urban Growth Boundary can be made to Metro; and

WHEREAS, the City received a Community Development and Planning Grant from Metro to fund the Sherwood West Re-look Project, and the City awarded a planning consultant contract to Angelo Planning Group, now known as MIG/APG, to assist in the planning process to update the 2016 Sherwood West Preliminary Concept Plan accepted by Council by Resolution 2016-009; and

WHEREAS, the community has had extensive input into the Plan, shaping many elements; and

WHEREAS, the development of the Plan was guided by a Public Involvement Plan that included both Technical and Community Advisory Committees; and

WHEREAS, two widely advertised open houses (including on-line) were conducted as part of the project; and

WHEREAS, the Sherwood Planning Commission and City Council have held work sessions on the Sherwood West Concept Plan; and

WHEREAS, the Planning Commission conducted a public hearing on the Sherwood West Concept Plan on June 27, 2023, affording all interested parties an opportunity to provide input and, following testimony, deliberated, providing a recommendation to City Council to accept the Plan; and

WHEREAS, the Sherwood West Concept Plan is attached as Exhibit 1, and the Plan's Appendices is attached as Exhibit 2.

NOW, THEREFORE, THE CITY OF SHERWOOD RESOLVES AS FOLLOWS:

Section 1. Based on the staff report to the City Council dated July 11, 2023, the Planning Commission's recommendations to accept the plan, and subsequent public testimony

Resolution 2023-060

July 18, 2023

Page 1 of 2, with Exhibit 1 (80 pgs) & Exhibit 2 (205 pgs)

provided at the Council hearing on July 18, 2023, The City Council hereby accepts the Sherwood West Concept Plan as a foundational tool on which to base future planning decisions for future UGB expansion discussions through the Plan's vision and implementation.

Section 2. This Resolution shall take effect immediately upon its passage by the Council and signature by the Mayor.

Duly passed by the City Council this 18th day of July 2023.



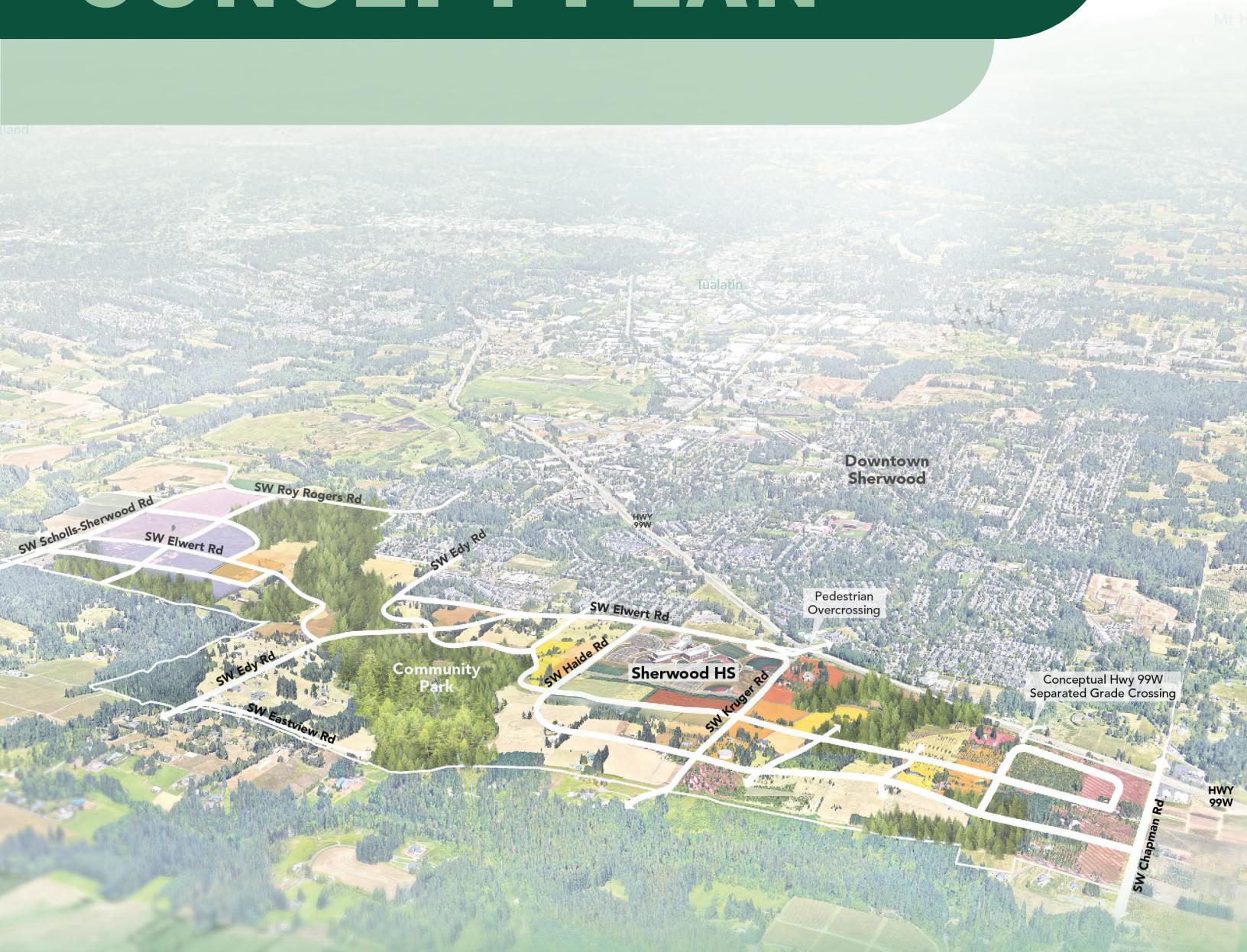
Keith Mays, Council President

Attest:



Sylvia Murphy, MMC, City Recorder

SHERWOOD WEST CONCEPT PLAN



DRAFT JULY 2023



ACKNOWLEDGEMENTS

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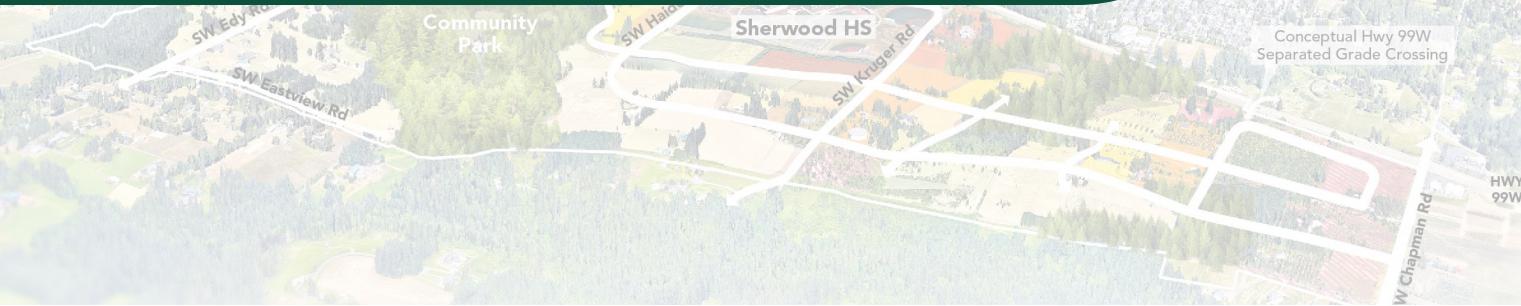


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EXECUTIVE SUMMARY



Overview

The Sherwood West Concept Plan is a long-range planning document intended to guide Sherwood community members, decision makers, and staff as they make plans and decisions about future growth in Sherwood West. Sherwood West is a large Urban Reserve area located just to the west of Sherwood city limits, which the City of Sherwood has identified as an area for future growth. Future development in Sherwood West will require expansion of the Metro urban growth boundary (UGB).

This Concept Plan is an update to the Sherwood West Preliminary Concept Plan accepted by Sherwood Council on February 16, 2016 (Resolution 2016-009). Since that time, the city and surrounding areas have seen significant changes including:

- Shifting of City Council priorities focusing on employment and job growth to diversify the city's tax base,
- Construction of a new high school within the Sherwood West study area,
- Adoption of the Sherwood 2040 Comprehensive Plan, and
- Recent changes to statewide and local housing regulations to plan for "missing middle housing" in residential areas.

This updated plan better reflects these changing conditions, while carrying forward ideas from the Preliminary Plan that are still valid and supported by the Sherwood community.

The Concept Plan provides a general framework for locating various land uses, transportation networks, open spaces, and public services. Once the area is brought into the UGB, the City will conduct additional analysis and undertake a comprehensive planning effort to refine the general concepts that are laid out in the Concept Plan – a necessary next step prior to land being eligible for future annexation and development.

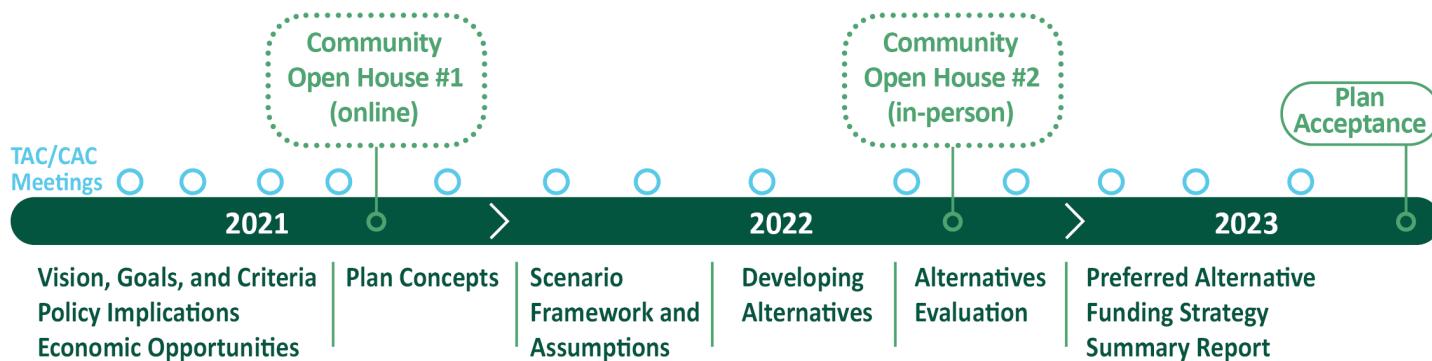


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Planning and Engagement Process

The Sherwood West Concept Plan was developed between spring 2021 and spring 2023 through a collaborative planning process that engaged a multitude of Sherwood residents, business and property owners, local organizations, technical advisors, City staff, and consultants. The project timeline is depicted below.

Project Timeline



The City convened two stakeholder groups to help guide the project—the Community Advisory Committee (CAC) and the Technical Advisory Committee (TAC)—which represented a broad range of interests. Together, these committees represented a broad range of interests and expertise that helped shape the direction and result of this process.

In addition, the City provided a wide range of engagement opportunities, including community open houses, online surveys, targeted outreach to high school students, meetings with neighborhood associations, stakeholder interviews, a project webpage, and periodic emails to interested parties.

Every step of the way, Sherwood community members provided meaningful guidance and feedback. This guidance has been essential to the Sherwood West planning process and the design of the Concept Plan is a reflection of this work.

Project Goals

The project vision, goals, and evaluation criteria were developed early in the planning process to guide Concept Plan development. The following six goals helped to develop and evaluate the concepts, alternatives and recommendations:

1. The area is designed as a natural extension of Sherwood and is integrated into the existing pattern of growth in order to preserve the community's heritage and small-town feel.
2. The area attracts a variety of businesses and employment opportunities, which help satisfy the City's need for an expanded tax base.
3. Transportation facilities serve to connect, rather than divide, neighborhoods.

EXECUTIVE SUMMARY



4. Residents have access to a variety of parks and natural areas, anchored by the Chicken Creek Greenway.
5. The area is served by a robust network of active transportation options that are integrated into Sherwood's existing network.
6. Growth and development are well-planned and implementation of the area is pragmatic.

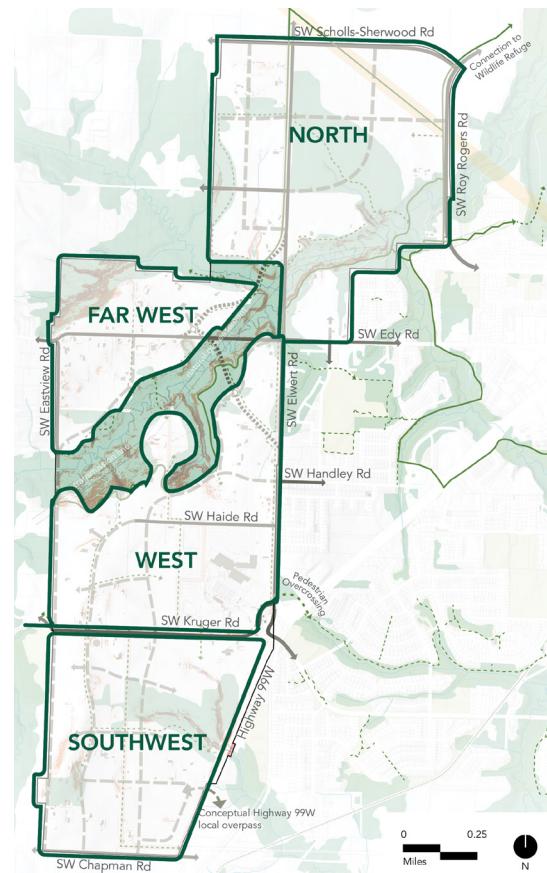
Concept Plan

Land Use

The Concept Plan identifies conceptual locations for future residential, commercial, employment, and open space areas.

- Land Use Themes – Key land use themes are associated with four distinct subdistricts:
 - **North District** – Mixed Employment is the main focus of this area due to its flat topography and transportation access. The plan also locates a cluster of housing near SW Elwert Road and a community park near West Fork Chicken Creek.
 - **Far West District** – The plan designates this area for mostly low-density housing, due to existing rural homes and sloping terrain.
 - **West District** – This area surrounds the new Sherwood High School and has relatively good access to existing infrastructure. The plan includes a mix of medium and higher-density housing types near the high school and some mixed use land along Kruger Road. The plan also locates a community park nestled into the Chicken Creek Greenway.
 - **Southwest District** – The plan focuses mixed use development at the Kruger-Highway 99W intersection, with higher-density housing along Kruger Road. The southern end of the district is focused on being the “Gateway to Wine Country.” Sherwood has an opportunity to capitalize on visitors entering or leaving wine country on Highway 99W. Uses in this area can focus on the growing wine and specialty agriculture tourism industry and provide lodging, tasting rooms, restaurants, and small retail shops.

Study Area and Subdistricts





EXECUTIVE SUMMARY

- **Housing** – Planning for a variety of housing options that will meet the needs of a wide range of Sherwood West residents was a key objective of the concept planning process. Providing housing opportunities for first-time home buyers, seniors who may prefer to age in place or downsize their housing, and moderate-income households will require a wider range of housing types than has typically been provided in Sherwood.

Housing types that have designated places in Sherwood West include single detached homes on smaller lots; cottage clusters; townhomes; duplexes, triplexes, and fourplexes; garden apartments; and mid-rise apartments. These types will be in addition to the standard single detached housing that has typified Sherwood's development so far.

- **Employment** – Sherwood wants and needs more jobs. 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, help diversify and balance the City's tax base, and build a self-sustaining and vibrant local economy.

A key theme of the Sherwood West Concept Plan is to designate land for Mixed Employment, which includes a mix of office, light industrial, and flex space uses in the same development or area of the city. The plan identifies potential areas for future Mixed Employment development, intended to accommodate the type of job growth desired for Sherwood West.

- **Schools and Civic Facilities** – Sherwood will eventually need new schools and other civic facilities, such as fire stations, library, and other public services to accommodate future households in Sherwood West. The Concept Plan anticipates an eventual need for two schools in the area—one middle school and one elementary school. Potential land needs have been factored into the plan for these facilities but, because they will not be needed until later stages of growth in the area, specific locations are not identified.

Transportation

As the City of Sherwood grows, a well-designed and connected network of streets, paths, and trails in Sherwood West should focus on safety, knitting the existing and new growth together, creating livable and walkable neighborhoods, and mitigating impacts of regional through-traffic.

Key elements of the transportation plan for Sherwood West focus on north-south connectivity through the area and providing for active (non-vehicular) transportation.

- **SW Elwert Road** – This key north-south arterial street is an important opportunity for providing access and defining urban design in Sherwood West. Design concepts for the roadway are aimed at making Elwert a livable and positive addition to the growth of Sherwood West and the adjacent neighborhoods on its east side. The concept is to create a safe, connected, and attractive boulevard inspired by SW Sunset Boulevard, that includes: buffered sidewalks, safe crossings, bike lanes, a planted median with canopy trees, and path connections to key sites and destinations.

EXECUTIVE SUMMARY



- **Potential Elwert-Edy Realignment** – The Concept Plan explores two options for future upgrades to SW Elwert Road and SW Edy Road: realigning the roads to reduce impacts to natural resources or maintaining the current intersection location. In either case, Elwert Road will need to be upgraded to current standards when development occurs in Sherwood West. The CAC and project team recommend the realignment option, although further analysis will be necessary before the decision about Elwert Road's alignment is finalized.
- **Active Transportation and Trails** – Trails, cycling routes, transit, “micromobility,” and other ways of getting around without a car are designed into Sherwood West. These active transportation options will connect between local parks, green spaces, schools, neighborhoods, and employment areas to encourage walking, rolling, and biking. The Concept Plan trail framework identifies potential future trail connections between new growth in Sherwood West and existing areas of Sherwood; future safe routes to school; and opportunities to ensure future transit can be as successful as possible.

Green Space Network

The Concept Plan for parks and open space take advantage of the natural landscape in Sherwood West to enhance access to nature and outdoor recreation. Sherwood West's green space network will include creek corridors and their habitat areas, trails and greenways, tree and tree canopy protected by Sherwood's code, stormwater facilities, neighborhood parks, community parks, and school fields.

- **Chicken Creek Greenway** – The concept for a future Chicken Creek Greenway is an opportunity to preserve and enhance natural stream corridors, provide wildlife crossings, incorporate stormwater management practices, and provide access to nature through a network of connected walking trails.
- **Neighborhood and Community Parks** – Park spaces are integrated into Sherwood West's overall trail and open space network. The Concept Plan identifies two possible locations for future community parks, which provide opportunities for active recreation and organized play where they can best accommodate anticipated increased demand. The plan also identifies conceptual locations for smaller, neighborhood parks to serve nearby residents.
- **Natural Resources** – Natural resource areas in Sherwood West will be preserved and integrated into the open space network. In addition to the Chicken Creek Greenway, regulations at the regional, state, and federal level will require protection of wetlands, habitat areas, and other natural resources as part of future development.

Chicken Creek Natural Area





EXECUTIVE SUMMARY

Utilities

In addition to transportation infrastructure, future development in Sherwood West will require provision of water, sanitary sewer, and stormwater utilities. Below is a summary of opportunities and potential phasing of future utility extension.

- **Water** – The area's West and Southwest districts can be served with water infrastructure in the near future. Water infrastructure will need to be extended east to west to serve the hillsides. The Far West district can be served after water infrastructure improvements, such as an additional pump station, are constructed. The North district will need further study and significant water infrastructure improvements to be served.
- **Sewer** – The West and Southwest districts also can be served with sanitary sewer infrastructure in the near future, through connection to existing and planned sewer lines. Sanitary sewer infrastructure would need to be extended into the hillside area of the West and Southwest districts and Far West district as those areas develop. The North district needs further study on how to serve the area and if any significant infrastructure is necessary to serve sanitary sewers in this area.
- **Stormwater** – All areas within Sherwood West can handle stormwater with required infrastructure improvements as development occurs. The West and Southwest districts in Sherwood West may be the easiest to serve.

Implementation

The Concept Plan will need to be formally accepted by the Sherwood City Council. City Council adoption will enable the Concept Plan to serve as a resource for future discussion about expanding the UGB and more detailed planning for growth and development in Sherwood West. There are a range of identified potential strategies and considerations for implementing the concepts laid out in the plan, including:

- **UGB Expansion Request** – The City of Sherwood will have the ability to request expansion of the UGB to include Sherwood West in 2024.
- **Infrastructure Funding Strategy** – The Preliminary Infrastructure Funding Strategy includes a high-level estimate of infrastructure costs, revenues, and potential tools for funding the development of priority districts in Sherwood West. Next steps involve continued refinement of projects and costs and financial modeling and discussions with developers on potential funding strategies.
- **Future Comprehensive Planning** – A detailed comprehensive planning process will assign land use designations and zoning, identify specific locations for major road connections, protect natural resources, and develop infrastructure plans.

EXECUTIVE SUMMARY



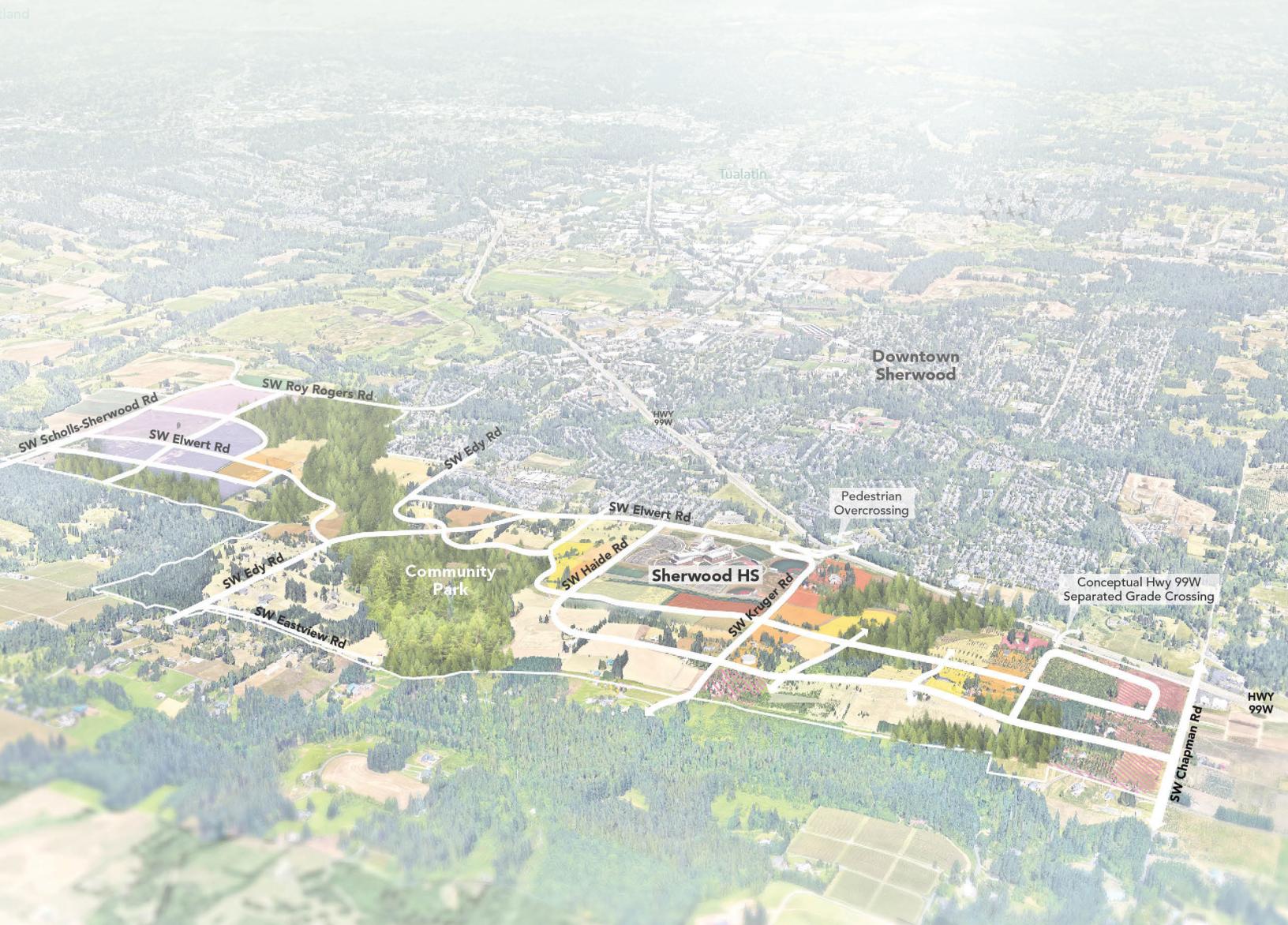
- **Natural Resource Protection** – For resource areas subject Metro Title 13 / Statewide Goal 5, the City will need to further analyze specific resources, make significance determinations; conduct an ESEE analysis; and adopt plans for resource protection through the Comprehensive Plan and Development Code
- **Future Development Code Regulations**
 - › *Custom Zoning* – The land use plan recommends two residential designations (Cottage Cluster and Middle Housing) and a Hospitality designation that would be implemented through custom zoning strategies.
 - › *Master Planning or “Village Planning”* – Master planning for the entire area, or specifically focused on smaller “villages,” can help prepare this future UGB expansion area for annexation and development. A master plan approach would allow for more certainty for coordinating multiple developments into cohesive neighborhoods; ability to coordinate unique plan elements; and coordination of infrastructure phasing and funding.
 - › *Future Annexation* – The City could consider requiring or allowing Annexation Agreements (binding contracts between the property owner and City) to ensure that proposed annexations are beneficial to the City and that key elements of the Sherwood West Concept Plan are implemented.
- **Transportation and Infrastructure**
 - › *Future Alternatives/Feasibility Studies* – The City will need to conduct several alternatives analyses and feasibility studies to determine the final location, alignment, and design of key transportation improvements.
 - › *Public Facility Plans* – Updates to the Sherwood Transportation System Plan and Capital Improvement Plan will be necessary to incorporate street design standards and improvement projects for facilities within Sherwood West. The City’s water and sewer master plans should also be updated to incorporate future utility extension in Sherwood West.
 - › *Funding Tools* – To establish detailed infrastructure funding plans, more detailed cost estimates, revenue projections, and infrastructure planning is needed.
- **Continued Community Engagement** – The City should continue engaging with property owners and the Sherwood community about Sherwood West. This should include outreach via periodic email updates, the project website, and neighborhood engagement.

Next Steps

There is more work to be done to prepare Sherwood West for future growth and development. The comprehensive planning and zoning process offers an opportunity for the City to reach out to affected property owners and the larger community to refine higher-level concepts. Robust community engagement, in addition to further evaluation of the topics addressed in this plan, will be an essential component of the City’s next steps in developing refined plans and future regulations for Sherwood West.



INTRODUCTION





INTRODUCTION

Concept Plan Background and History

Sherwood West is a geographic area located west of the existing Sherwood city limits and adjacent to the Metro Urban Growth Boundary (UGB). Sherwood West is a designated Metro urban reserve (Urban Reserve Area 5b) and, at 1,291 total acres, is a large area for potential future growth.

Urban reserves are designated by Metro in coordination with partner cities and counties and identify land that will be considered for addition to the region's UGB for urbanization over a 50 year period. Given its size, and the location of existing infrastructure, Sherwood West is logically the best direction for the City to consider growth in the future.

Preliminary Concept Plan

Starting in 2015, the City of Sherwood undertook a community process to develop a long-range planning tool that would help guide future community discussions and decisions about the city's long-term growth. The result was the Sherwood West Preliminary Concept Plan, which was accepted by City Council in 2016.

Re-Look Project

Significant changes in Sherwood and the surrounding areas since the adoption of the Preliminary Concept Plan spurred the City to reconsider growth options for Sherwood West and embark on the Sherwood West Concept Plan Re-look project.

Shifting priorities...

- › Sherwood City Council has prioritized adding employment land and job growth as a major goal to create a more diversified tax base. Sherwood West is an opportunity to help achieve that goal.
- › The City adopted the Sherwood 2040 Comprehensive Plan in 2021, which updated the vision, goals, and policies for the city as a whole.
- › The City updated plans for Brookman Road as a refinement of the Brookman Addition Concept Plan, the guiding planning document for the area just southeast of Sherwood West.

Changing conditions...

- › The Sherwood School District constructed the new 350,000 square foot Sherwood High School on 73 acres inside the Sherwood West area.
- › The city continues to see rapid growth and development. Since 1990, Sherwood has added hundreds of residents every year, with annual growth rates between 3-8%.
- › Washington County completed its Urban Reserve Transportation Study (URTS), which provides updated transportation information to help with future planning in urban reserve areas.
- › The State enacted new laws related to Climate Friendly and Equitable Communities, housing affordability, and other issues that will affect planning in Sherwood.



INTRODUCTION

Changing housing regulations...

- › The State of Oregon adopted House Bill 2001 in 2019, which directs cities to allow for “middle housing” (such as duplexes, townhomes, and cottage clusters) within areas zoned single-family residential. (Refer to Appendix Q, Housing Policy Implications Memo for more information.) The City adopted new Residential Design Standards in 2021 to ensure middle housing and other housing types fit into the City’s desired neighborhood character.

While many of the ideas and concepts in the Preliminary Concept Plan continue to be valid and are reflected in this update, the current plan better reflects existing and expected conditions. Specifically, the Sherwood West Concept Plan builds off the earlier accepted plan by addressing new land use and growth patterns, transportation plans, housing regulations, and opportunities for employment and economic growth.

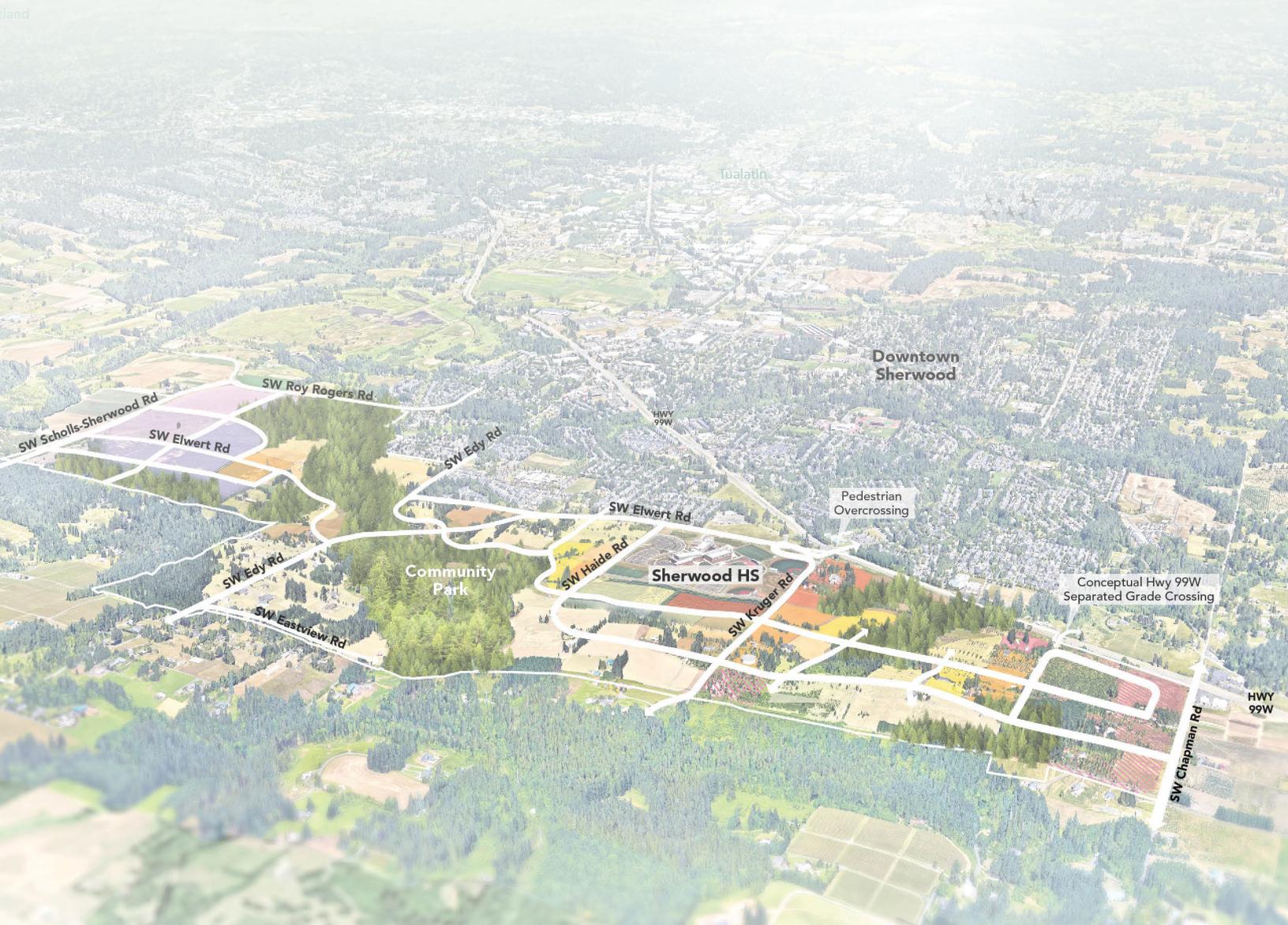
The Role of the Concept Plan

The Concept Plan is a long-range planning tool intended to guide Sherwood community members, decision makers, and staff as they make plans and decisions about future growth in Sherwood West. Specifically, creating and adopting a concept plan is a required step prior to amending the UGB, which is a necessary precursor to development in Sherwood West. There are specific requirements for the types of information that must be included and what issues must be considered in a concept plan in order to inform UGB amendment decisions. Metro and the State ultimately make those decisions.

Concept planning also provides a foundation for the more detailed comprehensive planning work that will follow UGB expansion. The concept plan provides a general framework for locating various land uses, transportation networks, open spaces, and public services. While vitally important as a policy document to provide planning direction, a concept plan is not a regulatory document, and the City must take additional actions to govern future urbanization. Once an area is brought into the UGB, a city will conduct additional analysis and undertake a comprehensive planning effort to assign land use designations and zoning, identify specific locations for major road connections, protect natural resources, and develop infrastructure plans within Sherwood West. For Sherwood, that later process will refine the general concepts that are laid out in this plan – a necessary next step prior to land being eligible for annexation and development.



PLANNING & ENGAGEMENT PROCESS

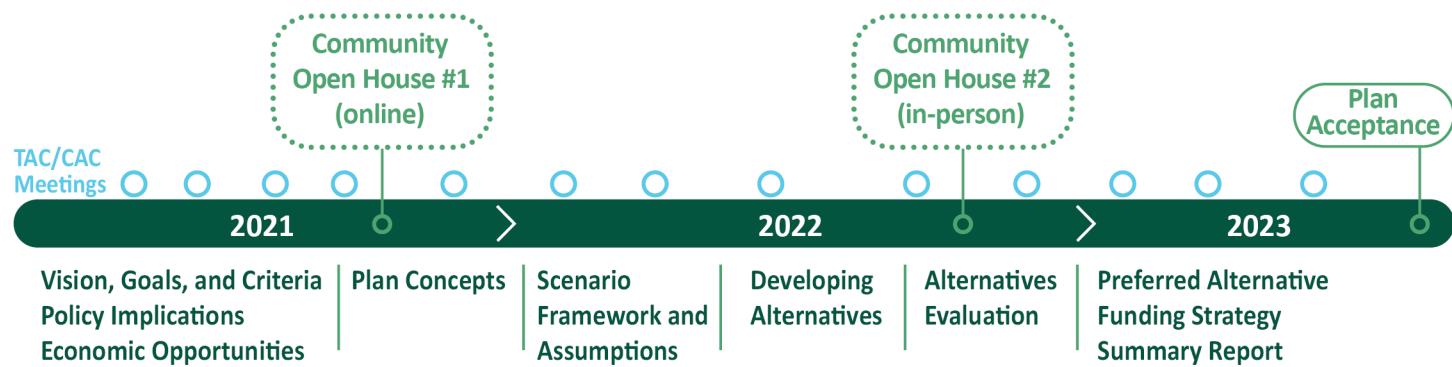


PLANNING & ENGAGEMENT PROCESS



The Sherwood West Concept Plan was developed between spring 2021 and spring 2023 through a collaborative planning process that engaged a multitude of Sherwood residents, business and property owners, local organizations, technical advisors, City staff, and consultants. The diagram below provides an overview of the Concept Plan process.

Figure 1. Concept Plan Process



Community Engagement

Engaging with Sherwood residents and other stakeholders was considered essential for producing a plan that reflects community values with integrity and foresight. To help guide the project, two stakeholder committees were formed to include a broad range of interests: the Community Advisory Committee (CAC) and the Technical Advisory Committee (TAC). Together, these committees worked to help shape the direction and result of this process.

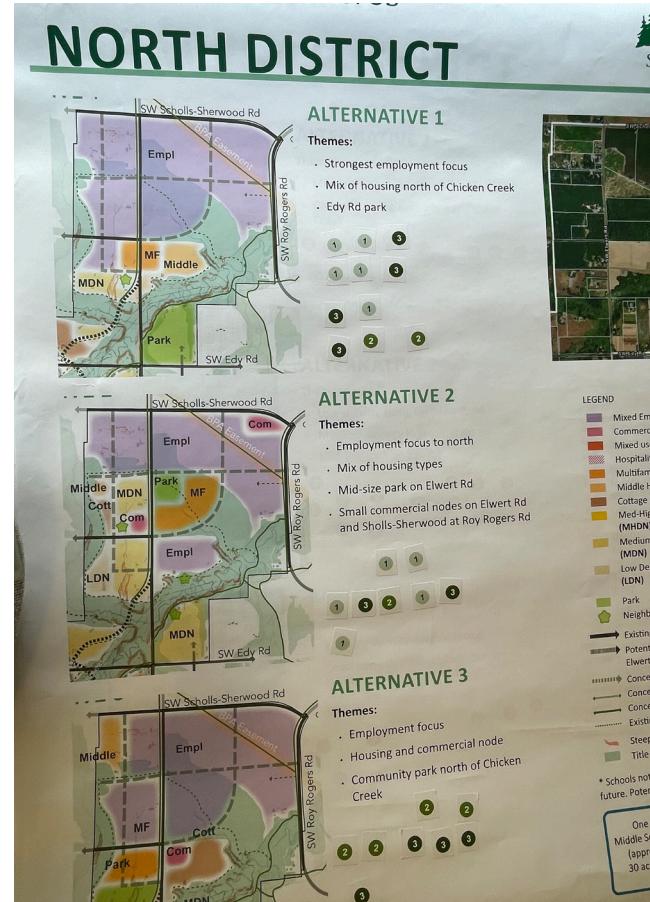
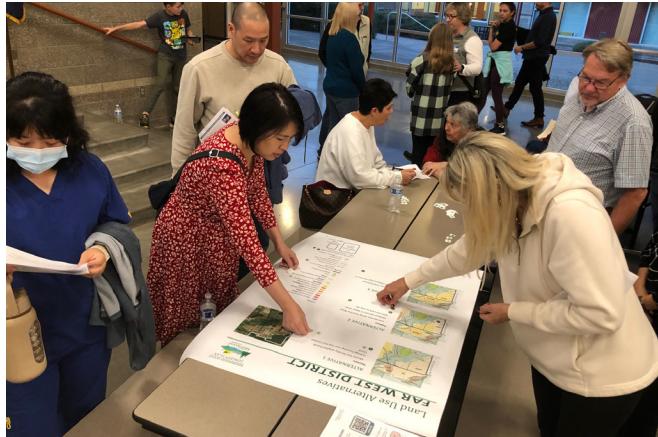
- **The CAC** was made up of 16 community members who live or own property within the city as well as those in the study area, and representatives from the City's Parks Board, Planning Commission, City Council, the Sherwood School District, and Sherwood Chamber of Commerce. They were charged with reviewing materials from the consultant team, providing broad perspectives to ensure the Sherwood West Concept Plan reflects diverse needs, participating in public outreach regarding the plan, and providing recommendations on plan alternatives. They were recruited and selected by the City Council through an open application process. Twenty-three individuals applied to be on the CAC and 16 were selected.
- **The TAC** was comprised of essential public service provider representatives: City Public Works, Engineering, Community Services, Police Department, Clean Water Services, Tualatin River National Wildlife Refuge, Tualatin Valley Fire and Rescue, the Oregon Department of Transportation (ODOT), Metro Oregon Home Builders, City of King City, Washington County Land Use & Transportation, and Metro. TAC members reviewed project deliverables for technical adequacy, policy, and regulatory compliance.

PLANNING & ENGAGEMENT PROCESS



Every step of the way, Sherwood community members provided meaningful guidance and feedback, gathered through interviews, public events, CAC public testimonies, online surveys and open houses. In addition, high school students' input was received through an online survey. This guidance has been essential to the Sherwood West planning process. The design of the Concept Plan is a reflection of this work. Together, we:

- 1. Refreshed the vision, goals and evaluation criteria that guided the Concept Plan.** This work was informed by CAC and TAC input and background research into updated policies, regulations, transportation issues, and economic opportunities.
- 2. Designed alternative concept plan scenarios.** Based on community core values, vision, existing conditions and discussions with the CAC and TAC, three draft alternative concept plan scenarios were developed to explore a variety of ideas for comparison.
- 3. Considered the relative merits of each scenario and the key features that best represent the goals and objectives of Sherwood West.** Through a community open house and workshop and online surveys, the CAC, TAC, staff, and consultant team worked to identify preferences for individual and collective plan elements using the evaluation criteria they helped develop.
- 4. Designed a Concept Plan that builds upon community feedback, technical guidance, and a landform analysis.** The Concept Plan is a hybrid of the three alternatives, combining the preferred elements into a recommended draft “hybrid” Concept Plan.



PLANNING & ENGAGEMENT PROCESS



Each step of the planning process incorporated a variety of community engagement activities, as listed below, designed to reach a broad spectrum of Sherwood residents.

Community Engagement Activities

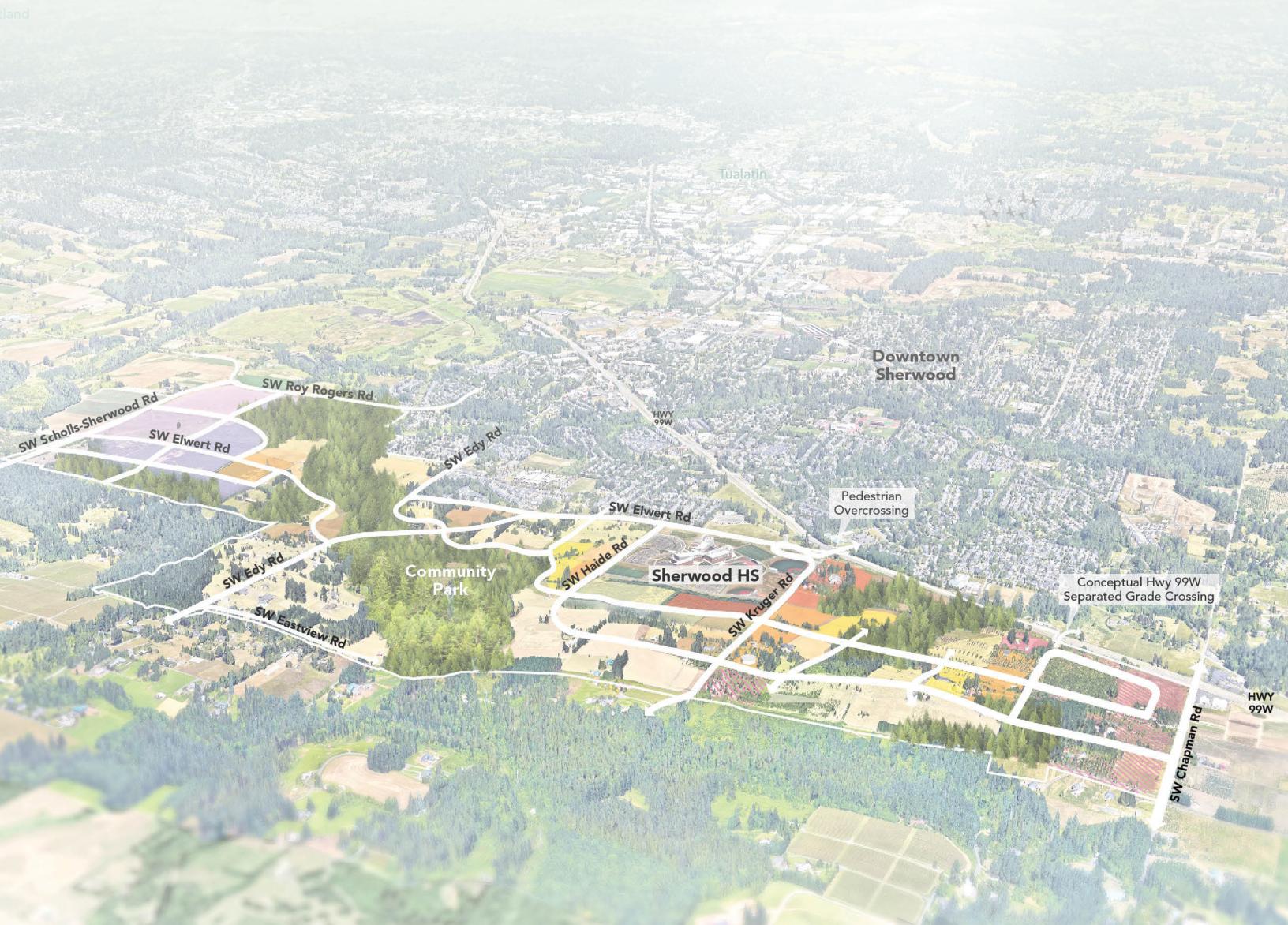
- Community Advisory Committee (CAC) Meetings - total of 14 meetings
- Public Testimony at CAC Meetings
- CAC Interested Parties Email Subscription
- Project Website
- Social Media (Facebook, Twitter, Next Door)
- Sherwood Utility Billing Email Listings Notices
- Sherwood Archer Newsletter
- Project Video
- Property Owner Mailing - Introduction to project (June 2021)
- Online Survey – Informational and Initial Concepts (October 2021)
- Coffee Klatches with Neighbors and Homeowners Associations (Summer 2021)
- Movies in the Park (August 2022)
- Cedar Creek Trail Grand Opening (September 2022)
- Community Open House with Property Owner Mailing (October 2022)
- Virtual Open House (October 2022)
- Technical Advisory Committee (TAC) Meetings – total of 12 meeting
- Metro Home Builders Association Presentation (August 2021)
- Sherwood West Economic Development Stakeholder Interviews (June 2021)
- Metro Technical Advisory Committee (MTAC) Presentation (July 2022)

To learn more about engagement approaches and results, refer the appendices (Appendix C, Community Engagement Plan; Appendix D, Open House #1 (Online) Summary; and Appendix E, Open House #2 and Survey Summary).

Note: Due to the COVID-19 pandemic, prior to June 2022 all public engagement activities occurred virtually. Starting in June 2022, all CAC meetings and public events took place in person, with virtual participation options also made available.



VISION, GOALS & EVALUATION CRITERIA



VISION, GOALS & EVALUATION CRITERIA



Vision Statement

The vision statement was developed early in the Concept Plan Re-Look process, updating the vision from the 2016 Preliminary Concept Plan. The vision describes the community's desired future for the Sherwood West area. The vision and its associated goals were developed and revised through a visioning exercise and subsequent discussions with the Community Advisory Committee and reflect current community priorities for Sherwood West.

Sherwood West is a walkable community with a balanced mix of employment, residential, commercial, and greenspace land uses—it is a place where families can safely live, work, shop, and play. Sherwood West is home to a variety of businesses that offer stable, high-paying jobs and those employment opportunities have helped satisfy the City's need for an expanded tax base to protect and maintain Sherwood's great quality of life. Sherwood West is attractive to employers and residents because of its well-planned infrastructure, well-connected streets, walkable neighborhoods, and variety of well-designed housing choices. The area feels like a natural extension of Sherwood's existing neighborhoods, and it is integrated with other nearby urbanizing areas and regional destinations such as the Tualatin River National Wildlife Refuge. Sherwood West's natural landscape is anchored by the Chicken Creek Greenway, which protects the creek corridor and connects the area's neighborhoods through a network of natural areas, parks, and trails.



VISION, GOALS & EVALUATION CRITERIA



Goals and Evaluation Criteria

Following are specific goals for various aspects of Sherwood West's future and corresponding criteria for evaluating Concept Plan alternatives. Like the vision statement, the goals and criteria were updated from the 2016 Preliminary Concept Plan to reflect current community priorities and desires for Sherwood West.

Table 1. Goals and Evaluation Criteria

GOAL	EVALUATION CRITERIA
1. The area is designed as a natural extension of Sherwood and is integrated into the existing pattern of growth in order to preserve the community's heritage and small-town feel.	<ul style="list-style-type: none">There is a balanced mix of office, industrial, commercial, and residential land uses and open spacesA variety of housing options accommodates a diverse range of family structures, income levels, and lifestylesNeighborhood retail nodes provide residents with walkable access to goods and servicesHousing density and implementation is pragmaticView corridors and separation from other cities contribute to Sherwood's unique identity
2. The area attracts a variety of businesses and employment opportunities, which help satisfy the City's need for an expanded tax base.	<ul style="list-style-type: none">Infrastructure is well-planned to make Sherwood West attractive to developers and large employersThere are large low-impact employment areas available for the growth of technology parks and other higher-wage jobsThere are opportunities to leverage the area's unique location for destination retail, hospitality, and visitor-related uses
3. Transportation facilities serve to connect, rather than divide, neighborhoods.	<ul style="list-style-type: none">A network of streets provides north-south connections to and through the areaThe Concept Plan helps realize the opportunity for a Highway 99 pedestrian crossingStreets are designed to balance accommodating vehicle traffic and parking while also being welcoming places for peopleStreets are designed with consideration for safety and emergency response vehiclesSherwood is "transit-ready" for future transit service

VISION, GOALS & EVALUATION CRITERIA

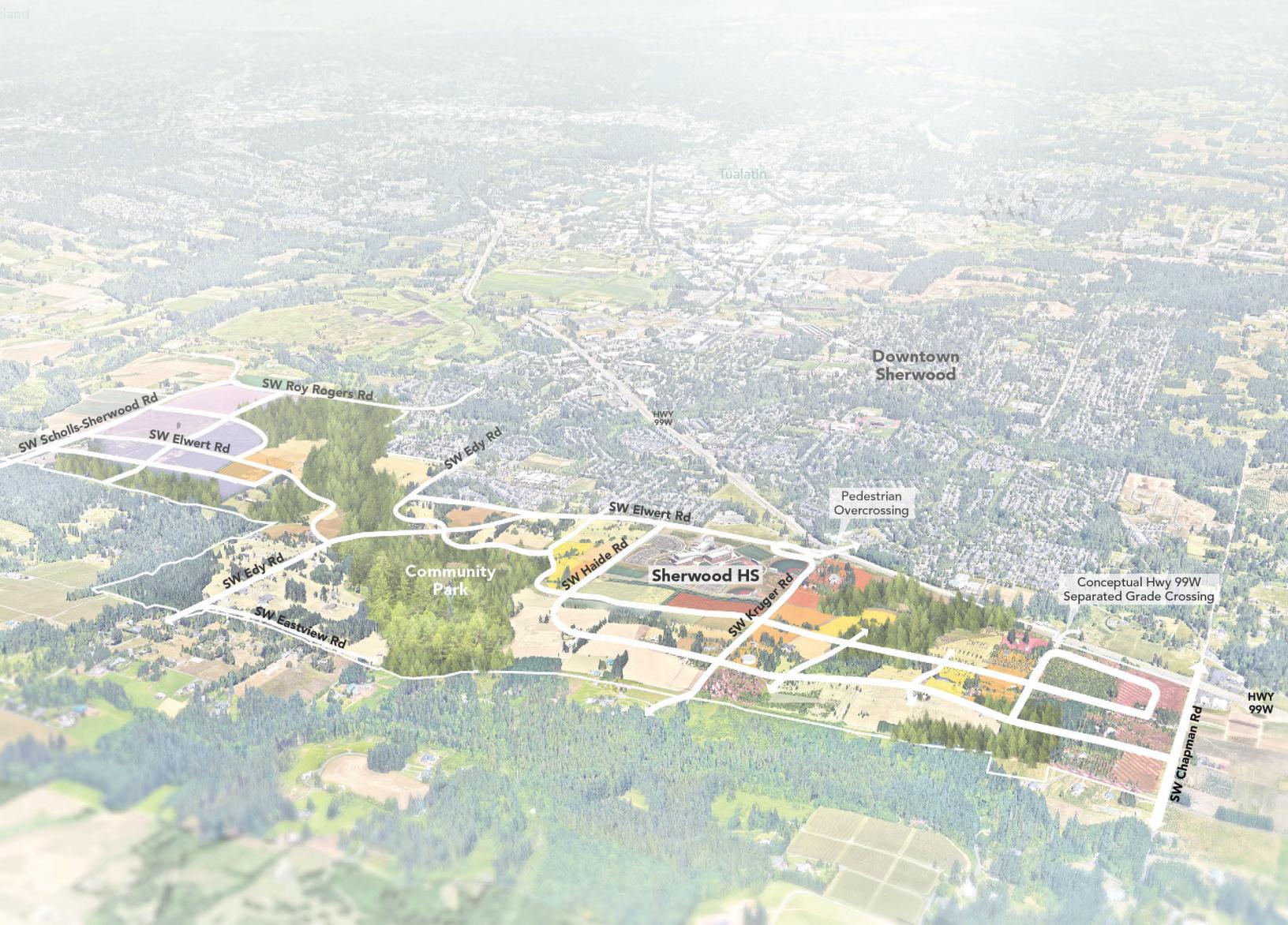


GOAL	EVALUATION CRITERIA
4. Residents have access to a variety of parks and natural areas, anchored by the Chicken Creek Greenway.	<ul style="list-style-type: none">• The Chicken Creek corridor is protected• Creek connections to the Tualatin River National Wildlife Refuge are preserved and, where possible, enhanced• Residents have access to nature through a network of multi-use and soft-surface trails• Parks and natural areas serve as places where families and community members can gather together• Existing mature trees and areas of dense tree canopy are preserved where feasible
5. The area is served by a robust network of active transportation options that are integrated into Sherwood's existing network.	<ul style="list-style-type: none">• Residents can easily walk or bike to access local destinations such as schools, parks, employment areas, and shopping centers• Active transportation facilities connect to existing Sherwood neighborhoods and nearby regional destinations• Students have safe options to walk or bike to school
6. Growth and development are well-planned and implementation of the area is pragmatic.	<ul style="list-style-type: none">• The extension of public facilities and services are phased and coordinated with development• Land uses serve Sherwood's needs and are complementary to other expansion areas along the western Urban Growth Boundary





EXISTING CONDITIONS





EXISTING CONDITIONS

Study Area

Sherwood West is a 1,291-acre area just west of the existing Sherwood city limits—see Figure 2. The area is bounded on the east by Highway 99W, SW Elwert Road, and SW Roy Rogers Road. The area's southern boundary is SW Chapman Road; its northern extent is SW Lebeau Road and SW Scholls-Sherwood Road. The western boundary is the outer edge of Metro's Urban Reserves, with Rural Reserve land lying further to the west). Site topography generally slopes from west to east, with an elevation difference of approximately 150 to 200 feet.

Figure 2. Sherwood West Study Area



EXISTING CONDITIONS



Land Use and Zoning

Existing land use in Sherwood West includes a mix of farmland, orchards, rural homes, and natural areas. The new Sherwood High School and the adjacent Countryside Community Church represent the few non-rural uses in the study area. Sherwood West is considered highly “parcelized” because it is divided up into numerous individual properties—126 tax lots in total. A majority of those properties (75 percent) are under 10 acres in size.

The land inside Sherwood West is currently under Washington County’s jurisdiction and is zoned for agricultural and forest uses (except for the high school, which is inside city limits and is zoned for institutional/public use).

Nearby landmarks and developed neighborhoods inside Sherwood include Ridges Elementary School, the Oregon Trail neighborhood, Mandel Farms, and Middleton.

Economic Opportunities

One of the main goals for updating the Sherwood West Concept Plan is to plan for additional employment land and to prioritize job growth and expansion of the City’s tax base, as directed by the Sherwood City Council. A better future jobs-to-housing ratio will provide the opportunity for more Sherwood residents to work in the city, rather than having to commute elsewhere for work. This has benefits in terms of quality of life, traffic congestion, and lower emissions.

To understand opportunities for economic development and job creation in Sherwood West, the project team (staff and consultants) studied economic opportunities and development trends, evaluated the area’s assets and constraints, and spoke with local developers, stakeholders, and leading economists. Key findings from these studies are summarized below. Full summaries can be found in Appendix F, Development Trends and Implications Memo, and Appendix G, Economic Opportunities Memo.

Economic Opportunities Analysis (EOA)

The City’s 2023 EOA Update identifies a deficit of 277 acres of industrial and commercial lands to meet Sherwood’s projected 20-year employment needs. Within the current city limits there is a shortage of appropriate sites for industrial development – particularly sites between 10 and 50 acres in size or larger. The lack of buildable sites over 10-acres is notable, especially since this size of industrial land supports high tech manufacturing and traded-sector jobs. Sherwood West provides an opportunity to address some of the identified employment land deficit, including proposed employment land designations with parcels between 10 – 50 acres in size.

Target Industries and Sectors

The following sectors represent likely employment and development opportunities in Sherwood West:

- **Employment/Industrial.** There is strong potential for mixed employment and industrial development, considering the increasing demand for, and limited supply of, high-quality buildable employment land in the region, particularly large sites.

EXISTING CONDITIONS



- **Tech Clusters.** Sherwood is centrally located between existing tech clusters in Wilsonville and the Sunset Corridor, and developers are looking for opportunities elsewhere in the region. The Sherwood area is beginning to draw interest from existing tech companies in Hillsboro and elsewhere.
- **Wine Businesses.** The wine industry is an important part of the local and regional economy which may dovetail with industrial, retail, and hospitality uses in Sherwood.
- **Hospitality.** Hotels are in demand in the region, and Sherwood is well positioned with its proximity to wine country and Highway 99W. However, other cities to the south are better located for an immersive wine country experience. New hotels in Sherwood will likely be feasible as a follow-on use once employment growth occurs, and the market is proven.
- **Retail.** Sherwood should focus on convenience-based retail, such as grocery and health and personal care, as well as neighborhood-serving retail, such as foodservice and drinking places.

Strategies and Recommendations

The top recommendations related to planning for employment uses and positioning Sherwood West for successful economic development include:

- **Plan for Mixed Employment.** Most of the opportunities for long-term job creation will likely require a mixed employment approach—namely industrial, flex, and office. Mixed Employment in centers/parks of 20-100 acres is the strongest market.
- **Reserve large, flat parcels with transportation access for employment uses.** Land needs for mixed employment range from 40 to 50 acres per “center” or “park.” The City should target areas of Sherwood West with the largest and flattest contiguous tracts of land for these developments, with slopes of less than 3.0 percent.
- **Target Highway 99W for transportation-dependent uses.** Considering the limited frontage, retain 99W for certain users that require access and visibility.
- **Be Flexible.** Maintain as much flexibility (zoning, land, tools, approach) as possible in planning for employment growth as market cycles and trends over the next 20 years are unclear. This means maintaining large, contiguous sites but not mandating large-lot sites.



EXISTING CONDITIONS



Transportation

The summary in this section describes key features of the Sherwood West transportation network, as illustrated in Figure 3, and current plans for future improvements. Appendix H, Transportation Issues Memo, contains more detailed information on the existing and planned transportation system.

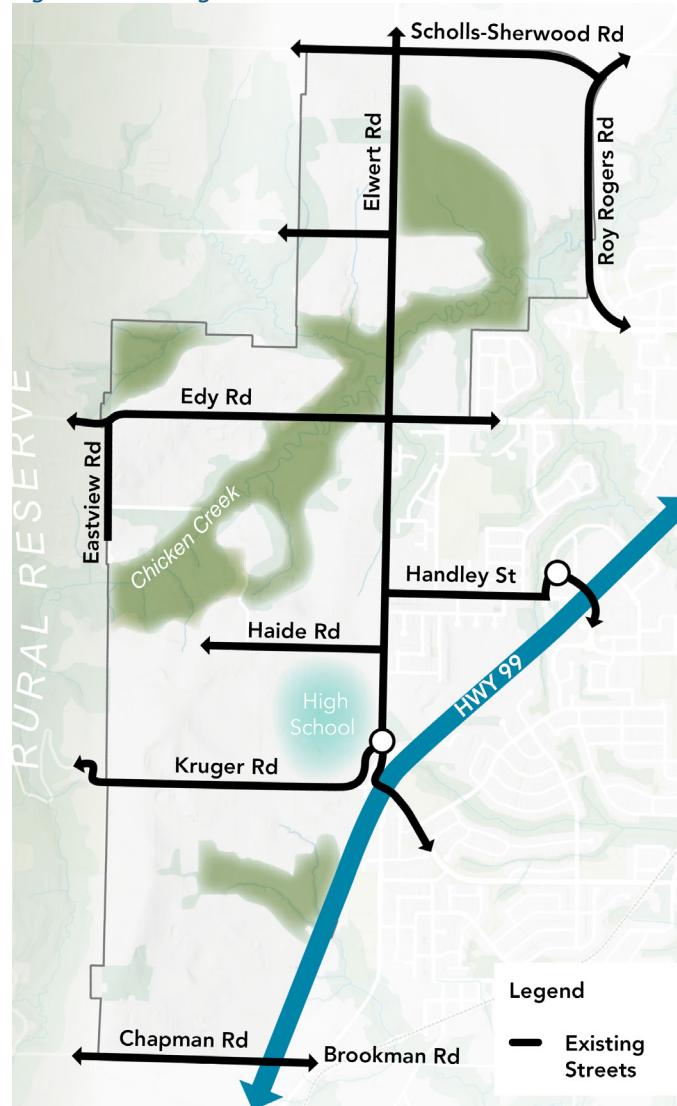
Elwert Corridor

Spanning the length of the Sherwood West area, from SW Scholls-Sherwood Road to SW Kruger Road, SW Elwert Road is a key north-south route. Designed as a two-lane rural arterial under Washington County jurisdiction, it is now commonly used as an alternative route to Highway 99W for both local and commuter (through) travel.

Travel along Elwert Road is characterized by rolling hills that include acute vertical sags and crests, which result in poor vertical sight distances and intersection sight distances. While sidewalks have been constructed along portions of Elwert Road adjacent to developed land (on the east side), Elwert Road will eventually need to be upgraded to urban standards as more land develops and vehicular trips increase.

Both the Washington County Transportation System Plan (TSP) and the City of Sherwood TSP identify the future build-out condition of Elwert Road as a 3-lane arterial which will include sidewalks and bike lanes on both sides of the road. It will be important to strike a balance between local connectivity and regional travel needs when developing the ultimate design of this facility.

Figure 3. Existing Street Network





EXISTING CONDITIONS

Regional Transportation Improvements

Highway 99W

Highway 99W is a state-designated freight corridor and limited-access highway. It is identified as a principal arterial in both the County and City TSPs. New access onto Highway 99W must be coordinated with the Oregon Department of Transportation (ODOT). The intersections of SW Chapman, SW Brookman, and SW Elwert roads will all need to be studied and possibly reconfigured or signalized depending on the amount of traffic generated by future land uses within the area.

Roy Rogers Road

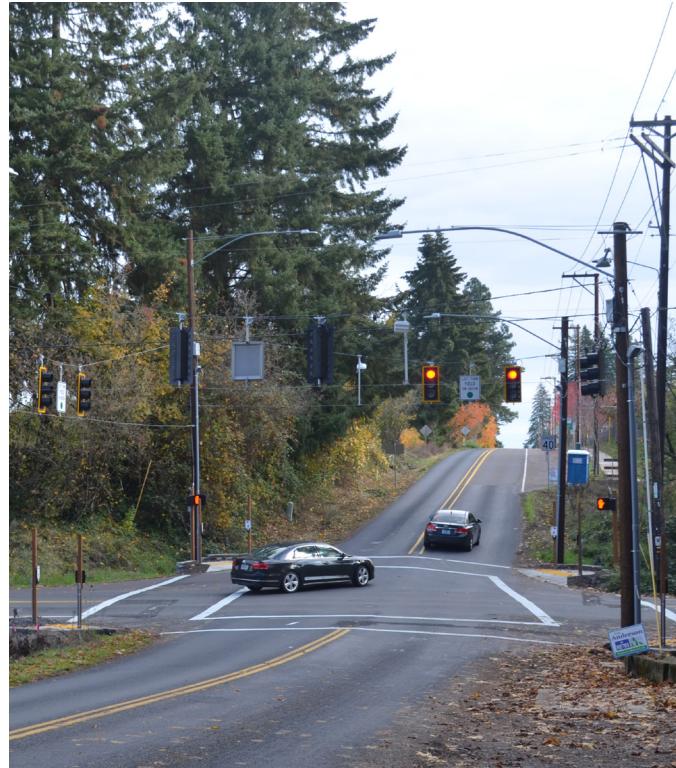
The County plans to expand SW Roy Rogers Road to a five-lane roadway – two travel lanes in either direction plus a center turn lane – south into Sherwood and through to Highway 99W. The final southerly extent of this improvement will be from Chicken Creek to Borchers Drive. The estimated \$14 million project is funded by the County's MSTIP program, and it is planned for completion by Spring 2024.

This regional corridor connects SW Scholls Ferry Road to Highway 99W and connects between job centers in Hillsboro, Beaverton and housing areas in Sherwood, Wilsonville, and western Clackamas County. Horizon year (2040) travel forecasts are roughly 40,000 vehicles on an average weekday, which is similar to levels observed today on Highway 99W between Tigard and Tualatin. This high level of travel demand may influence the type and location of potential development along the SW Roy Rogers Road corridor, specifically making it more attractive for retail and mixed use development.

Brookman Road

An extension of SW Brookman Road will ultimately define a new southern edge of Sherwood. When properties in the Brookman Addition area annex to the City, SW Brookman Road will be upgraded to a full urban arterial facility and its current intersection with Highway 99W will be upgraded to comply with Washington County and ODOT multi-modal standards to safely accommodate driving, bicycling, and walking. The recent update to the Brookman Addition Concept Plan recommends an interim 3-lane arterial cross-section on Brookman Road until such a time as a 5-lane section is required.

The SW Brookman Road extension west of Highway 99W, via SW Chapman Road, will also serve as the southern edge of the greater Sherwood West planning area. The scope and character of its intersection with Highway 99W, and additional connectivity between the Brookman Addition and Sherwood West areas are still being planned. See the transportation recommendations in Section VI for further discussion.



Intersection of Elwert and Edy.



EXISTING CONDITIONS

Multimodal Transportation

A key component of the Sherwood West transportation network is the incorporation of safe and convenient walking and bicycling facilities into the higher classification street facilities. Planned improvements to arterial and collector class streets will include these elements. In addition, the natural areas and varied terrain in Sherwood West offer opportunities for a separate trail system to promote non-motorized travel away from the roadway network.

Transit does not currently serve the immediate Sherwood West area. The closest TriMet service is Route 94 which connects to Portland along Highway 99W. The nearest stop is over a mile away. The Concept Plan explores how to make the area “transit-ready” with transit-supportive land use and sufficient connectivity of the street system.

Parks, Trails, and Open Spaces

There are no formal multi-use trails or parks in Sherwood West. Chicken Creek forms a natural greenway flowing southwest to northeast through the study area, eventually draining to the Tualatin River via Cedar Creek. The Cedar Creek greenway through the city connects at Chicken Creek. West Fork Chicken Creek and Goose Creek form smaller natural greenways in the central and southeast portions of the study area, respectively. Upper Chicken Creek, a 38-acre Metro-owned natural area, is located just outside the study area and abuts its western edge south of Kruger Road.

Sherwood's updated Parks and Recreation Master Plan (2021), discusses recommendations for park, trail, and facility development throughout the City and within planned growth areas such as Sherwood West. Recommendations for parks and facilities within Sherwood West include the following:

- Provide parks or park amenities in natural areas and along trail corridors to meet **the 10-minute walk goal**.
- Provide a **connected trail network** throughout the concept plan area. Explore the potential of a trail in the powerline corridor and an off-street shared use path along the Elwert Road corridor.
- Site a community park south of Edy Road, potentially adjacent to a natural area.
- **Consider a sports complex within Sherwood West** to include rectangular fields with lighting and potentially a new fieldhouse. At least 10 acres of relatively level, developable land is needed to accommodate a complex of this type. Specific considerations for the use and siting of this type of facility are detailed in Chapter 4 of the Parks and Recreation Master Plan (PRMP).

The PRMP also establishes minimum standards for parks and open space—including minimum sizes and levels of service for neighborhood parks, community parks, and other types of facilities (see PRMP Chapter 3).

EXISTING CONDITIONS



Environment and Natural Resources

Floodplains

There is a defined 100-year floodplain for a portion of Chicken Creek and West Fork Chicken Creek within Sherwood West (Figure 4). The floodplain for Cedar Creek at its intersection with Chicken Creek is also defined. The upper reaches of Chicken Creek and Goose Creek do not have available flood study data.

Wetlands

Wetlands that are mapped by the National Wetland Inventory and Metro's inventory comprise just over 31 acres within the study area. Most prominently, these are found along the riparian corridor of Chicken Creek, but also near the headwaters of Goose Creek. Additional wetland areas are also expected to exist within the study area, most likely along smaller tributaries of Chicken Creek, Cedar Creek, and Goose Creek. An inventory will be necessary to determine the likely extent of these wetlands.



Metro Title 13 Habitat

Metro Title 13 habitat areas are also depicted in Figure 4. Title 13 establishes baseline requirements to protect, conserve, and restore the region's significant riparian corridors and wildlife habitat resources, collectively referred to as Habitat Conservation Areas. Habitat Conservation Areas include rivers, streams, wetlands, and adjacent resource areas, as well as upland wildlife habitat patches and habitats of concern. Riparian Habitat areas are classified as either Class I, II, or III and Upland Habitat areas are classified as Class A, B, or C. The mapping of Title 13 habitat areas will be further refined and protections will be established as part of the comprehensive planning for Sherwood West once it is brought into the UGB.

Steep Slopes

The Sherwood West area mostly consists of gently sloped terrain, but there are also areas of steep slopes (25% or greater). Such steep slopes are found along drainage corridors for Chicken Creek, West Fork Chicken Creek, Goose Creek, and their tributaries, as well as at a higher point in the southwest portion of the study area (Figure 5). These areas are generally considered unbuildable.

Figure 5 depicts the range of slope conditions found in Sherwood West. Note that this map is from the Preliminary Concept Plan and predates the construction of Sherwood High School.

Figure 41 Natural Resources Existing Conditions

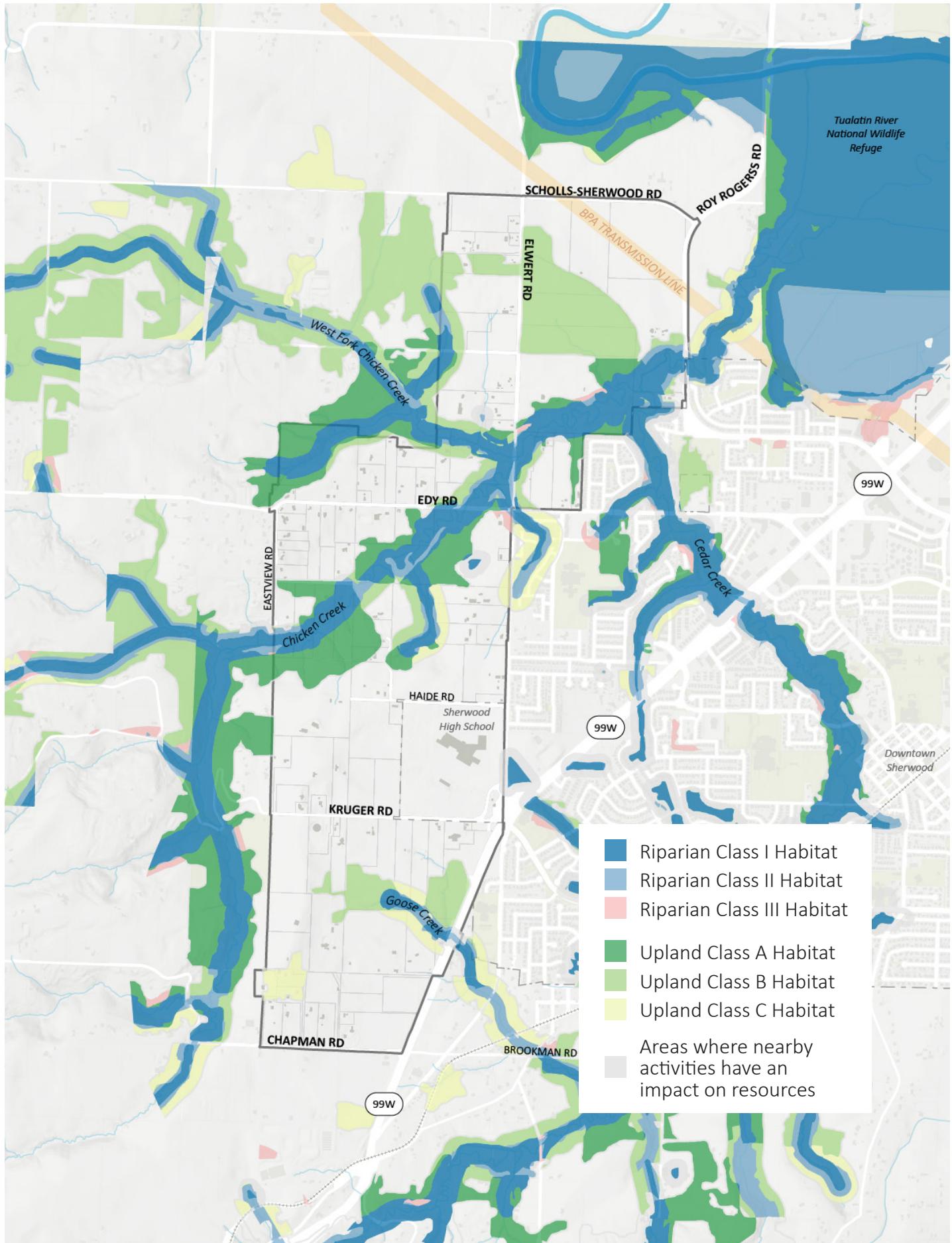
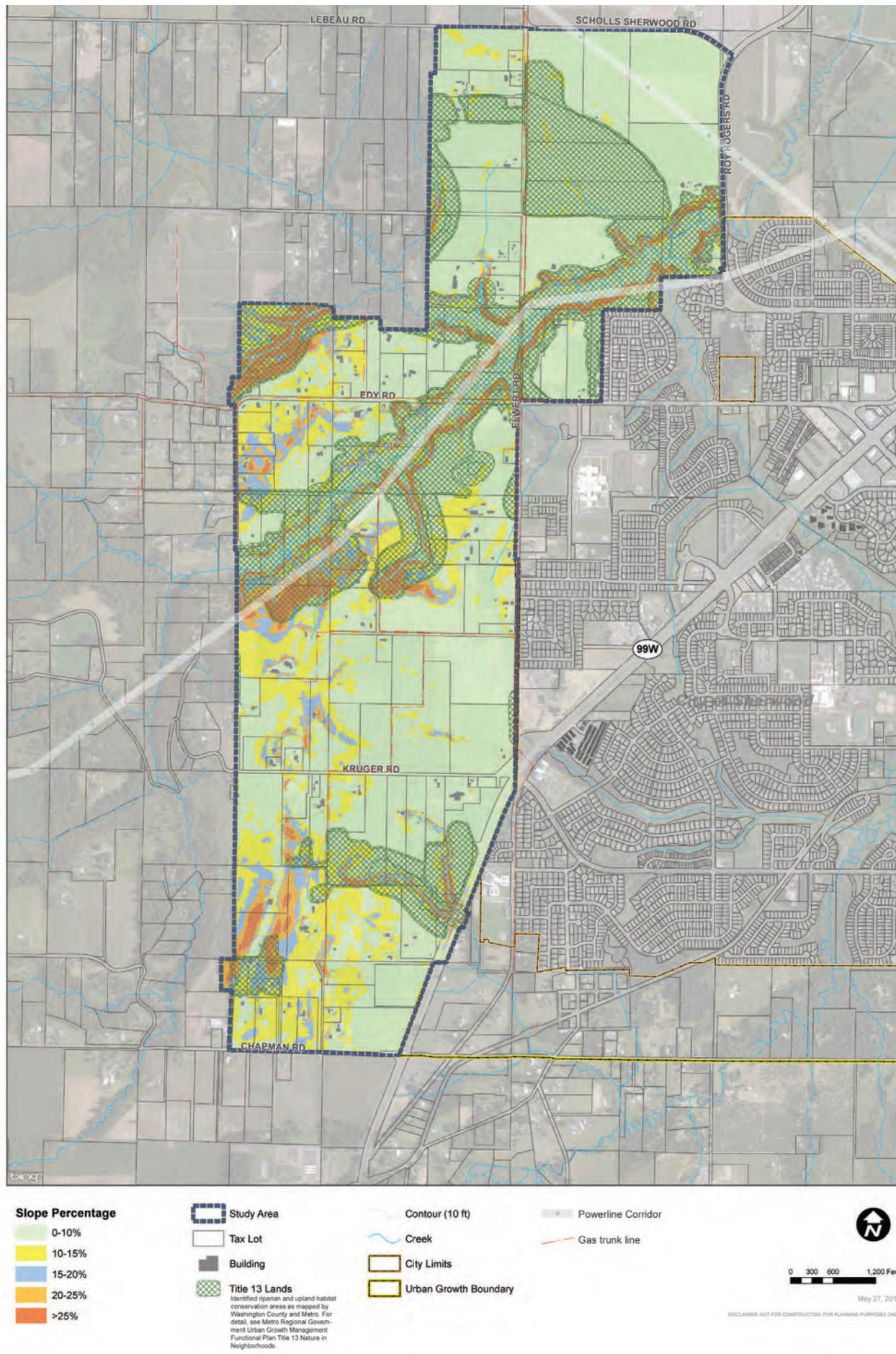


Figure 5 Slope Analysis (from Preliminary Concept Plan)



EXISTING CONDITIONS



Public Facilities

As properties in Sherwood West annex into the city boundary for future development opportunities, public facilities will need to be extended to support intended uses.

Water

Existing Conditions

The current Water System Master Plan was adopted in May 2015 and considers all areas within the city limits, the UGB, and the Sherwood West area. The City's primary water supply is from the Wilsonville Water Treatment Plant, supplemented by groundwater wells. The City maintains an emergency connection and transmission piping to the Tualatin-Portland supply main. The City's distribution system includes three service zones supplied by three storage reservoirs and two pumping stations. The majority of Sherwood customers are served from the 380 Pressure Zone which is supplied by gravity from the City's Sunset Reservoirs. The 535 Pressure Zone, serving the area around the Sunset Reservoirs, is supplied with constant pressure by the Sunset Pump Station, and the 455 Pressure Zone serves higher elevation customers on the western edge of the City by gravity from the Kruger Reservoir.

Opportunities and Constraints

Initial anticipated growth in Sherwood West will be served by extending the existing 380 and 455-Zone distribution mains. Future customers along the ridge north and south of the existing Kruger Reservoir will be served by constant pressure from the proposed Kruger Pump Station at the existing reservoir site. Some future customers in Sherwood West may need to be served through a Pressure Relief Valve (PRV)-controlled sub-zone or through individual PRVs on each service in order to maintain required service pressures. A small area on the western edge of the Sherwood West, along Edy Road near Eastview Road, is too high in elevation to receive adequate service pressure from the adjacent 380 Zone. This area will be served by constant pressure from the proposed Edy Road Pump Station. An additional pump station would potentially be needed to serve this area. Extensive large-diameter mains will be needed to expand the City's water service area to supply water to Sherwood West as development occurs.

Sanitary Sewer

Existing Conditions

The existing Sanitary Sewer Master Plan was completed in 2016 and considers all areas within the city limits and the UGB, but not Sherwood West. The City of Sherwood is served by two sanitary sewer trunk lines, the Sherwood Trunk Sewer (24-inch) which conveys sewage from the Cedar Creek sewage collection basin and the Rock Creek Trunk Sewer (18-inch) which conveys sewage from the Rock Creek sewage collection basin. Both trunk lines convey flows to the Sherwood Pump Station, owned by Clean Water Services (CWS), which sends sewage to the Durham Advanced Wastewater Treatment Plant via the Upper Tualatin Interceptor, also owned by CWS.

EXISTING CONDITIONS



Opportunities and Constraints

Existing sanitary sewer facilities adjacent to or near Sherwood West are limited. The Sherwood Interceptor crosses the study area near the northeast corner of the area at Cedar and Chicken Creeks, and any sewer mainlines would need to cross these creeks to connect. The Brookman Addition is an area within the UGB on the south end of Sherwood between the city limits and SW Brookman Road. The City recently constructed a sewer mainline to the northern boundary of the Brookman area.

Clean Water Services and the City of Sherwood are working together to extend necessary sewer services to the Brookman and Sherwood West areas. The Brookman sanitary project will connect the Brookman and Sherwood West areas to the existing lines in the Ladd Hill area.

The sanitary sewer line is needed because the new Sherwood High School (annexed in 2018 as part of the West Sherwood planning area) was constructed in an area where there was no existing sanitary service. A short-term pump station provides service to the new Sherwood High School but long-term the school must be converted over to this new sewer extension.

Stormwater

Existing Conditions

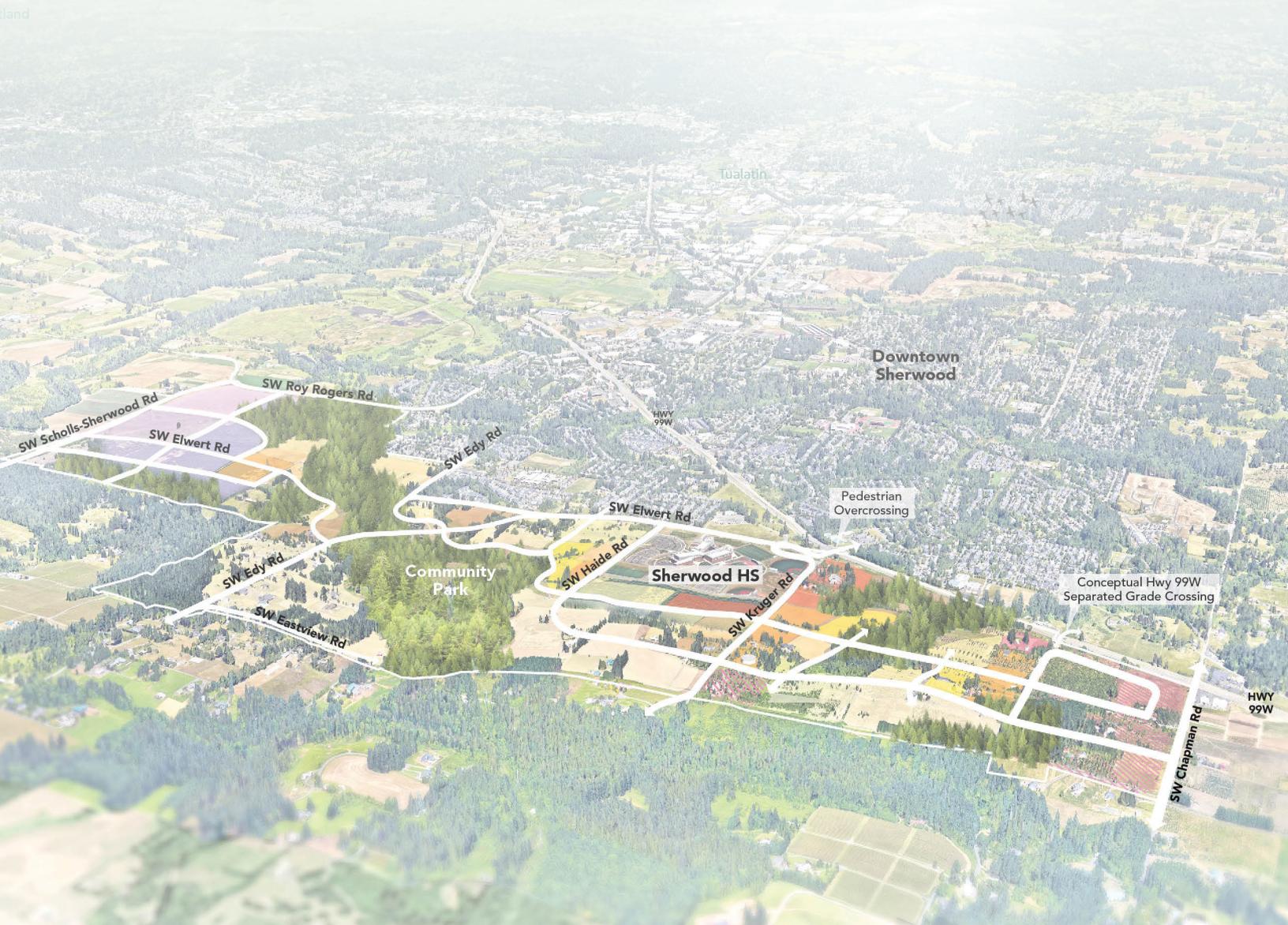
The existing Stormwater Master Plan was completed in 2016 and considers all areas within the city limits and the UGB, but not Sherwood West. Sherwood West lies primarily within the Chicken Creek Drainage Basin. The basin flows north and northeast along Chicken Creek. Cedar Creek flows into Chicken Creek at the northeast corner of Sherwood West near SW Roy Rogers Road. West Fork Chicken Creek enters the Sherwood West area at the northwest boundary and flows east into Chicken Creek. A small portion of the Sherwood West area in the southeastern corner is part of the Cedar Creek Drainage Basin. On-site runoff enters Goose Creek, which flows from west to east, crosses under Hwy 99W, and reaches Cedar Creek.

The Stormwater Master Plan notes that Chicken and Cedar Creeks have been identified by the Environmental Protection Agency (EPA) as providing habitat for anadromous fish that are listed as threatened under the Federal Endangered Species Act. The area in the vicinity of Chicken and Cedar Creeks and their tributaries have been designated by Metro as riparian corridors, upland wildlife habitat, and aquatic impact areas. Some areas within the riparian corridors are also shown on the National Wetland Inventory Opportunities and Constraints. Beyond the natural streams, channels and roadside ditches, there is no developed stormwater infrastructure within the Sherwood West area except for the Sherwood High School site and the surrounding public roads that drain southeast through a large stormwater management pond and into a storm culvert under the highway and the east through the Woodhaven greenway over to Cedar Creek.

As development occurs in the future, stormwater would likely be discharged into the floodplains of the adjacent creeks and tributaries flowing to the north and south of the high school site that drains the middle part of the study area. The City of Sherwood requires that all stormwater facilities meet the requirements of Clean Water Services Design and Construction Standards for conveyance, water quality treatment, hydromodification, and water quantity treatment. The City has indicated that they prefer to use regional stormwater facilities where possible within Sherwood West, similar to the vegetated stormwater ponds near the roundabout, with Low Impact Development Approaches (LIDA), proprietary treatment, and underground storage preferred only private property only.



LAND USE ALTERNATIVES



LAND USE ALTERNATIVES



Developing Alternatives

The project team developed three Concept Plan alternatives through an iterative process that involved close collaboration with the Community Advisory Committee. The alternatives were intended to explore and compare a variety of ideas and to solicit preferences for plan elements that would be advanced and combined into a single preferred alternative.

The process of developing alternatives started with a series of baseline assumptions, based on consideration of existing conditions, ideas carried forward from the Preliminary Concept Plan, the vision statement and project goals, and recent regulatory changes (e.g., middle housing requirements under Oregon House Bill 2001). The team also developed a series Plan Concepts that addressed key topics for the Concept Plan—transportation, employment, open space, housing, etc. These concepts then fed into the assumptions and alternatives (see Appendix I. Plan Concepts).

Themes and Assumptions

Several baseline assumptions and key themes factored into the three alternatives:

- **Employment Focus** – Mixed Employment uses, defined as a mix of office, light industrial, and flex space uses in the same development or area, emerged as a key driver of the land use alternatives. This focus was informed by the City Council prioritizing job creation and opportunities identified in the Economic Opportunities and Challenges memo (Appendix G). However, the amount of mixed employment land, as well as other commercial and employment lands, was not a constant between alternatives.
- **Community and Neighborhood Parks** – The alternatives targeted 10-20 acres for one or more community parks in Sherwood West. In addition, neighborhood parks (average 2 acres) would be distributed throughout the neighborhoods. The location of parks varied across alternatives.
- **Open Space** – In every alternative, nearly 500 acres – approximately 40% of Sherwood West – would be reserved as open space, either in the form of natural resource lands, tree groves, parks, or open space set aside as part of development.
- **Schools** – An estimated 35-40 acres would be needed for future schools in Sherwood West – 25-30 acres for a middle school and 10 acres for an elementary school. While these land needs were factored into the alternatives, the City of Sherwood and the school district cannot identify specific locations for schools at this point.
- **Transportation Network** – Feedback received from the advisory committees and the online open house showed a clear preference for the Elwert-Edy realignment concept, which was studied in the Preliminary Plan (and described in Section VI, below). This alignment, as well as a general framework of local streets, was kept constant across the three alternatives.
- **Custom Land Use Designations for Middle Housing** – The State’s middle housing requirements were a key consideration for developing land use concepts for Sherwood West. State law requires that Sherwood allow development of duplexes, triplexes, fourplexes, cottage clusters, and townhouses in residential areas zoned for detached single-family homes.

LAND USE ALTERNATIVES



The CAC was interested in developing custom land use designations for the middle housing types that are most favored by the Sherwood community: duplexes, townhomes, and cottage clusters. Custom designations would provide areas for these middle housing types only, and would not allow single-family detached dwellings, which would give the City more flexibility to customize their design and development standards. See below for a description of the land use designations.

Land Use Designations for the Concept Plan

The following land use designations are included in the three alternatives maps (Figure 6). Note that, with the exception of Middle Housing and Cottage Cluster, the residential land use designations are based on the City's existing residential zones and associated densities.

Table 2. Concept Plan Land Use Designations

DESIGNATION	PURPOSE AND ATTRIBUTES
	RESIDENTIAL
Multifamily	<ul style="list-style-type: none">Purpose: To provide intentional locations for apartments and condominiums in Sherwood West.Housing Types: Apartments, condominiums, townhomes, triplexes, and quadplexes would be permitted in this designation.Density: 16.8-24 dwelling units/acre (based on High Density Residential [HDR] zone).
Middle Housing	<ul style="list-style-type: none">Purpose: To provide intentional locations for specific middle housing choices of duplexes, townhomes, and cottage clusters. These middle housing types are most favored by the CAC and Sherwood community, and would provide different housing choices—including options for more affordable homeownership as compared to single detached dwellings.Housing Types: Duplexes, townhomes, and cottage clusters would be permitted in this designation.Density: 5.5-11 dwelling units/acre
Cottage Cluster	<ul style="list-style-type: none">Purpose: To provide intentional locations for cottage cluster housing.Housing Types: This designation would only allow cottage cluster housing. Cottage clusters are groupings of relatively small homes clustered around a shared courtyard or open space. Their smaller footprints and shared amenities can make cottage cluster housing appealing to many seniors, small households, and first-time homebuyers.Density: 12.8-16 dwelling units/acre
Neighborhood Designations	<ul style="list-style-type: none">Purpose: To provide land for a range of single and middle housing types, ensuring open space with each project.Housing Types: These are the designations for single detached homes; by law, the full range of middle housing (duplexes, triplexes, quadplexes, townhouses, and cottage clusters) must also be allowed (with design standards).Densities: See below. (Note that state law limits how cities can regulate density for middle housing.)



LAND USE ALTERNATIVES

DESIGNATION	PURPOSE AND ATTRIBUTES
<ul style="list-style-type: none">• Medium-High Density Neighborhood• Medium Density Neighborhood• Low Density Neighborhood	<ul style="list-style-type: none">• 5.5-11 units/acre – This designation would likely be applied in flatter areas with larger sites where there would be more flexibility for creation of smaller lots. (Based on Medium Density Residential High [MDRH] zone.)• 5.6-8 units/acre – This designation is also likely to be applied in flatter areas with larger sites. (Based on Medium Density Residential [MDRL] zone.)• 3.5-5 units/acre – This designation would likely be applied in hillside and hilltop areas, and in parcelized areas with existing homes, where lots would be larger and densities would be lower. This would better accommodate topography, utility access, partial development, and other features, which would typically require larger lots. (Based on Low Density Residential [LDR] zone.)
EMPLOYMENT, COMMERCIAL, AND MIXED USE	
Mixed Employment	Provide land that supports living-wage employment opportunities for Sherwood residents. Mixed Employment includes a mix of office, tech, healthcare, light industrial, warehouse, and limited retail uses. This type of development typically requires large sites (at least 40-50 acres), flat topography, and good access to transportation.
Commercial	Provide opportunities for commercial businesses, including retail, dining, services, offices, and civic uses. These areas should have good visibility and access to transportation.
Mixed Use	Provide opportunities for a mix of housing and commercial businesses. Residential and commercial uses could be in the same building (vertical mixed use) or on the same site (horizontal mixed use).
Hospitality	This is a new concept for Sherwood, which emerged from discussions with the CAC. This zone would provide intentional locations for uses such as hotels/motels, restaurants, wineries, and similar uses that could capitalize on Sherwood West's location as the "entrance to wine country." These uses typically rely on strong visibility to the public—e.g., from Highway 99W.
PARKS	
Community Parks	Community parks are large parks (10 to 20 acres) that are intended to serve the broader community, and which may include amenities such as sports fields, picnic areas, pathways, and playgrounds. Community parks need relatively flat acreages and good transportation access for all modes of travel. The land use alternatives maps identify one or two locations for community parks.
Neighborhood Parks	Neighborhood parks are smaller (2 to 5 acres) and provide recreation opportunities for nearby residents, who typically live within walking and bicycling distance. The maps identify very conceptual locations for neighborhood parks, spread among the various residential areas.

Process

To create the three alternatives, the project team led the CAC through a hands-on exercise in which small groups developed the maps interactively. Each small group was given a base map and a set of land use "chips" that represented all the land uses listed in Table 2. The groups were then asked to place the chips on the map using their best judgment as to the appropriate location and overall layout of the land uses. Table facilitators helped organize the exercise and suggested parameters for placing the chips (e.g., certain uses, such as employment and schools, should not be placed on steeply sloped land).

The results of the chip exercise were then digitized and refined by the project team, with additional input from the CAC.

LAND USE ALTERNATIVES



Land Use Alternatives

The three land use alternatives in Figure 6 share several common themes:

- Focus on mixed employment in the northern, flat area
- Community park on the south side of the Chicken Creek corridor
- Commercial/mixed use and higher-density housing along Kruger Road
- Mix of housing types throughout
- Low density residential along western hilltop

Figure 6. Land Use Alternatives Maps



Alternative 1

- Largest amount of Neighborhood residential
- Moderate Mixed Employment land
- Community park northeast of Edy-Elwert intersection
- Hospitality on western end of Chapman Road

Alternative 2

- Most multi-family
- Least Mixed Employment land
- Community park west of Goose Creek
- Largest hospitality area, whole southern portion of study area

Alternative 3

- Mixed use residential focus west of high school
- Most Mixed Employment land
- Community park northwest of where Chicken Creek crosses Elwert Road
- Smallest hospitality area, at Kruger and Highway 99W

LAND USE ALTERNATIVES



Alternatives Evaluation

The three alternatives were evaluated through a community open house and survey and through application of the evaluation criteria (Section III). The project team also confirmed employment concepts through additional stakeholder engagement, and evaluated transportation alternatives through a Traffic Impact Analysis. The outcomes of each of these steps are briefly summarized below. Refer to the Appendices for full summaries.

Community Feedback

The Sherwood community had the opportunity to weigh in on the three land use alternatives, transportation concepts, and other plan concepts at an in-person open house and accompanying online survey in Fall 2022.

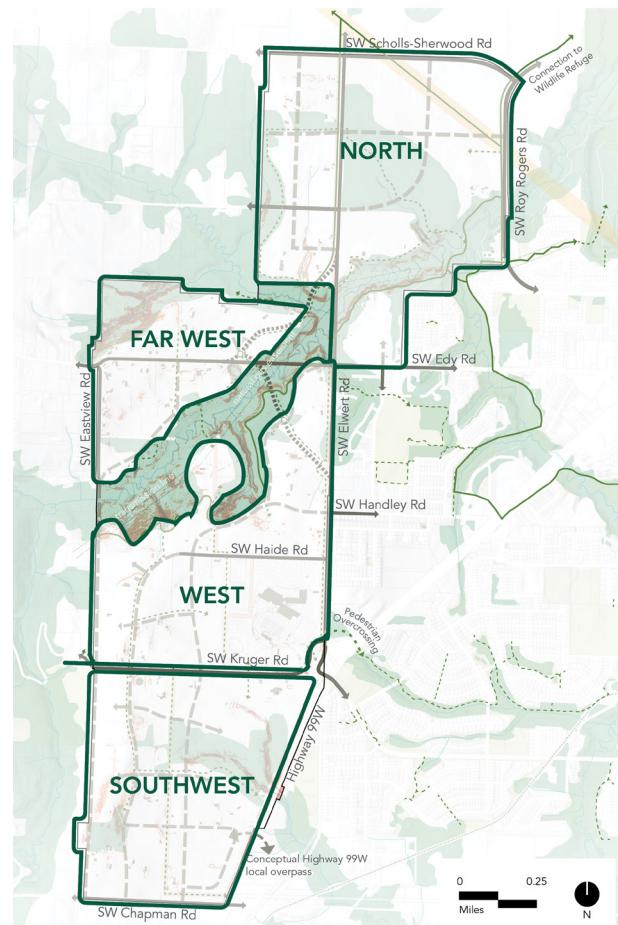
For the purpose of assessing the alternatives, the maps were broken up into the four distinct districts identified in the Preliminary Plan: North, Far West, West, and Southwest. Participants were asked to rank the alternatives in order of preference. Overall, participants favored Alternative 1 for the North and Far West districts, and Alternative 2 for the West and Southwest districts. See Appendix E for a full summary of survey/open house results.

Qualitative Evaluation

The project team also evaluated the three land use alternatives using the qualitative evaluation criteria identified earlier in the concept planning process. Table 3 summarizes the extent to which each alternative meets each criterion. See Appendix I for the full evaluation memo.

Generally speaking, all three alternatives are supportive of the project goals. None of the alternatives were given a score of “does not support project objectives” for any of the criteria. However, Alternative 1 rated the highest, with Alternatives 2 and 3 close behind, as shown in Table 3.

Figure 7. Sherwood West Subdistricts



LAND USE ALTERNATIVES



Table 3. Alternatives Evaluation Summary

GOAL	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
1. The area is designed as a natural extension of Sherwood and is integrated into the existing pattern of growth in order to preserve the community's heritage and small-town feel.			
2. The area attracts a variety of businesses and employment opportunities, which help satisfy the City's need for an expanded tax base.			
3. Transportation facilities serve to connect, rather than divide, neighborhoods.			
4. Residents have access to a variety of parks and natural areas, anchored by the Chicken Creek Greenway.			
5. The area is served by a robust network of active transportation options that are integrated into Sherwood's existing network.			
6. Growth and development are well-planned and implementation of the area is pragmatic.			

Supports Objectives Partially Supports Does Not Support

Developer Feedback

In Fall 2022, the City of Sherwood hosted a driving tour and discussion of the Sherwood West Concept Plan area with stakeholders from the development and brokerage community. The purpose was to gather insights about the draft plan concepts from development practitioners and to provide advice for future implementation. Some key takeaways from these discussions are provided below. A full summary of developer feedback, including recommendations for infrastructure and funding needs is included in Appendix J.

Industrial/Employment Opportunities

- Industrial development at the north end of Sherwood West could be developed as soon as the land is brought into the UGB and utilities are available. The region is virtually out of industrial land today.
- Likely industrial uses would be multi-tenant buildings in the 50,000-70,000 square foot range.
- Sherwood's Employment Industrial (EI) zone is an appropriate one for Sherwood West. It is flexible and does not restrict by tenant use unlike some zones in neighboring cities.

LAND USE ALTERNATIVES



Other Commercial Uses

- Office development is unlikely in Sherwood West.
- Some support retail would make sense near the industrial uses, but zoning should remain flexible.
- Sloped sites or sites at a higher grade than the adjacent street lend themselves better to housing than retail uses.

Hospitality

- The hospitality designation needs a destination use to make it viable if the area is not visible from or directly located on Highway 99W.
- A wine-themed destination would best be built off of an existing working winery, although offsite tasting rooms are becoming popular.

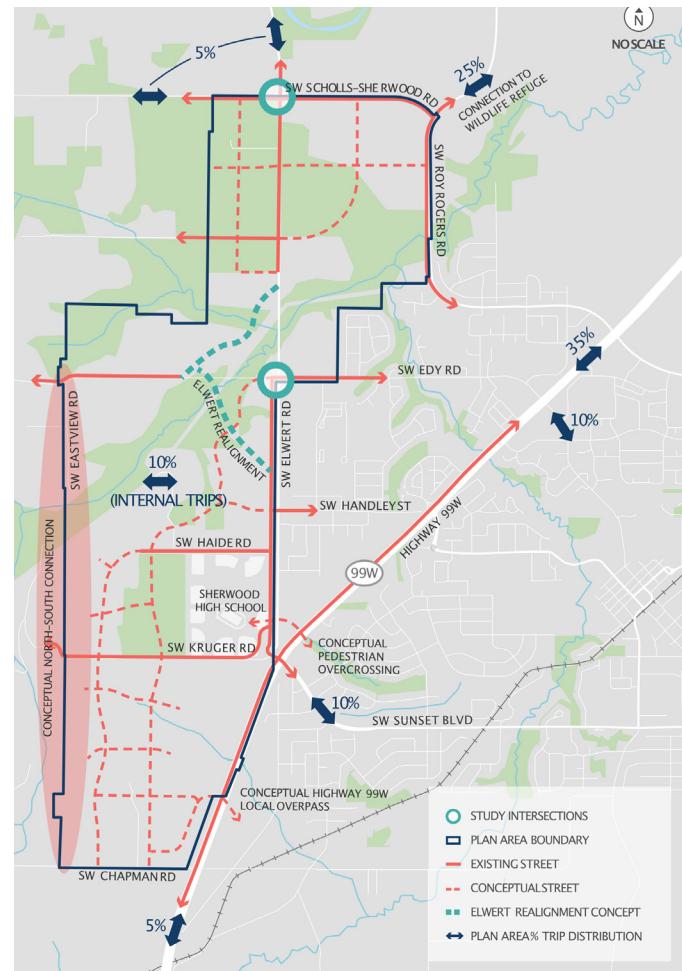
The development and brokerage participants also provided feedback on necessary conditions for development to occur in Sherwood West, including needed utilities and funding. These elements are discussed in more detail under Implementation (Section VII).

Traffic Analysis

A traffic analysis evaluated the potential transportation impacts of the three land use alternatives and examined potential transportation network upgrades for the Concept Plan area. Below is a summary of the findings and recommendations. See Appendix L for the full Traffic Impact Analysis memo.

Findings

- **Total Trips** – All three land use alternatives have a comparable number of total proposed housing units, total jobs, and total vehicle trips. Overall estimated vehicle trips are also similar to the number estimated by Washington County as part of the Urban Reserve Transportation Study (URTS) for this area.
- **Travel Patterns** – Variations in land use and layout in the three alternatives would be expected to have a minimal impact on overall travel patterns, based on an examination of the origin and destination of trips.



LAND USE ALTERNATIVES



- **Traffic Operations** – Initial findings indicate that Sherwood West growth will be served adequately with the planned street network, including planned street upgrades, as described in the Concept Plan. Further study is recommended to develop a more comprehensive list of improvements and associated cost estimates as this area is made ready for urban development.

Recommendations

- Advance the **Elwert Road re-alignment** concept with the Sherwood West Concept Plan; conduct further study to determine the best alignment and intersection configurations.
- Adopt **design themes for the Elwert Road corridor** consistent with the City's vision, as represented by the Sunset Boulevard corridor.
- **Upgrade Elwert Road** to a 3-lane cross-section with bike lanes and sidewalks as development occurs.
- Upgrade the **Elwert at Lebeau/Scholls-Sherwood intersection** to adequately support traffic growth through to the 2040 horizon year. The intersection with Elwert Road will require additional study, reconfiguration, and eventual signalization or roundabout improvement as development occurs.
- Make **multimodal safety improvements** to the Elwert-Edy intersection consistent with the Concept Plan. Other intersections should also be reviewed for possible multimodal safety upgrades as development occurs nearby, including the Elwert-Handley intersection, and the Elwert-Haide intersection.
- Upgrade **Edy Road** east of Elwert/Chicken Creek 3-lane collector with bike lanes and sidewalks, consistent with the Sherwood TSP. Keep Edy Road west of Chicken Creek as a two-lane collector road.

Preferred Alternative

The preferred alternative for the Sherwood West Concept Plan is described in the next section. The preferred land use map was developed by taking the most supported ideas from the three land use alternatives reviewed at the community open house and online survey. By comparing the districts (North, Far West, West, and Southwest) across alternatives, the best ideas from each could be incorporated into the final map. The CAC considered the community's input and provided direction as to which alternative they preferred for each district. The preferred layout of the North and Far West districts is based primarily on Alternative 1, while the West and Southwest districts are based primarily on Alternative 2. The CAC and project team also suggested modifications and refinements to the land uses in a few areas, for consistency with earlier plan concepts.



CONCEPT PLAN

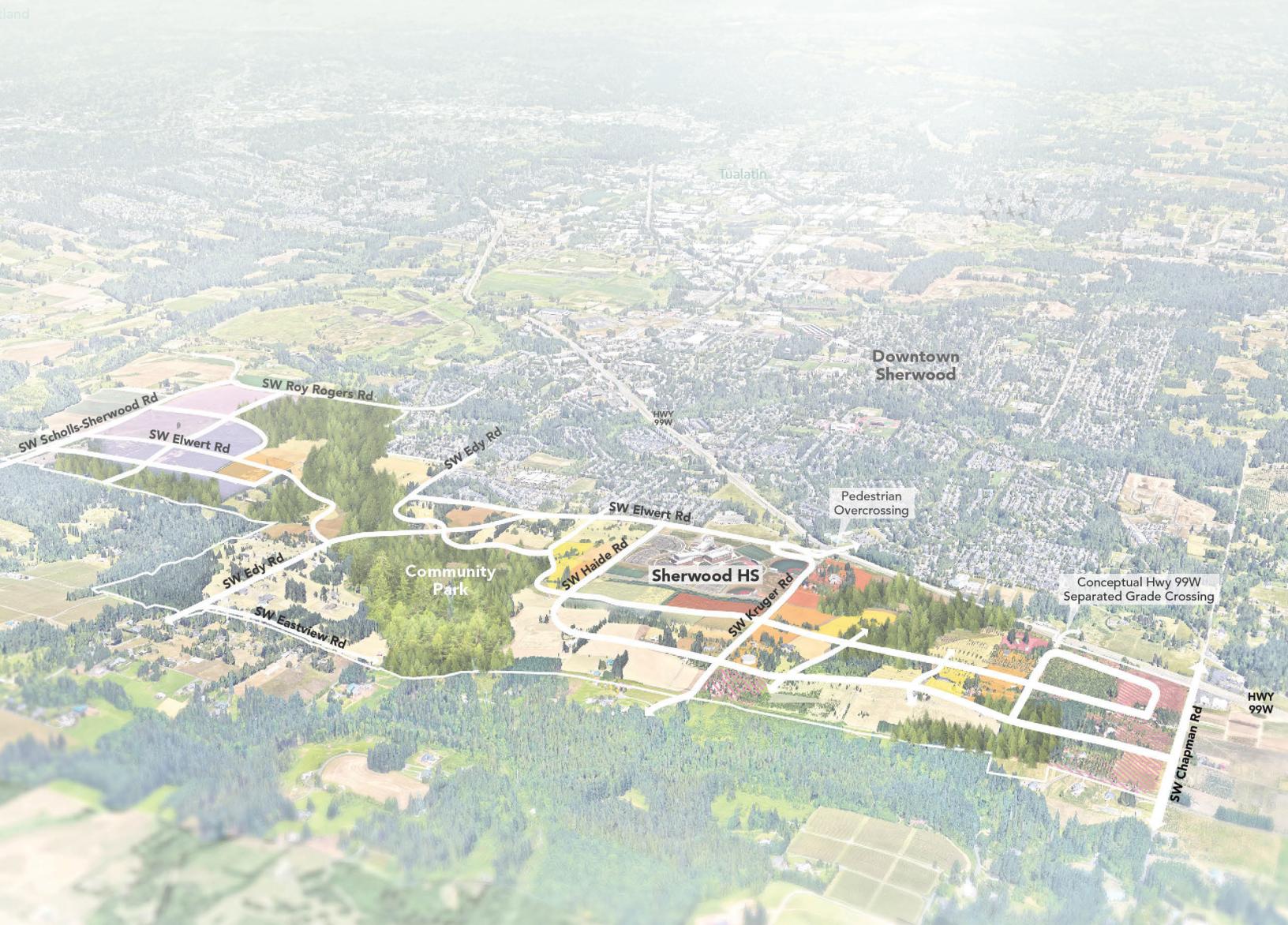
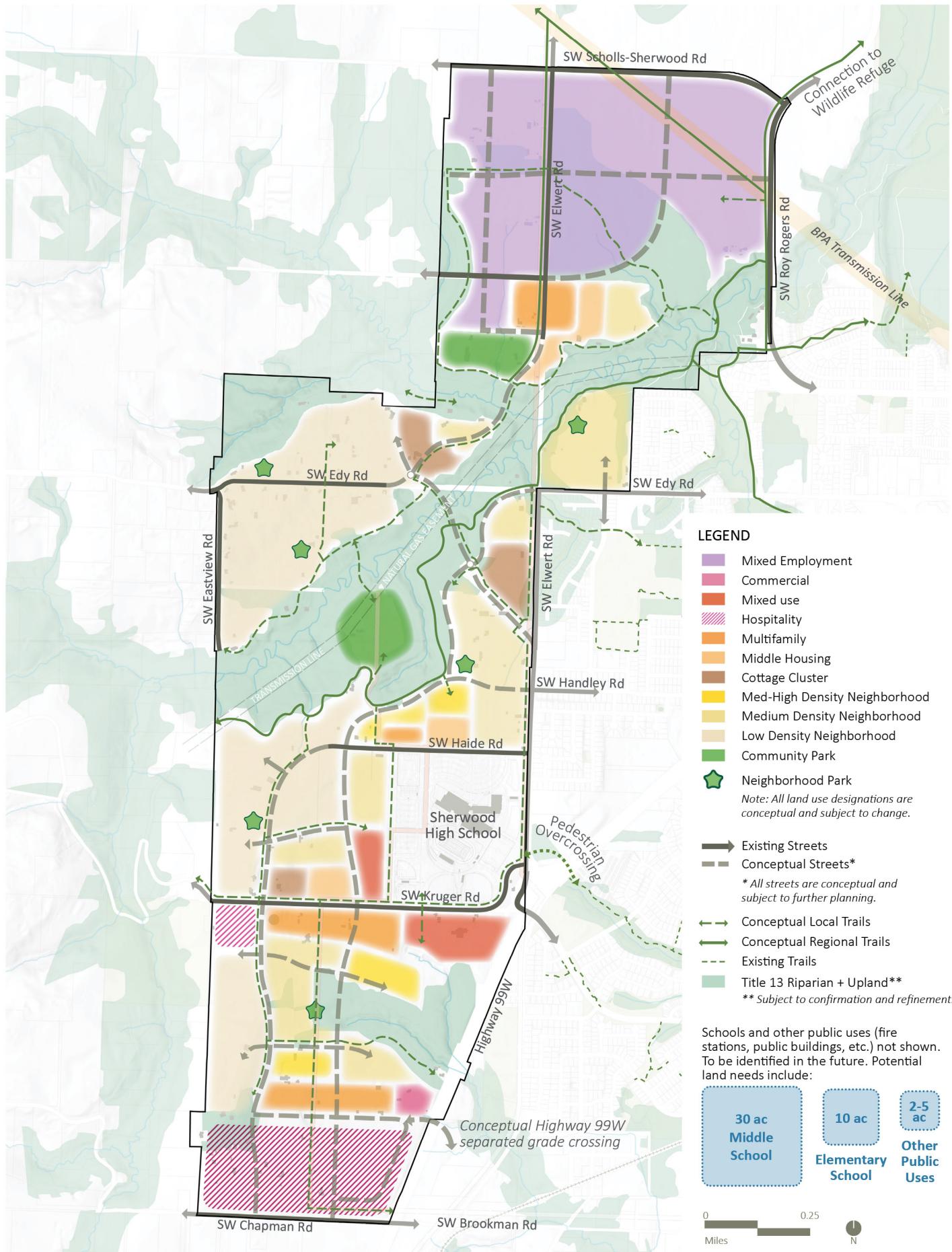


Figure 8 Composite Concept Plan Map



CONCEPT PLAN



Overview

The map in Figure 8 illustrates the recommended land uses, street network, parks, and trails for the Sherwood West area. The map shows how all these components come together to form complete and connected neighborhoods in Sherwood West. The accompanying descriptions related to land use, transportation, green space, and utilities further explain how these elements are integrated into the Concept Plan.

Figure 9. North District

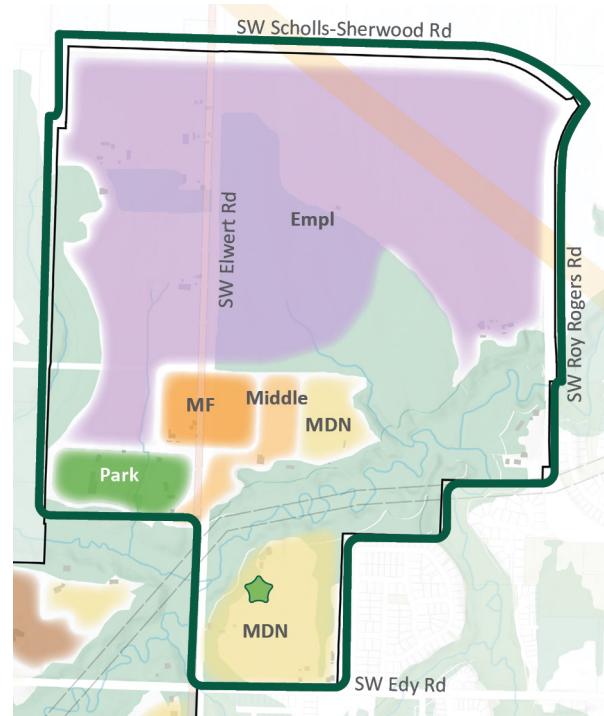
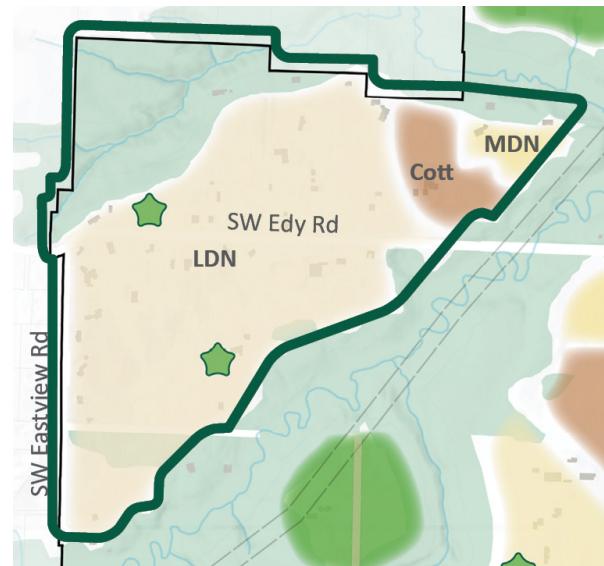


Figure 10. Far West District



Land Use Plan

Figure 13 depicts the preferred land use designations for Sherwood West, as well as key themes within each district – North, Far West, West, and Southwest. In Sherwood West, each of the four distinct subdistricts has unique qualities, shaped by the area's creeks, hills, valleys, and major roads. The land use plan for each district is described below.

North District

The North district is the employment center for Sherwood West. Located south of Scholls-Sherwood Road and north of Chicken Creek, this area features mostly flat terrain to the northeast, many large parcels, and good transportation access to SW Roy Rogers Road—all favorable qualities for Mixed Employment uses.

The plan for this area also features a mix of housing types clustered near Elwert Road, just north of Chicken Creek. A community park of roughly 13 acres (net) takes advantage of access from Elwert and adjacency to a Chicken Creek tributary.

Far West District

Located northwest of Chicken Creek with access to Sherwood via Edy Road, this area features mostly sloping terrain and has many existing parcels and rural residential homes. The plan for the Far West district includes low-density housing with a pocket of cottage cluster and medium-density residential near Edy Road and Chicken Creek.

CONCEPT PLAN



West District

Located in the middle of the planning area, directly west of Elwert Road, north of Kruger Road, and south of Chicken Creek, this area surrounds the new Sherwood High School and has relatively good access to existing infrastructure as compared to the other districts. The terrain features steeper slopes and higher elevations to the west.

The plan for the West district includes a mix of housing types west of the high school. Mixed use residential, cottage cluster, and middle housing are focused along Kruger Road. Medium-density and cottage cluster housing provide frontage along Elwert Road. The hilltop area to the west is designated for low-density residential.

A second, approximately 8-acre (net) community park is nestled into the Chicken Creek greenway. This area is relatively flat, with access to the future greenway trails, natural areas, and street access from the south.

Southwest District

The Southwest district is located west of Highway 99W, between Kruger Road and Chapman Road. The terrain features steeper slopes and higher elevations to the west, but mostly flat land along Kruger Road.

The plan focuses mixed use development at the Kruger-99W intersection, with higher-density housing along Kruger Road. The southern end of the district is focused on being the “Gateway to Wine Country.” Sherwood has an opportunity to capitalize on visitors entering or leaving wine country on Highway 99W. Uses in this area can focus on the growing wine and specialty agriculture tourism industry and provide lodging, tasting rooms, restaurants, and small retail shops. Another hospitality node is also located at the west end of Kruger Road, where the current property owner has plans for a wine-related business.

A small commercial node along Highway 99W, a variety of housing, and a low-density area on the hilltop round out the remainder of the Southwest district.

Figure 11. West District

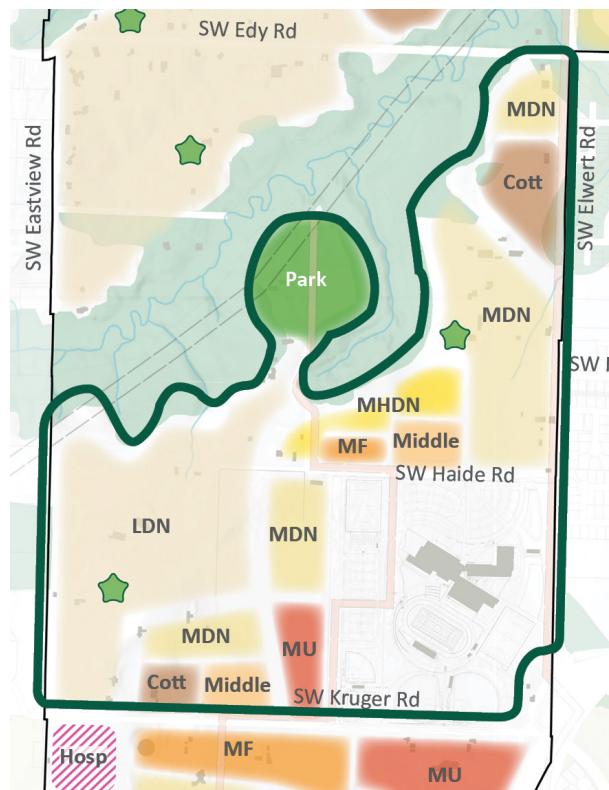
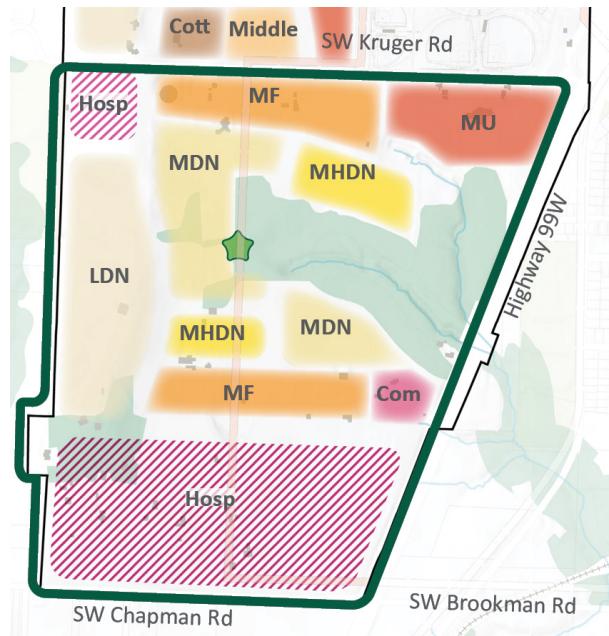
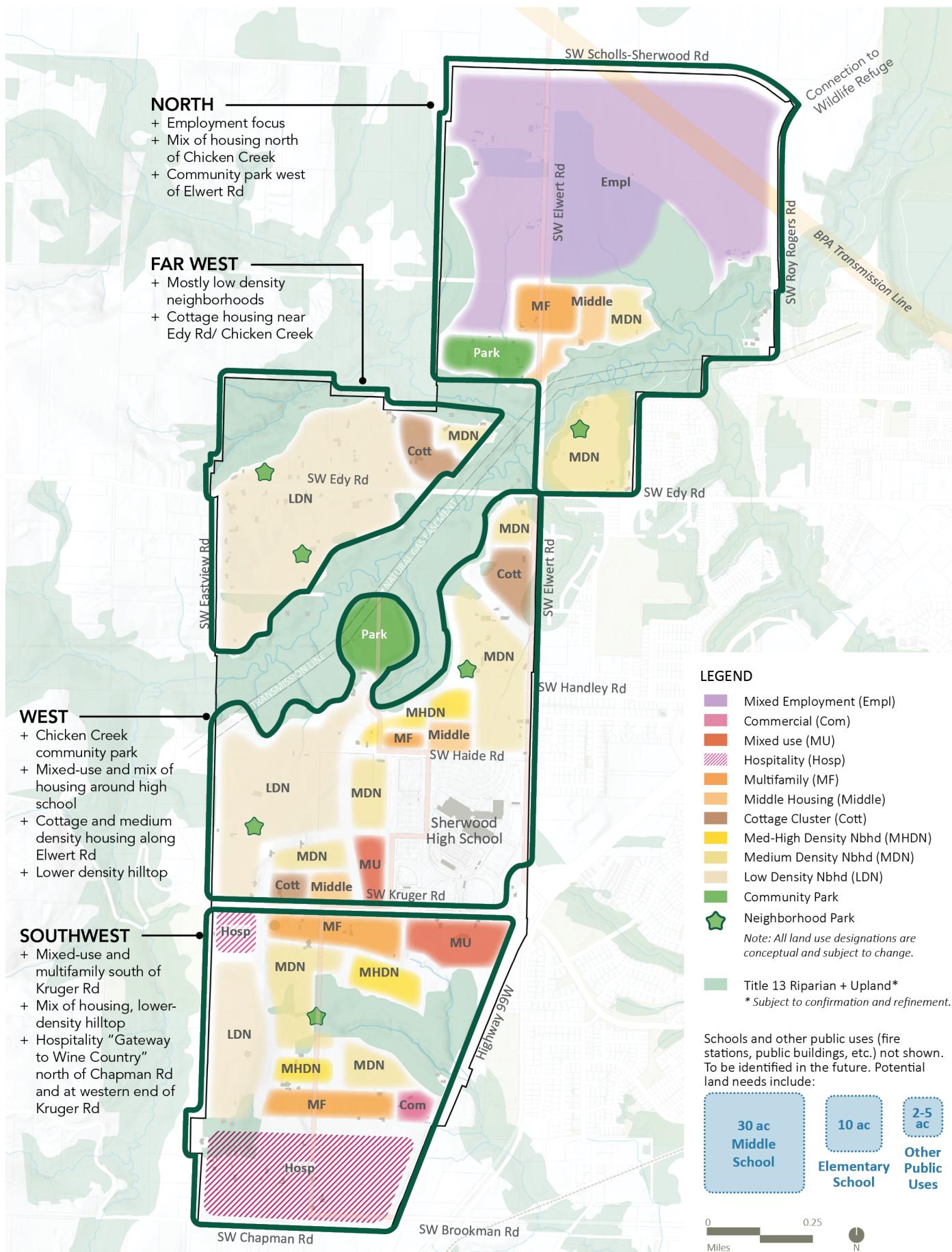


Figure 12. North District





CONCEPT PLAN



Housing

Planning for a variety of housing options that will meet the needs of a wide range of Sherwood West residents was a key objective of the concept planning process. Providing housing opportunities for first-time home buyers, seniors who may prefer to age in place or downsize their housing, and moderate-income households will require a wider range of housing types than has typically been provided in Sherwood. Examples of housing types that have designated places in Sherwood West include: single detached homes on smaller lots, cottage clusters, townhomes, duplexes, triplexes, fourplexes, garden apartments, and mid-rise apartments. These types will be in addition to the standard single detached housing that has typified Sherwood's development so far.

Residential Design Standards

Design standards will shape the look and feel of housing in Sherwood West. The City adopted new Residential Design Standards in 2021 to ensure middle housing (plexes, townhomes, etc.) and single-family housing fits into the City's desired neighborhood character. The standards focus on entry location and orientation, design of garages and off-street parking areas, window coverage, minimum landscaping required in all residential zones, and other specific design details. These new standards will apply in Sherwood West to ensure that all new housing maintains design features that are within the context, scale, and compatibility with the Sherwood community. Additional design standards could also be customized for the Sherwood West area (see Section VII. Implementation for further discussion).



Accessory Dwelling Unit (ADU)



Duplex



Townhouse



Standard Single-Family Detached



Cottage Cluster



Small Single-Family Detached



Triplex



CONCEPT PLAN

Custom Zoning

As described in Section V. Land Use Alternatives, custom land use designations were developed to plan for the middle housing types that are most favored for future development in Sherwood West: duplexes, townhomes, and cottage clusters. Sherwood West's custom designations for Cottage Cluster housing and Middle Housing would not allow single-family detached development. This will not only help ensure middle housing is built in Sherwood West, but it will also give the City more flexibility to customize the design and development standards that apply in these zones.

Housing Metrics

Based on the Land Use Map depicted in Figure 13, the total estimated amount of future housing in Sherwood West could range from roughly 3,120 units up to 5,580 units, depending on how much middle housing is developed in the Neighborhood zones (see Table 4). The low end of the range represents no middle housing being developed in the Low-Density, Medium-Density, and Medium-High Density Neighborhood zones; the high end represents 50% of these areas being developed as middle housing at maximum allowable densities.

While middle housing will be permitted in the Neighborhood zones (as required by state law), it is unknown how much will actually be developed. Currently there is still a strong market for single-family detached housing in the region. Based on current development trends and consultation with developers in the region and housing economists, a realistic estimate is that somewhere in the range of 5-10% of single-family areas will be developed with middle housing. Because of the number of variables that can impact the actual percentage built, it was important to test a range of potential outcomes. Table 4 calculates total units based on a range of middle housing scenarios in the Neighborhood zones: 0%, 10%, 20%, and 50%.

This results in an estimated overall residential density of 9.2 to 10.6 units per acre (or up to 16.4 in the less likely 50% middle housing scenario). Average density is slightly lower factoring in the 15% open space that is required by the Sherwood Community Development Code.

See Appendix M. Housing Memo for additional information about the Concept Plan's consistency with state and regional requirements for housing.

Table 4. Sherwood West Housing Estimates

	Density Range (Net)	Total Acres (Net)	% of Residential Acres	Total Housing Units (with % of Middle Housing in Neighborhood areas)			
				0% MH	10% MH	20% MH	50% MH
Multi-Family	16.8 to 24	33	10%	798	798	798	798
Middle Housing	5.5 to 11	16	5%	173	173	173	173
Cottage Cluster	12.8 to 16	23	7%	362	362	362	362
Med/High Density Nbhd	5.5 to 11	23	7%	248	279	311	406
Medium-Density Nbhd	5.6 to 8	102	30%	816	990	1,163	1,683
Low-Density Nbhd	3.5 to 5	144	42%	720	1,008	1,296	2,160
TOTAL		340	100%	3,117	3,610	4,103	5,582
<i>Total Average Density</i>				9.2	10.6	12.1	16.4
<i>Total Average Density with Open Space</i>				7.8	9.0	10.3	13.9

CONCEPT PLAN



Employment

Sherwood wants and needs more jobs. 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, help diversify and balance the City's tax base, and build a self-sustaining and vibrant local economy.

Key employment concepts for Sherwood West are described below.

Mixed Employment

Mixed Employment, which involves a mix of office, light industrial, and flex space uses within the same development or area of the city, emerged as an important theme of the Concept Plan. The economic opportunities study (Appendix G) identified mixed employment as a key economic development and job creation opportunity for Sherwood West. The land use plan locates Mixed Employment areas in the North district based on favorable characteristics for siting this type of use: large sites (at least 40-50 acres), flat topography (less than 3-5% slopes), larger ownerships, and easy access to major freight routes.

Hospitality

The proposed hospitality-focused land use designation is intended to accommodate uses such as lodging, wine tasting rooms, restaurants, and small retail shops—which typically rely on strong visibility to the public, e.g., from Highway 99W. This informed the placement of the hospitality designation at Highway 99W and Kruger Road—visible from the highway and closest to the vineyard areas to the southwest of Sherwood.

Section VII, Implementation includes potential approaches to implementing a hospitality designation, including a new base zone and an overlay zone.

Precedent Example: The Allison Inn & Spa

A luxury hotel in Oregon's wine country, The Allison Inn & Spa in Newberg, Oregon is an example of a type of destination resort that could distinguish Sherwood's own "Gateway to Wine Country."



Image Source: The Allison



CONCEPT PLAN

Employment Metrics

Table 5 presents estimated employment potential for Sherwood West, based on the Land Use Map depicted in Figure 13. Based on these estimates, the total employment potential in Sherwood West is roughly 4,500 jobs.

Table 5. Sherwood West Employment Estimates

	Total Acres (Net)	Jobs / Net Acre (est.)	Total Jobs	Percent of Jobs	% of Employment Acres
Mixed Employment	130	18	2,398	53%	49%
Commercial	7	36	237	5%	2%
Mixed Use	25	25	638	14%	9%
Hospitality	63	15	938	21%	24%
Schools	40	8	314	7%	15%
TOTAL	265		4,524	100%	100%

The jobs-per-acre estimates for each land use type are rough estimates gleaned from the Metro 2014 Urban Growth Report and from the scenario planning software Urban Footprint.

Jobs-to-Housing Ratio

Sherwood's current jobs-to-housing ratio is 0.9, meaning that for every 10 households in the city, there are 9 jobs. The potential jobs-to-housing ratio for Sherwood West is calculated by comparing the total housing and employment estimates (see Table 6). The estimated ratio ranges from 0.8 to 1.5, depending on how much additional housing results from middle housing being built in the Neighborhood zones. A reasonable "most likely" scenario is 1.3 jobs for each unit of housing.

Table 6. Sherwood West Jobs-to-Housing Ratio

	Middle Housing Scenario		
	0% MH	10% MH	50% MH
Total housing units	3,117	3,610	5,582
Total jobs	4,524	4,524	4,524
Jobs-Housing Ratio	1.5	1.3	0.8

According to 2019 Census data, approximately 92% of local Sherwood residents work outside of the community. This suggests that some residents are seeking employment outside Sherwood because the jobs available within the city do not match their needs. Adding more employment land in Sherwood West is intended to help balance the jobs-housing ratio in the city, help balance the types of jobs in the community, and allow more residents to live and work in Sherwood.

CONCEPT PLAN



Community Services

Schools

Given the opportunities for new households, as Sherwood West is built out there will be demand for additional school facilities. While potential locations for school sites were part of the discussion, the CAC recommended that specific school locations not be included in the updated Concept Plan. As conveyed by the School District representative, schools will be built in later development phases, and the District does not typically reserve land many years in advance of development.



The Land Use Map (Figure 13) indicates the general land need for an elementary school and middle school and these school acreages also are factored into the housing and employment metrics in Table 4 and Table 5. Locating schools in Sherwood West will require trade-offs with less land available for other uses—this should be a consideration for future school siting. Pursuant to the City's development code, schools are a Conditional Use within residential-zoned areas. School placement could also factor into infrastructure phasing and future transportation planning.

Other Services

Sherwood West will need other community services and facilities in addition to schools. Existing services may need to expand, such as those provided by the City of Sherwood, Tualatin Valley Fire & Rescue, and Portland General Electric (PGE). PGE anticipates that a new substation in Sherwood West will be needed north of Edy Road to serve this area. Other facilities that may need to improve and expand to serve growing community needs include the Sherwood Library and the Field House. The Land Use Map (Figure 13) indicates the general estimated land need for future civic uses (roughly 2-5 acres). The City of Sherwood will continue working with local service providers to ensure community services are being met through planned and orderly development.

CONCEPT PLAN



Transportation Plan

Streets

As the City of Sherwood grows, a well-designed and connected network of streets, paths, and trails in Sherwood West should focus on safety, knitting the existing and new growth together, creating livable and walkable neighborhoods, and mitigating impacts of regional through-traffic.

Figure 14 shows a conceptual framework of livable and connected streets for Sherwood West. Locations and alignments of proposed new streets (dashed gray lines) are conceptual and approximate. Additional local streets will be built between the framework streets, depending on land uses.

Key features of the streets framework include:

- North of Chicken Creek, the street framework is designed to serve Mixed Employment land uses. There are continuous parallel routes to SW Elwert Road so that local trips can move freely and turning movements Elwert are minimized.
- The Elwert-Edy Road intersection is realigned as described below (and in the Preliminary Concept Plan).
- A neighborhood street connects from SW Handley to SW Haide and south to SW Chapman Road. This street connects multiple neighborhoods and the central and southern employment areas.
- A north-south hilltop route provides additional north-south access and a second continuous north-south route for emergency access and other services.

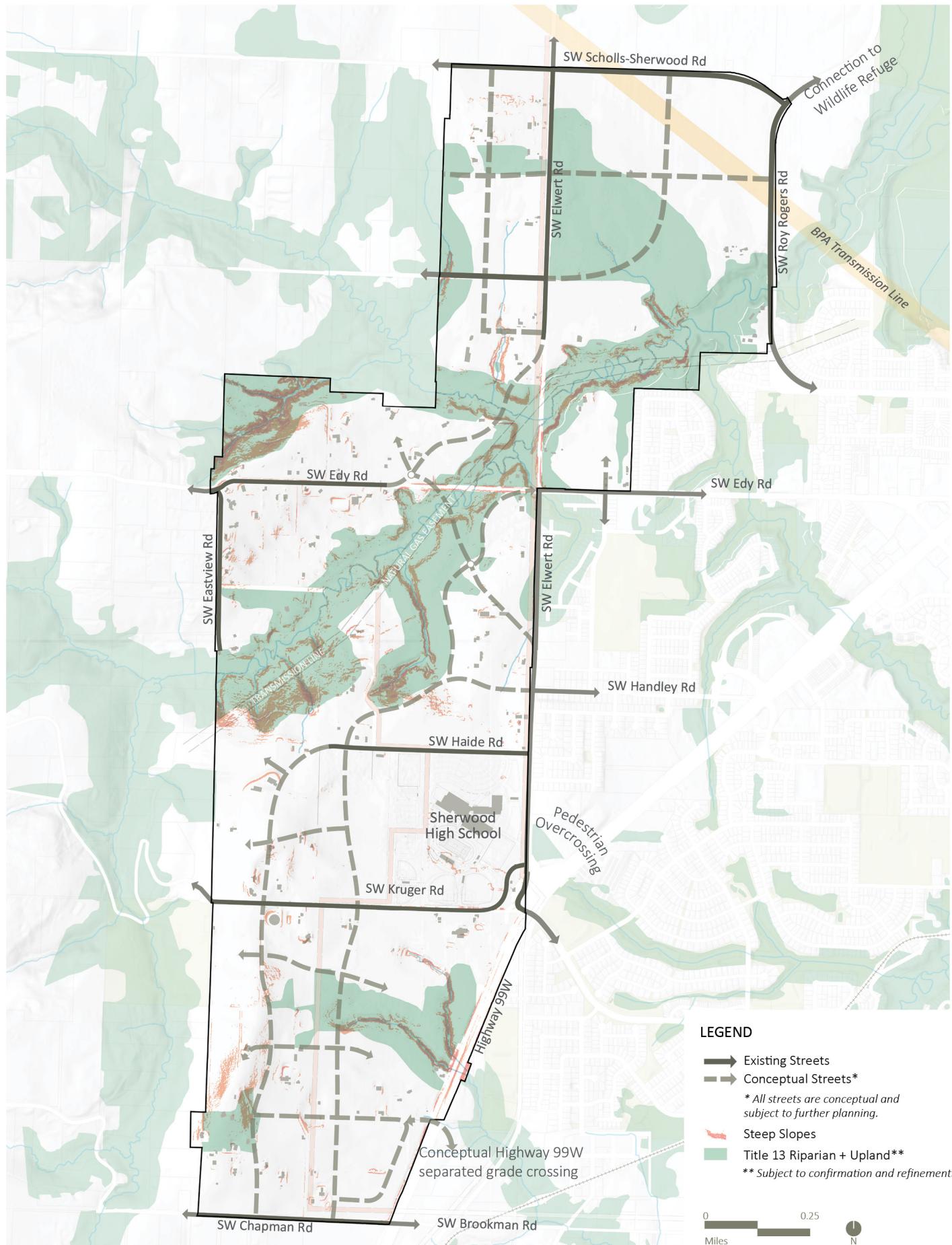
Transportation Principles for Sherwood West:

- Design for safety
- Integrate with existing Sherwood
- Connect all areas of Sherwood West
- Streets are places for people of all ages and abilities
- Provide for all modes of travel



SW Sunset Blvd

Figure 14. Conceptual Street Framework for Sherwood West



CONCEPT PLAN



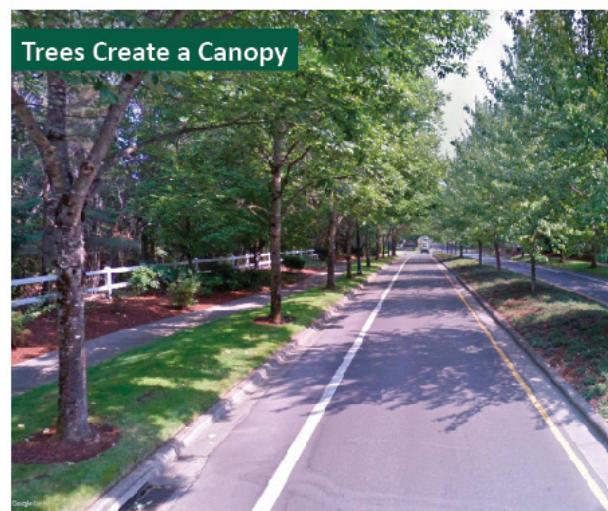
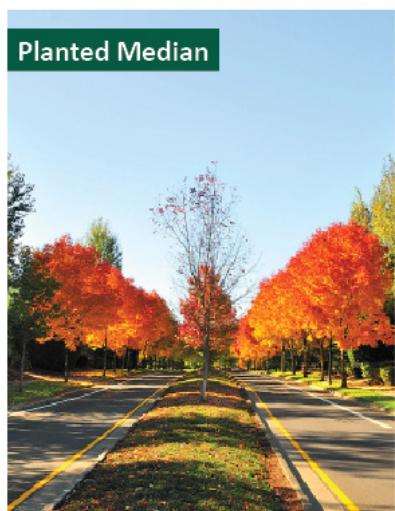
Elwert Road

Design Concept

SW Elwert Road is a key north-south arterial street, and an important opportunity for providing access and defining urban design in Sherwood West. Design concepts for the roadway are aimed at making Elwert a livable and positive addition to the growth of Sherwood West and the adjacent neighborhoods on its east side. The concept is to create a safe, connected, and attractive boulevard with buffered sidewalks, safe crossings, bike lanes, a planted median with canopy trees, and path connections to key sites and destinations.

Design Ideas: Learning from SW Sunset Boulevard

Elwert Road connects to SW Sunset Boulevard at its southern end. The City can incorporate ideas from Sunset Boulevard into the design of Elwert Road. Desired roadway elements exemplified by Sunset Boulevard are illustrated at right.



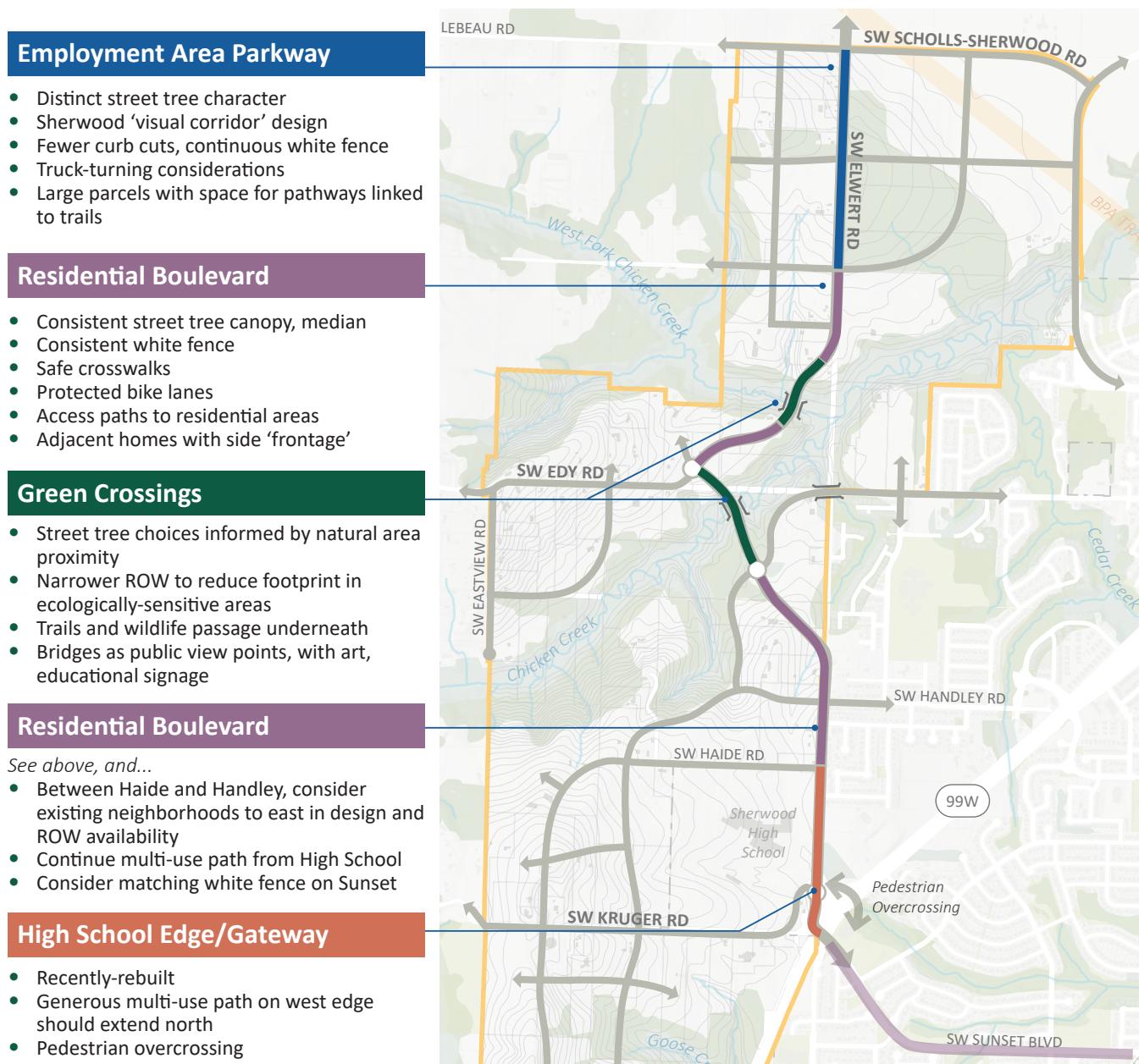
CONCEPT PLAN



Design Ideas: A Distinctive, Context-Sensitive Elwert Road

The design of Elwert Road should respond to the varied landscape and land use contexts along its length. Ideas for potential design strategies are specific to the identified land uses along the roadway. Elwert is currently a County roadway and future design details will require further study and collaboration with Washington County.

Figure 15. Contextual Design Concepts for Elwert Road



CONCEPT PLAN



Potential Elwert Realignment

The Concept Plan Re-Look project examined two options for the intersection of SW Elwert Road and SW Edy Road, which are described in detail in the Preliminary Concept Plan. In either case, Elwert Road will need to be upgraded to current standards when development occurs in Sherwood West.

Realignment (Figure 16)

This option would realign Elwert and Edy Roads and add two new intersections on either side of Chicken Creek. As described in the Preliminary Concept Plan, this option has several advantages:

- Crosses two Chicken Creek tributary streams at the narrowest points, thereby reducing or eliminate wetland mitigation issues.
- Eliminates the excessive fills within the Elwert-Edy intersection and follows the existing terrain.
- Likely discourages freight traffic usage of the road and enhances safety by reducing speeds while still allowing significant local residential and commuter traffic flow.
- Allows the existing Elwert-Edy alignments and intersection to remain in use until construction of the realigned roadway is nearly complete.

This option would require construction of structural bridging and acquisition of right-of-way to accommodate the realignment of SW Elwert Road.

Existing Alignment (Figure 17)

This option retains the current location of the Edy-Elwert intersection, which would require correcting the intersection's vertical alignment to meet safety standards. This means raising the road elevation approximately 10-20 feet to flatten the rolling topography for safer stopping sight distances at intersections. In contrast to the realignment approach, this option has a few disadvantages:

Figure 16. Realignment Option

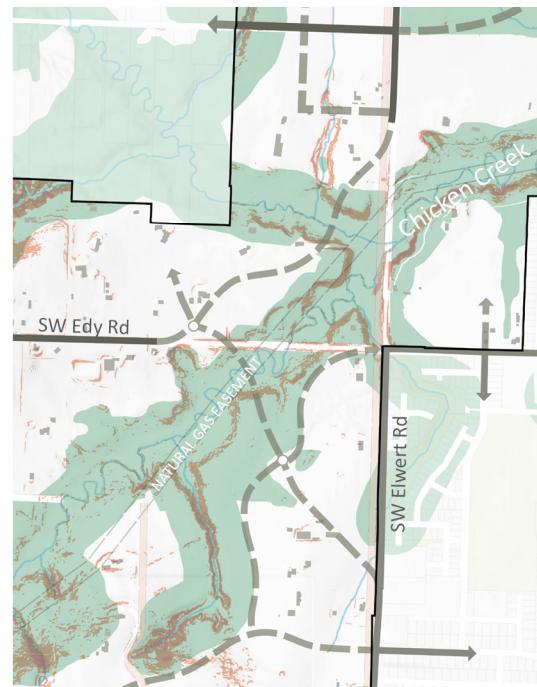
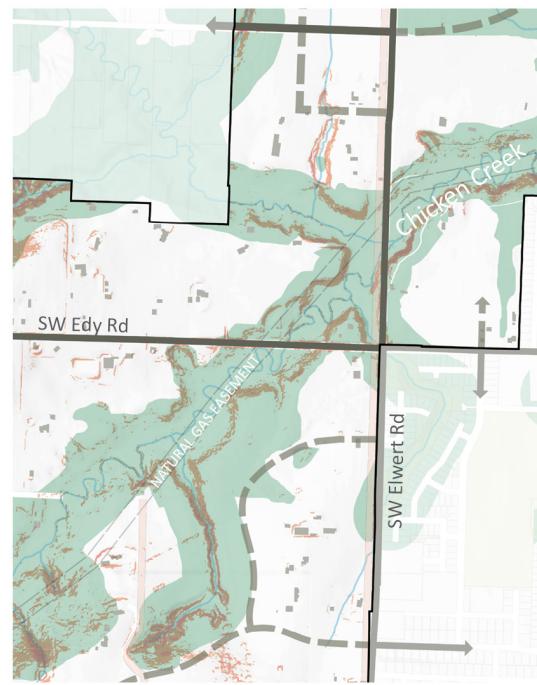


Figure 17. Existing Alignment Option



CONCEPT PLAN



- By raising the road along this length, there would be impacts to the existing right-of-way and adjacent wetlands due to the need for additional fill.
- An estimated 20 to 40 feet of additional right-of-way would be required to account for fill slope.
- The additional environmental impacts would require extensive wetlands mitigation.
- Local and commuter traffic would be heavily impacted during construction.

Because of these reasons, the CAC and project team recommend the realignment approach. However, further analysis, including more in-depth environmental, engineering, and cost analysis, will be necessary before the decision about Elwert Road's alignment is finalized.

Transportation Improvements Under Study

Pedestrian Overcrossing

A new Highway 99W pedestrian overcrossing is planned in the vicinity of Sherwood High School and is currently being designed (as of spring 2023). The new overcrossing will address the major barrier that the highway presents for pedestrians today. It would also help connect the high school, the YMCA, and the greater Sherwood West area with existing trails and destinations on the east side of the highway. The preferred alignment for the overcrossing is illustrated in Figure 18.

Figure 18. Pedestrian Overcrossing Alignment





CONCEPT PLAN

Connection to Brookman Area

The City of Sherwood has been studying several alternatives for improving connectivity between the Brookman Area and Sherwood West. Sherwood City Council recently endorsed the alternative that would locate a new grade-separated crossing of Highway 99W to the north of SW Chapman Road (see Figure 19). The crossing would serve local access (no interchanges from Highway 99W), and would connect to Old Highway 99W to the east and to the western side of Sherwood West via new local streets.

The connectivity alternative also includes intersection improvements (signal or roundabout) at the intersection of SW Brookman Road/ SW Chapman Road and Highway 99W, which would provide access to and from the highway.



Figure 19. OR 99W/Brookman-Chapman Alternative 2

Other Transportation Concepts for Future Study

The existing transportation system in Sherwood West is limited to very few routes, is characterized by rural road conditions, and has almost no pedestrian and bicycle facilities. A key challenge to future development in the area is the current reliance on Oregon Highway 99W and SW Elwert Road for north-south travel, particularly for through-trips that do not have an origin or destination in Sherwood. Highway 99W is designed for this traffic; however, SW Elwert Road is not. Elwert's future improvements should support Sherwood West as a livable, walkable part of Sherwood, not only as a conduit for through traffic.

The transportation network for Sherwood West will serve local travel, provide excellent walking and biking routes, and minimize trips through Sherwood's neighborhoods. Toward this end, the strategies in the Concept Plan are to:

- Plan and develop a well-connected street network that connects existing and new neighborhoods;
- Plan and develop a robust, safe and inviting pedestrian and bike network – for all users;
- Implement the Chicken Creek Greenway with a regional trail that connects Sherwood West to the existing city and the Tualatin National Wildlife Refuge;

CONCEPT PLAN

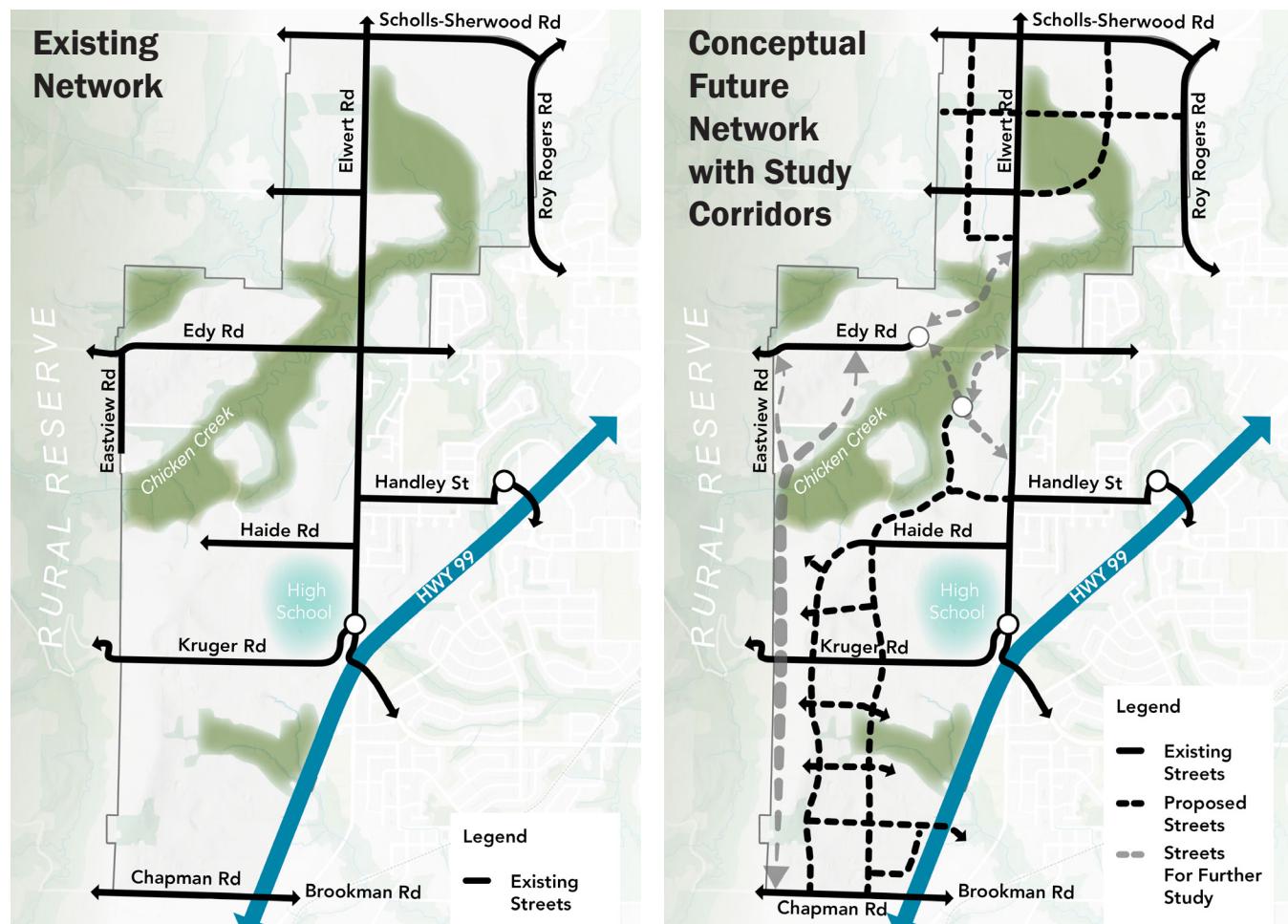


- Implement the Elwert Road Design Concept described and illustrated above, using Sunset Boulevard as inspiration;
- Build the Brookman separated-grade crossing;
- Build the Highway 99W pedestrian overpass; and
- Provide additional north-south connectivity that directs traffic away from neighborhoods rather than through them.

Streets For Further Study (North-South Connector & Elwert Realignment)

Figure 20 shows a conceptual street framework for further study. The diagram shows additional north-south connectivity and the realignment of Elwert Road. The core idea of the north-south connectivity concept is to connect SW Chapman Road to the north end of Sherwood West, enhancing regional connectivity and providing an option away from neighborhoods. The route is conceptual and its specific alignment has not been identified. The City is aware of the challenges – topographic, environmental, conflicts with existing development – but seeks to continue to study this long range transportation corridor. The Elwert realignment concept is discussed on page 53.

Figure 20. Conceptual Diagrams – Streets for Further Study



CONCEPT PLAN



Active Transportation and Trails

Trails, cycling routes, transit, “micromobility,” and other ways of getting around without a car will be designed into Sherwood West. It is expected that active transportation options will connect between local parks, green spaces, schools, neighborhoods, and employment areas to encourage walking, rolling, and biking. This Concept Plan provides an opportunity to pre-plan key connections between new growth in Sherwood West and existing areas of Sherwood. There is also an opportunity through plan implementation to ensure future transit can be as successful as possible.



Sherwood West’s streets will be an important part of providing active transportation options, along with off-street trails and the location of parks, schools, and community gathering spaces.

Trail Network

The maps in Figure 22 and Figure 24 illustrate a conceptual trail network for Sherwood West, ranging from larger regional trails to smaller community trails. Future trails in the Sherwood West area will prioritize connections to existing and planned trail networks.

Chicken Creek will also form a key component of the future trail network. See the Green Space Network section, below, for a discussion of Chicken Creek Greenway concepts.

Safe Routes to School

The Concept Plan illustrates the potential for a bicycle and pedestrian network that is safe, connected, and serves all ages and abilities. Key elements include:

- Chicken Creek Regional Trail;
- Local trails serving every neighborhood and providing continuous routes throughout Sherwood West (north to south and east to west);
- Key connections to Sherwood at SW Edy Road, SW Chapman Road, and SW Elwert Road / SW Sunset Boulevard, with associated pedestrian and bicycle improvements;
- A pedestrian overcrossing of Highway 99W connecting to Sherwood High School; and
- Potential safe routes to Ridges Elementary School at SW Handley, SW Copper Terrace and via trail connections from SW Elwert and SW Edy.



CONCEPT PLAN



Future Transit, Micromobility, and the “First and Last Mile”

The Sherwood West lies directly adjacent to TriMet’s current service boundary but TriMet does not currently provide transit service to the area. The closest bus stops are about a mile away in Old Town, which is served by lines 93 and 94. The Concept Plan helps Sherwood West to be “transit-ready” by planning land uses, key streets, and trails to accommodate and support future transit service. The diagram at right shows potential future transit routes in orange as conceptually noted in the TSP.

In addition, the inclusion of “micromobility” services, like bike-sharing and scooters, can help people to get around more easily without a car. Micromobility stations could be included at schools, employment and commercial areas, and near existing transit stops. Access to micromobility services can help people access transit and make the “first and last mile” of a trip and provides options for getting to and from school, work, and leisure activities.

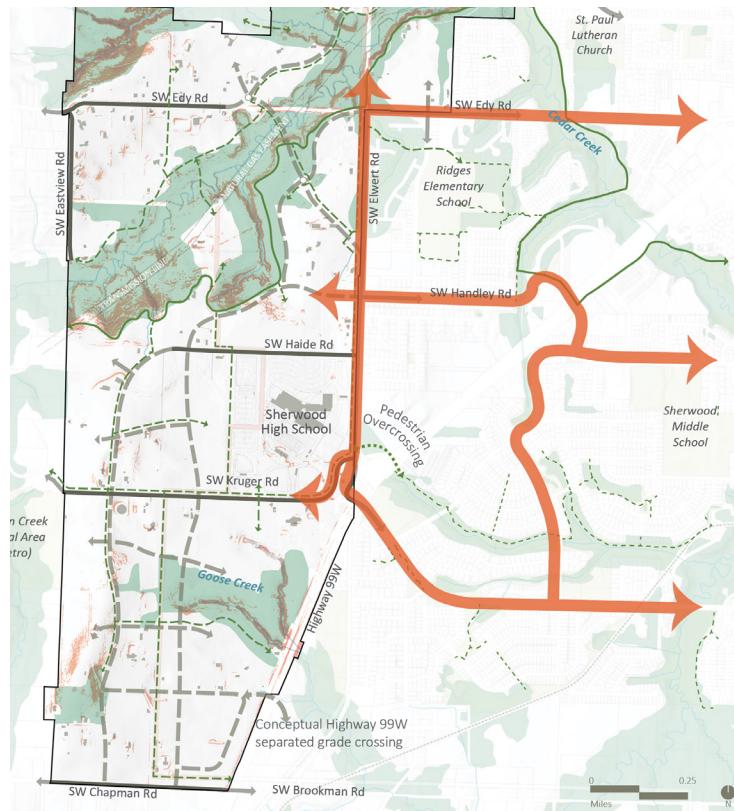
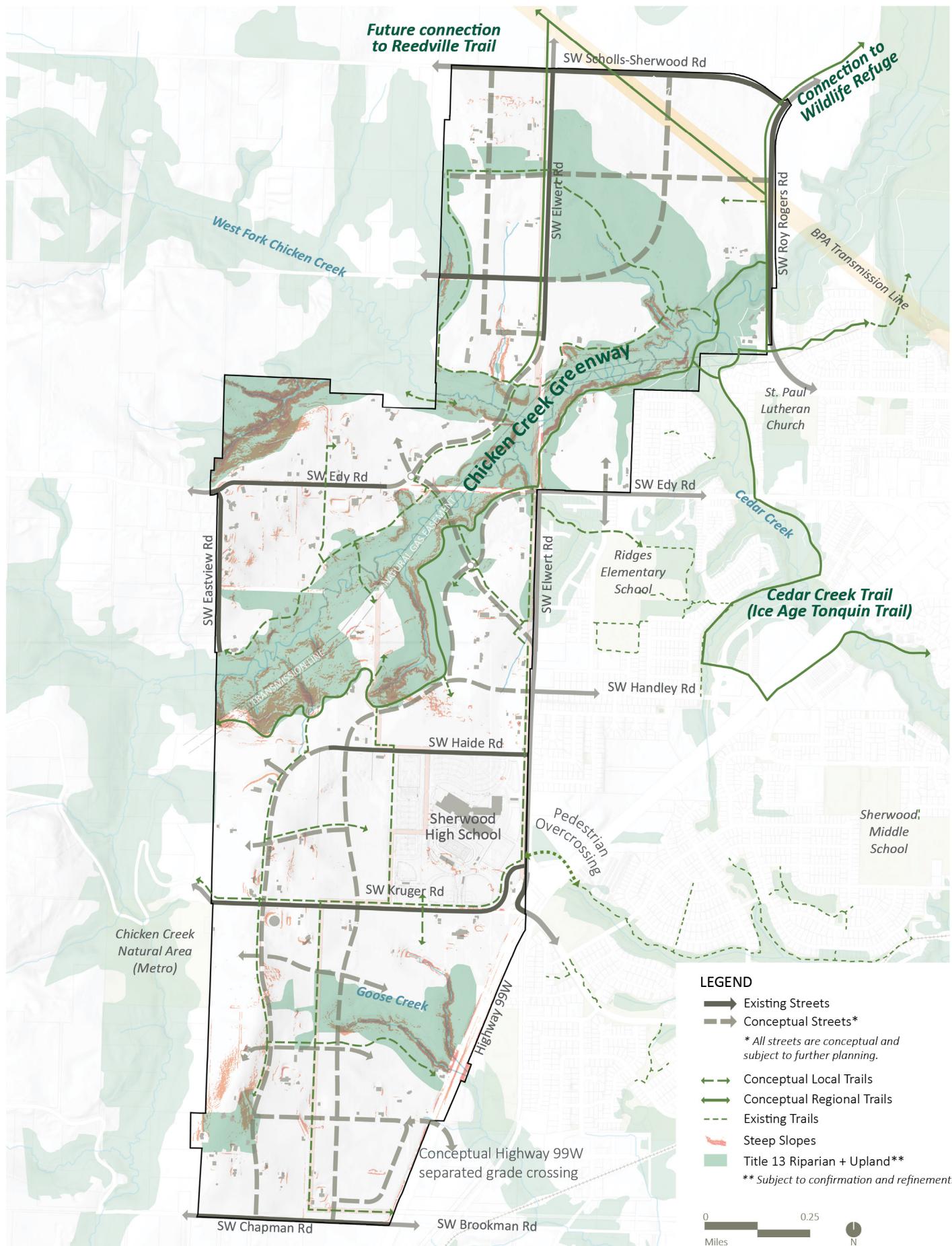


Figure 21. Potential Future Transit Routes Connecting to Old Town (Source: Sherwood TSP)





CONCEPT PLAN



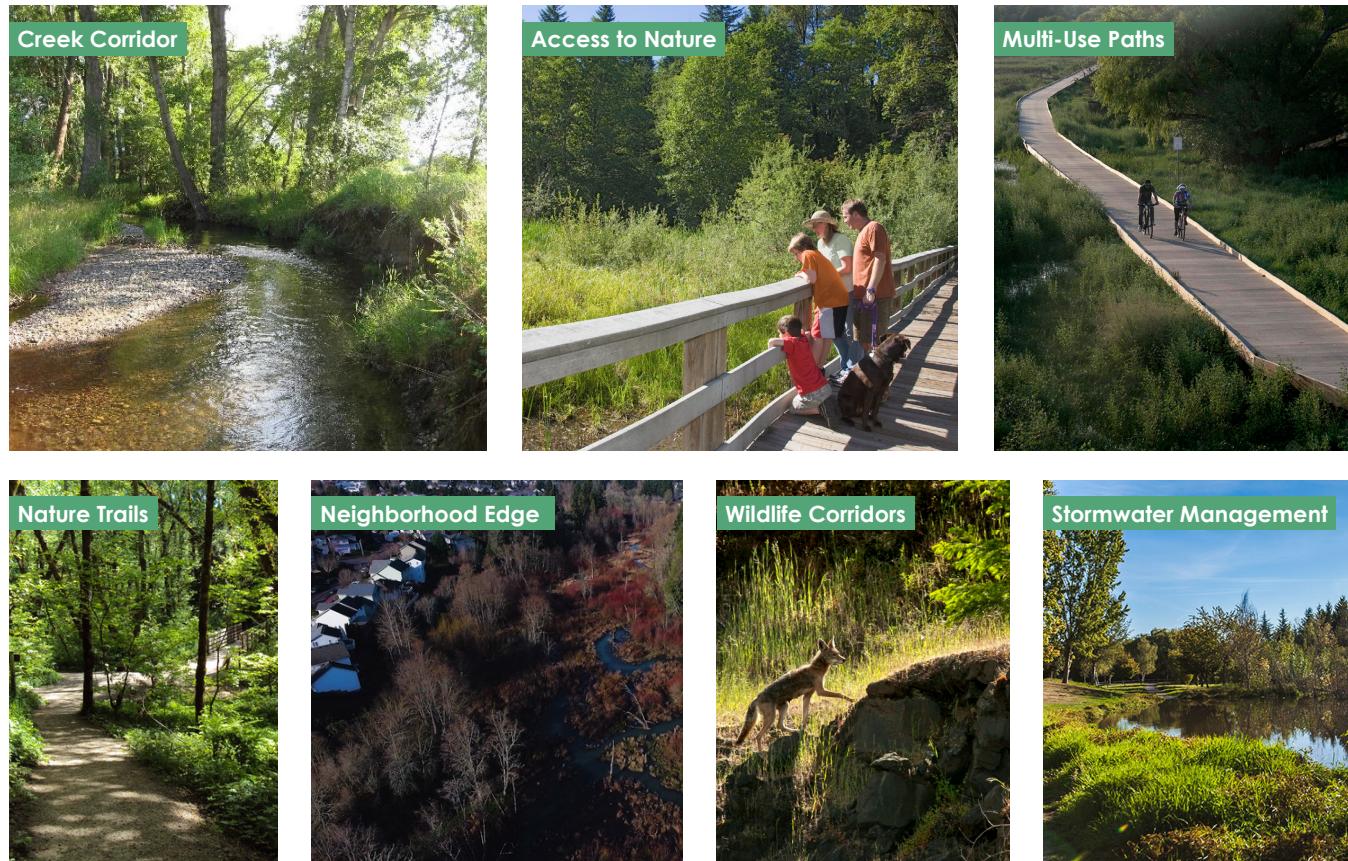
Green Space Network

A vital component of Sherwood's livability is its access to nature and open spaces. Sherwood's landscape is defined by the creek corridors that flow through the city and drain to the Tualatin River at the Tualatin River National Wildlife Refuge. Parks and open space illustrated in the Concept Plan take advantage of the natural landscape in Sherwood West to enhance access to nature and outdoor recreation. Sherwood West's green space network includes creek corridors and their habitat areas; trails and greenways; tree and tree canopy, as protected by Sherwood's code; stormwater facilities; and neighborhood parks, community parks, and school fields.

Chicken Creek Greenway

Chicken Creek forms a natural greenway through the area, flowing southwest to northeast and eventually draining into the Tualatin River. It is fed by several other waterways: Cedar Creek, Goose Creek, and West Fork Chicken Creek. The future Chicken Creek Greenway preserves and enhances these natural corridors by providing wildlife crossings, incorporating stormwater management practices, and providing access to nature through a network of connected walking trails. As conceptualized, the Chicken Creek Greenway will incorporate the creek corridor as well as the surrounding riparian and upland habitat areas (as shown in Figure 23).

Figure 23. Elements of a Greenway



CONCEPT PLAN



Neighborhood and Community Parks

The map in Figure 24 identifies potential locations for future neighborhood and community parks. These spaces will ultimately be integrated into Sherwood West's overall trail and open space network.

Community Parks. Consistent with the Sherwood Parks and Recreation Master Plan, the Concept Plan locates two community parks with a minimum of 10 acres in Sherwood West. Specific future locations for community parks will depend on site suitability (e.g., topography, size, street access), phasing of development, and property acquisition opportunities.



Neighborhood and Pocket Parks. The Concept Plan also identifies conceptual locations for smaller neighborhood parks. While the City may identify preferred locations and acquire land for neighborhood parks, typically greater than 1.5 acres, often these areas can be dedicated as a part of land development. In addition, pocket parks, typically smaller than 1.5 acres and maintained by Homeowner Associations, will be required as part of usable open space through the land development process.

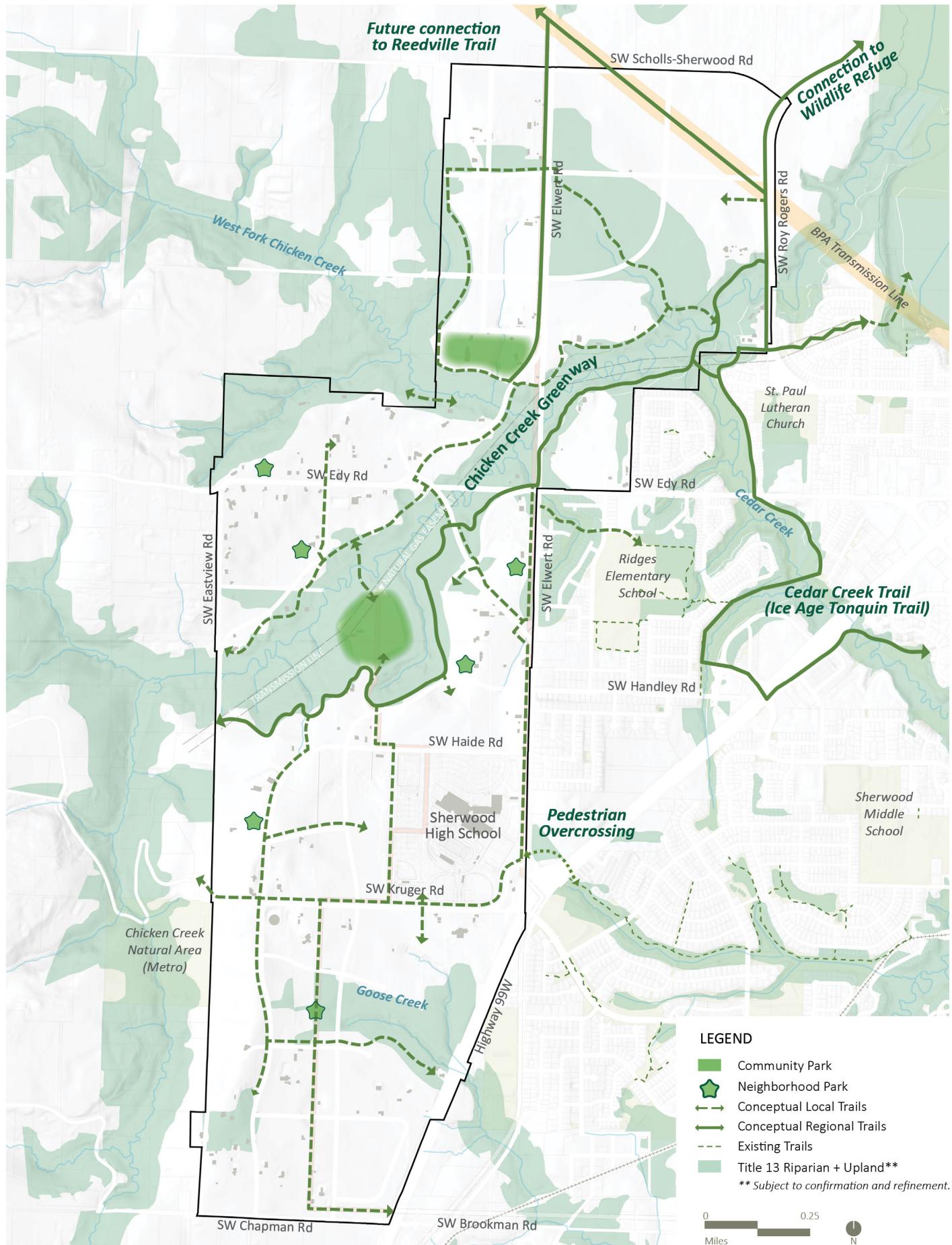
Natural Resources

Natural resource areas in Sherwood West will be preserved and integrated into the open space network. The Chicken Creek Greenway section, above, describes how creek corridors will form an essential component of the trail network and access to nature. In addition, regulations at the regional, state, and federal level require protection of wetlands, habitat areas, and other natural resources as part of future development.

Once Sherwood West is brought into the UGB, the next steps for riparian and other habitat areas subject to Metro Title 13 and Statewide Planning Goal 5 will be to analyze specific resources; make determinations about their significance; conduct an Economic, Social, Environmental and Energy Consequences (ESEE) analysis; and adopt plans for resource protection through the Sherwood Comprehensive Plan and Development Code. The Concept Plan maps show mapped Title 13 habitat areas; however, the extent of protected resources could change based on future analysis and planning.



Figure 24. Sherwood West Trails and Open Space Network



CONCEPT PLAN



Utilities

In addition to transportation infrastructure, future development in Sherwood West will require provision of water, sanitary sewer, and stormwater utilities. This section briefly summarizes future planning, phasing, and future extension of utilities. Additional detail is provided in Appendix M, Infrastructure Costs, Planning, and Phasing Memo) and Appendix N, Preliminary Infrastructure Funding Strategy.

Water

Existing water facilities in or near Sherwood West include a water reservoir, a supply line, and distribution lines. The Kruger Reservoir, which serves a portion of existing Sherwood, is located in Sherwood West, south of SW Kruger Road and approximately one-half mile west of Highway 99W. There is also an existing water main in SW Elwert Road between SW Kruger Road and SW Handley Street, and in the vicinity of Derby Terrace. This water main could be extended to serve Sherwood West development.

Phasing: Development in Sherwood West's West and Southwest districts can be served with water infrastructure in the near future. Water infrastructure will need to be extended east to west to serve the hillsides. The Far West district can be served after water infrastructure improvements, such as an additional pump station, are constructed. The North district will need further study and significant water infrastructure improvements to be served. The Preliminary Infrastructure Funding Strategy (Appendix N) includes cost estimates for extending infrastructure to the North district; water and transportation projects have the highest projected costs for this district.



Sewer

Existing sanitary sewer facilities adjacent to or near Sherwood West are limited. To serve the area with sanitary sewer, a new pump station in the West district and a new sewer trunk line extension to the Sherwood High School from the Brookman Area are needed.

Pump station

A sewer mainline was constructed in Copper Terrace as part of the Ridges Elementary School development. This mainline runs up Edy Road, down Copper Terrace, and ends at the north end of the school perimeter. To use this line, a new pump station is needed from the south to the crest of Handley Street. The line would need to cross private property or run to and down Edy Road to connect in. This

CONCEPT PLAN



line could serve the West, Far West and a portion of the North districts. An additional pump station and sanitary sewer planning are needed for the North district.

Trunk line extension

The Brookman sanitary trunk line extension will gravity flow across Highway 99W at the future Brookman Road intersection to a future gravity system that will serve a portion of the West and Southwest districts. The Brookman sanitary trunk line project ties into the existing Sherwood Trunk that runs north. A current CWS project is extending and constructing the Brookman trunk line to the boundary of the Brookman Addition and then north of Highway 99W to serve the new Sherwood High School. The extension project is anticipated to be completed in 2025.

Phasing: The West and Southwest districts in Sherwood West can be served with sanitary sewer infrastructure in the short term. Sanitary sewer infrastructure would need to be extended into the hillside area of the West, Southwest, and Far West districts as those areas develop. The North district needs further study on how to best serve the area and if any significant infrastructure is necessary to serve sanitary sewers in this area.

Storm

Largely undeveloped today, Sherwood West has no existing stormwater infrastructure. As development occurs in the future, stormwater would likely be discharged onto the floodplain of the adjacent creeks and tributaries. All planned stormwater facilities must meet the requirements of Clean Water Services Design and Construction Standards for conveyance, water quality treatment, and water quantity treatment. Handling Sherwood West's future needs through regional stormwater facilities within Sherwood West is the City's preferred approach.

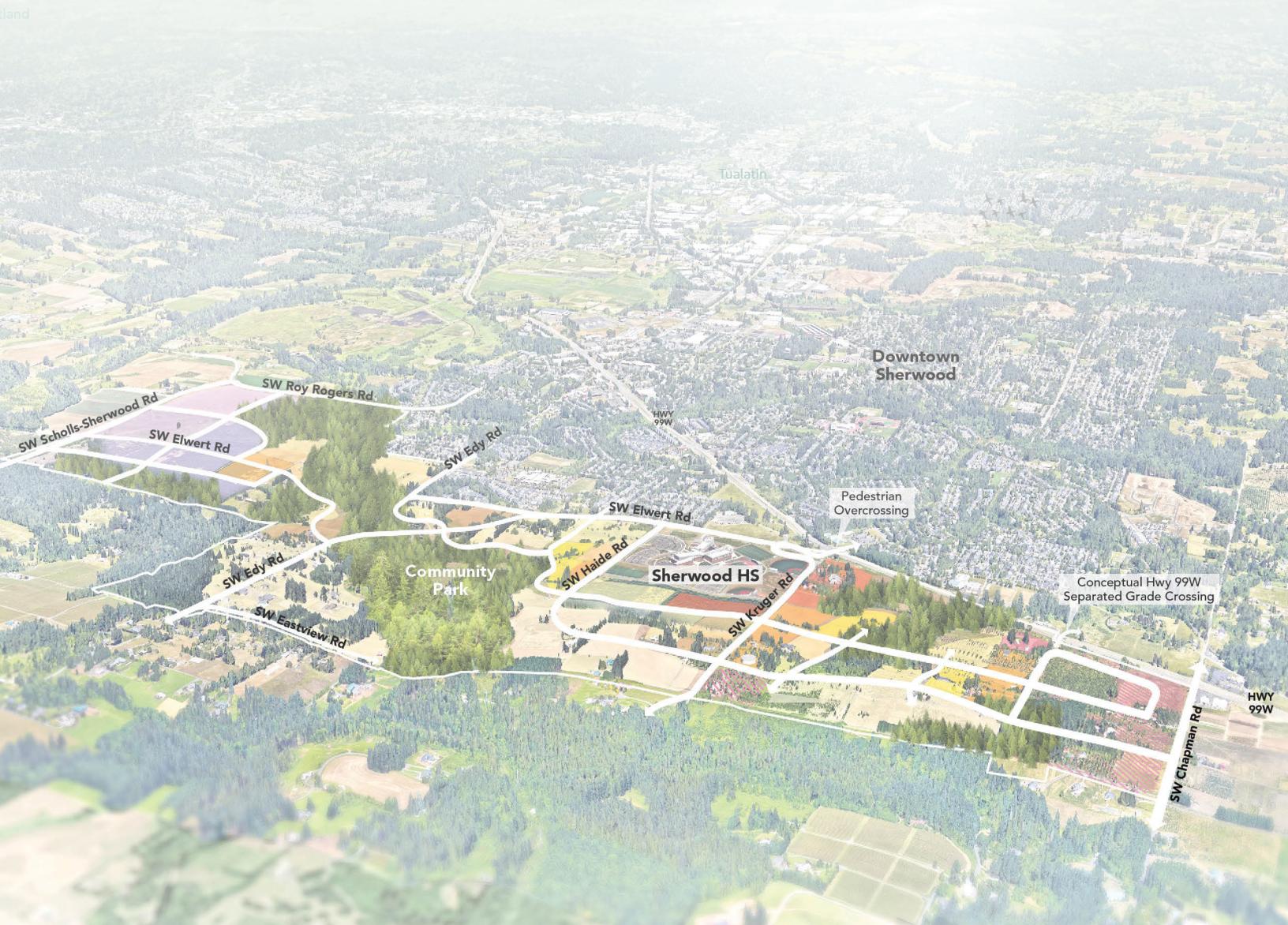
Sherwood West also offers new opportunities to utilize low impact development approaches (LIDAs) such as rain gardens, vegetated swales, porous pavement, and other forms of green infrastructure. These types of facilities can provide visual amenities and habitat benefits in addition to managing stormwater and should be integrated into new transportation facilities, parks, and private development.

Phasing: All areas within Sherwood West can handle stormwater with required infrastructure improvements as development occurs.





IMPLEMENTATION



IMPLEMENTATION



Once accepted by the Sherwood City Council, this Concept Plan will serve as a resource for future discussion about expanding the UGB and more detailed planning for growth and development in Sherwood West. The following strategies and considerations are suggested to implement the concepts laid out in this plan.

UGB Expansion Request

City Council will decide whether to make a UGB expansion request in the next review cycle, and Metro will decide whether Sherwood West is an appropriate area for expansion. With local acceptance of the Sherwood West Concept Plan, the City will have the ability to request a UGB expansion to include all or part of Sherwood West in 2024. The Metro Council must review and report on the regional 20-year land supply UGB every six years and, if necessary, adjust the UGB to meet land needs for that 20-year period. Metro's next review of the land supply will occur in 2024.

Possible timing for these decisions is included in the “Future Development Timeline” in Appendix A and the phasing strategy in Appendix O.

Infrastructure Funding Strategy

The City of Sherwood places a high priority on well-planned, efficient infrastructure to serve community goals. The Sherwood West Concept Plan’s Preliminary Infrastructure Funding Strategy (Appendix N) is consistent with City priorities and implements Project Goal #6, which states “(g)rowth and development are well-planned and implementation of the area is pragmatic.”

The Preliminary Infrastructure Funding Strategy includes a high-level estimate of infrastructure costs, revenues, and potential tools for funding future development in Sherwood West. The strategy addresses water, sanitary sewer, storm water, transportation, and parks.

Key findings of the preliminary infrastructure funding strategy analysis include:

- Envisioned development includes employment uses in the North district and a mix of housing and employment uses along Highway 99W in the West and Southwest districts.
- Several infrastructure projects are catalytic to making development possible in these areas. For the North, West, and Southwest districts, transportation projects are projected as the highest-cost, including the improvement of Elwert Road, Scholls-Sherwood Road in the North, and a new 2-lane collector in the West and Southwest districts. Additional catalytic projects include extending water and storm improvements along Elwert Road in the North and expanding water service in the West and Southwest districts.
- Preliminary analysis shows a revenue shortfall for water and storm and surplus for transportation, sewer, and parks when regional connection charge revenues to Clean Water Services and the Washington County Transportation Development Tax are included. *NOTE: Cost and revenue estimates for this analysis are rough estimates and will be refined in subsequent planning phases.*

IMPLEMENTATION



- Of all the potential funding strategies, a supplemental system development charge (SDC) would be easiest to implement to cover funding gaps, though the City should also aggressively seek outside funding from regional, state and federal programs to reduce the overall cost.
- Next steps involve continued refinement of projects and costs and financial modeling and discussions with developers on a potential supplemental fee.

Future Zoning And Regulations

Future Comprehensive Planning

The Sherwood West Concept Plan establishes the overall vision, goals, and framework plans for land use, transportation, parks, natural resources, and utility infrastructure. If Sherwood West is added to the UGB, the next phase is a more detailed comprehensive planning process. Outcomes of that process will include:

- New or revised Comprehensive Plan policies that address issues in Sherwood West (if needed)
- Property-specific Comprehensive Plan and zone map designations (these could be existing Plan designations or new designations tailored to Sherwood West)
- Development Code regulations
- Specific locations for major road connections and updates to the Transportation System Plan
- Detailed infrastructure plans
- Natural resource protection (see below)
- Other implementation strategies needed to set the stage for annexation and development

The comprehensive planning and zoning process is another opportunity for the City to reach out to affected property owners and the larger community to refine plans for Sherwood West. Robust community engagement will be an important component of developing detailed plans and regulations.

Natural Resource Protection

The Concept Plan identifies locations of Metro Title 13 / Statewide Goal 5 resources within Sherwood West. However, additional analysis and planning will be necessary to determine the level of significance of these resources and the extent to which they must be protected. As part of the future comprehensive planning process, the City will further analyze specific resources, make significance determinations; conduct an Economic, Social, Environmental and Energy Consequences (ESEE) analysis; and adopt plans for resource protection through updates to the Comprehensive Plan and Development Code.

IMPLEMENTATION



Future Development Code Regulations

Objectives

The regulatory implementation for the Sherwood West Concept Plan should:

- Implement the Sherwood West vision and goals.
- Create a system that can implement the vision over time, with incremental development. Because Sherwood West is highly parcelized, development is likely to happen incrementally, rather than large areas being developed all at once.
- Design a zoning structure that will ideally work in the short- and long-term. Development in Sherwood West is expected to occur over several decades; therefore, regulations should be flexible and adaptable to changing conditions.
- Adopt new base zones only if there is a compelling reason to do so. A simple approach to zoning that limits the amount of “new code” is easier for City staff and applicants to work with, which can lead to better outcomes.
- Craft the fewest number of rules to get the job done while meeting the City’s expectations for quality development.
- Adopt and implement annexation code for the orderly and efficient transition of land uses from rural to urban.

Custom Residential Zoning

While the objective is to minimize new zoning and related requirements, the land use plan for Sherwood West recommends two residential designations that would be implemented through new, custom zones:

- **Cottage Cluster** – This zone would allow only cottage clusters, which are groupings of relatively small homes clustered around a shared courtyard or open space. Their smaller footprints and shared amenities make them an appealing alternative to typical single detached dwellings.
- **Middle Housing** – This zone would allow duplexes, townhomes (attached housing on individual lots), and cottage clusters. These are the middle housing types that have been most favored by the CAC and Sherwood community and would provide different housing choices—including options for more affordable homeownership, as compared to single detached dwellings.

This strategy is recommended to help ensure that community-supported middle housing types are built in Sherwood West and to give the City flexibility to customize the design and development standards that apply in these zones.

In developing these zones, the City should evaluate how its current zones and recently-adopted Residential Design Standards are working as demonstrated by recent development. If different approaches to development and design would be beneficial in Sherwood West, those should be considered for the Cottage Cluster and Middle Housing zones. Care should be taken to ensure future regulations are not overly restrictive and discourage this type of development, especially given the limited housing types that will be permitted.

IMPLEMENTATION



Hospitality Zoning

Specific approaches for implementing a Hospitality Zone, unique to Sherwood West, will need to be developed as part of the comprehensive planning/zoning process. To successfully capitalize on this area's ability to be the "Gateway to Wine Country," additional economic study and outreach to developers is recommended to assess the feasibility of this concept and options for implementation.

Potential approaches to accommodate hotels/motels, restaurants, wineries, destination tourism, and similar uses:

- New Hospitality base zone – Establish a new zone that would allow only those uses that are desired in this area.
- Overlay zone – Apply standard base zones, with an overlay zone that implements the City's hospitality objectives. The underlying zoning could be commercial zones that already allow lodging and restaurants, such as the City's Retail Commercial (RC) or General Commercial (GC) zones, and/or could include employment or residential zones. The overlay zone could either restrict uses or add additional allowed uses, depending on what is allowed in the underlying zone(s).
- Incentive zoning – Offer development incentives, such as increased building height or lot coverage, to desired hospitality uses.

Master Planning or "Village Planning"

Master planning is an approach used by some Metro-area jurisdictions to prepare UGB expansion areas for annexation and development. It is expected that a master plan approach, led by the City in advance of development, would have the following benefits and characteristics:

- More certainty for coordinating multiple developments into cohesive neighborhoods.
- Ability to coordinate unique elements like views, trails, specific greenspaces, public uses, street trees, and streetscape design.
- More specific land planning to help coordinate infrastructure phasing and funding.
- Required public planning process, with an associated timeline, City staff time and costs, and community participation.
- Potential challenges if some property owners are ready/favorable toward development and others are not – this should be thoroughly assessed prior to initiation.
- Reduced flexibility for developers in subsequent development review.
- Phasing – Infrastructure planning to date has identified infrastructure phasing for the Sherwood West area. Sherwood could prepare master plans in phases that follow that same general sequence of development.
- Master planning may be superseded by regulatory compliance of House Bill 2001.

IMPLEMENTATION



The “Village Planning” concept involves planning for a mix of land uses, walkable community design, and open spaces that can result in quality new development that reflects Sherwood values. Villages are assumed to be created through master planning processes that are either City led or developer led prior to annexation into the city. Precedents for village planning are Villebois Village and Frog East & South in Wilsonville.

A potential strategy for Sherwood West is to prepare master plans only for “village” portions of Sherwood West—such as the areas along SW Kruger Road and near Sherwood High School. These areas are primed for future development, offering locational and topographic features that lend themselves to a broader mix of uses and village-style development.

Note that if the City pursues a master planning approach, it should work with the Department of Land Conservation and Development (DLCD) to understand how state middle housing requirements would affect planning in Sherwood West.

Future Annexation

Annexation is the process by which land inside the UGB will be brought into Sherwood city limits. Annexation may be initiated by property owners and is a necessary step before development can occur.

The Sherwood Comprehensive Plan requires that annexations occur “in an orderly and coordinated manner, and services are provided to support urban growth consistent with the 2040 Vision” (Policy 3.4). Criteria include that the property is contiguous to the existing City limits or separated from it only by a public right of way and that an adequate level of urban services and infrastructure are available or can be extended in a cost effective and efficient manner to the area.

Some cities require or allow **Annexation Agreements**, which are binding contracts between the property owner and City, to ensure that a proposed annexation is in the public interest. The City of Sherwood could use a such a strategy to ensure that applicants are aware of the key elements of the Sherwood West Concept Plan and aware of what their development obligations will be regarding utilities, dedication of open space and trails, and other requirements applicable to the subject property.

Planning for Housing

In the coming years, the City of Sherwood will undertake a planning process called a Housing Production Strategy (HPS) to identify actions that the City will take to increase housing production that meets community members’ needs. An HPS is required of Oregon cities under House Bill 2003 and OAR 660-008. The law requires Sherwood and other cities to evaluate a broad range of solutions to meet local housing needs—which may include policies, programs, funding tools, incentives, partnerships, and more. The City will be required to adopt its first HPS by 2027. As part of that process, the City will consider various strategies to promote housing development in Sherwood West that provides a variety of housing choices and options and that is affordable to the full range of income levels, including low-income households.

IMPLEMENTATION



Transportation and Infrastructure

Future Alternatives/Feasibility Studies

The City will need to conduct several alternatives analyses and feasibility studies to determine the final location, alignment, and design of key transportation improvements.

- **SW Elwert Road - SW Edy Road Alignment** – The City will need to conduct more in-depth environmental, engineering, and cost analysis before the decision about Elwert Road's alignment is finalized. This should be undertaken as a separate feasibility study, which should be included in the scope of work for the comprehensive planning effort. The feasibility analysis should be robust and include coordination with Division of State Lands, an engineering feasibility analysis with a preliminary 5-10% roadway and intersection design, and a high-level cost estimate, among other analyses required for wetland and other impacts.

In addition, because SW Elwert Road is a Washington County facility, final designs and proposed cross sections must be coordinated with County staff and be appropriately sized and designed for an arterial roadway that can accommodate anticipated future local and regional travel demand, including truck traffic.

- **LeBeau Road/Elwert Road/Scholls-Sherwood Road Intersection** – The scope of work for comprehensive planning should also include analysis of the LeBeau Road/Elwert Road/Scholls-Sherwood Road intersection and needed improvements.
- **Connection to Brookman Area** – The recommendation for a separated-grade crossing of Highway 99W will require further analysis to determine what specific type of improvement is preferred and how it will be phased.
- **North-South Connectivity** – The concept of adding a route to enhance regional north-south connectivity will require future study. Additional feasibility and cost analysis will be necessary. This should be considered as a long-term strategy, rather than an essential component of early-stage transportation planning in Sherwood West.

Public Facility Plans

Transportation Plans

Updates to the Sherwood TSP and Capital Improvement Plan (CIP) will be necessary to incorporate street design standards and improvement projects for facilities within Sherwood West. A TSP update will include functional classification of roads and potentially new street cross section designs. The CIP establishes, prioritizes, and defines funding for capital projects to improve existing systems and develop new infrastructure and facilities. Ultimately, key Sherwood West transportation projects can be included and prioritized in the CIP based on the availability of funding (e.g., county, regional, state, and federal funds).

IMPLEMENTATION



Other Utilities

More detailed water, sewer, and stormwater infrastructure planning will be necessary prior to annexation and development in Sherwood West. As part of this step, the City's water and sewer master plans should be updated as needed.

Funding Tools

The Preliminary Infrastructure Funding Strategy (Appendix N) identifies potential funding approaches for catalytic infrastructure projects in the North, West, and Southwest districts. However, more detailed cost estimates, revenue projections, and infrastructure planning are needed. In subsequent phases, the City should conduct further study to evaluate and establish funding tools for Sherwood West. One promising tool to explore in the next steps is implementing a supplemental SDC. This would be managed by City staff with the support of a municipal finance consultant and would involve:

- Ongoing refinement of project engineering and costs;
- Outreach to property owners and developers to refine development projections and phasing and to negotiate the specifics of a potential fee;
- Financial modeling of a potential fee, including identification of specific projects that would be included in the fee and exploration of scenarios that might vary the fee in different parts of Sherwood West;
- Sherwood City Council and Planning Commission engagement; and
- Development of a final proposal for adoption.

Developer Recommendations

The following are recommendations for infrastructure and funding needs from local development practitioners. These points were gleaned from the developer tour and discussions conducted in fall 2022. Refer to Appendix J for the full summary of developer feedback.

Infrastructure

- Roads with utilities are critical to setting the stage for private development. Consider it backbone infrastructure that is a prerequisite to getting development underway.
- Get a wetlands inventory done soon so that potential issues are known early on.
- The high school is not yet on sewer, but when it is installed in 2025, that part of the study area will open up for development.

Implementation and Funding

- It is a challenge for developers to front load all infrastructure when they do not always get credit for it and/or they may not get reimbursed by future developers before they expire.
- Locating a public facility like city offices or a police or fire station in the study area could jumpstart development.

IMPLEMENTATION



Continued Community Engagement

The City should continue engaging with property owners and the Sherwood community about Sherwood West's future growth. This should include outreach via periodic email updates, the project website, and neighborhood outreach. Community engagement is critical to the success of Sherwood West development, especially given the voter-approved annexation laws applicable in Sherwood. The City can learn from other annexation projects to better understand when Sherwood West land may be needed to accommodate growth, what issues are important to the community, and how best to support the smooth incorporation and transition of Sherwood West.

Metro Title 11 Compliance

Title 11 of the Metro Urban Growth Management Functional Plan addresses planning for new urban areas added to the UGB. The City of Sherwood is required to have a Title 11-compliant Concept Plan for Sherwood West before it can be added to the UGB. To meet Metro requirements, the Concept Plan must "consider actions" necessary to achieve certain outcomes, including:

- A mix of land uses that will make efficient use of the public systems and facilities;
- A development pattern that supports pedestrian and bicycle travel;
- A range of housing of different types, tenure and prices addressing local and regional housing needs;
- Employment opportunities to support a healthy economy;
- Well-connected systems of streets, bikeways, parks, recreational trails and public transit;
- A well-connected system of parks, natural areas and other public open spaces;
- Protection of natural ecological systems and important natural landscape features; and
- Minimization of adverse effects on farm and forest practices and important natural landscape features on nearby rural lands

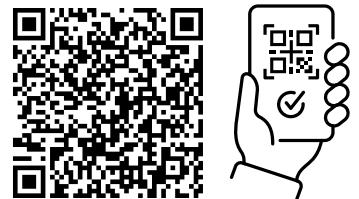
The Title 11 findings included in Appendix O describe how this Concept Plan addresses these and other Metro requirements.

Future Development Timeline

The diagram in Appendix A illustrates the potential planning and future development timeline for Sherwood West. As indicated in this diagram, development in Sherwood West is not expected to occur for at least five or six years after being brought into the UGB and full buildout is anticipated to take several decades.

APPENDIX A

Future Development Timeline

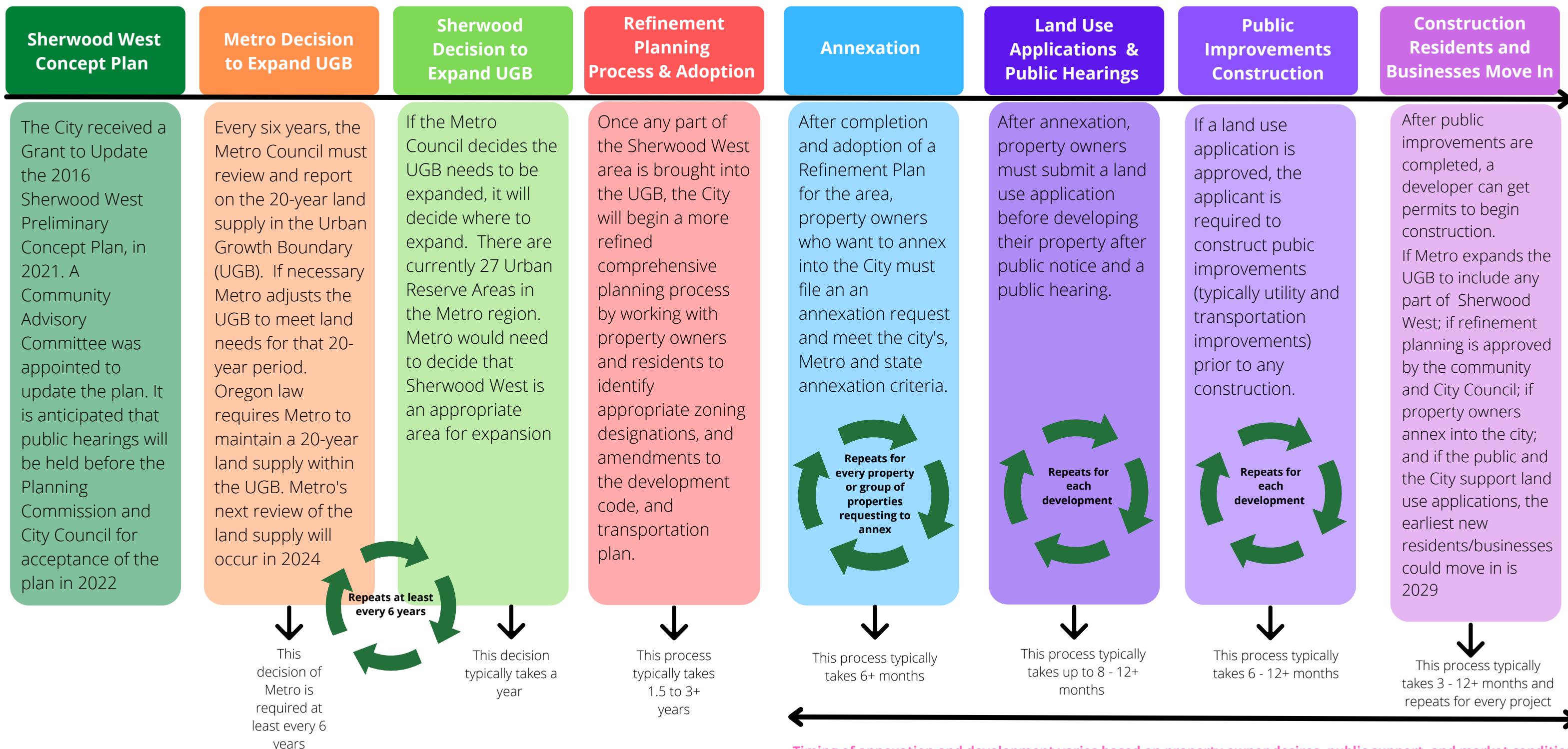


Sherwood West Concept Plan

Why are we Planning for Sherwood West?

The City of Sherwood is taking a second look at the 2016 Concept Plan for Sherwood West. The updated Concept Plan addresses many factors including state rules and opportunities for housing and employment. The updated plan supports the city's newly adopted Comprehensive Plan. Oregon Law requires a 20-year land supply for housing and employment uses within cities. Sherwood has a deficit of housing units to meet projected future growth. If Metro decides the regional Urban Growth Boundary (UGB) needs to be expanded it will need to decide where to expand. If Sherwood West, or a portion thereof, is brought into the UGB our community's concept plan for the area ensures that it will grow in a way that we all love. **For more information: www.SherwoodOregon.gov, Email: PalmerE@Sherwoodoregon.gov, Phone: 503-625-4208**

Potential Sherwood West Planning and Development Process 2022-2065



APPENDIX B

Housing Policy Implications Memo



HOUSING POLICY IMPLICATIONS

Sherwood West Preliminary Concept Plan, Comprehensive Plan Update, and Oregon House Bill 2001

TO: Community Advisory Committee
FROM: Erika Palmer, Planning Manager
CC: Angelo Planning Group
DATE: April 27, 2021

Introduction

The purpose of this memorandum is to summarize the future of housing to help inform discussions on this topic during this re-look of the Preliminary Sherwood West Concept Plan. This memorandum provides a brief overview of housing and neighborhoods described in the 2016 Sherwood West Preliminary Concept Plan, the draft housing goals and policies in the updated Comprehensive Plan, and implementation of Oregon House Bill 2001: Housing Choices (HB 2001).

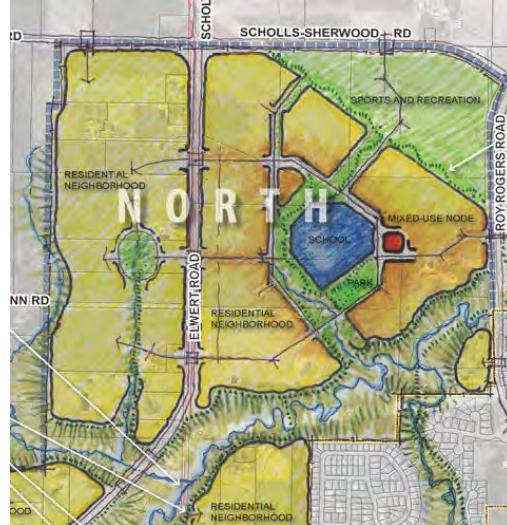
SHERWOOD WEST PRELIMINARY CONCEPT PLAN

Sherwood West is the regional Urban Reserve Area 5B, which is approximately 1,291 acres. This area, designated by Metro in coordination with its partner cities and counties, identifies land that will be considered for addition to the region's Urban Growth Boundary (UGB) for urbanization over a 50 year period. Sherwood West is the largest urban reserve area adjacent to Sherwood, and given the location of existing utilities, the area is logically the best direction for the City to consider growth in the future.

The 2016 Preliminary Sherwood West Concept Plan recognized that Sherwood has a shortage of land available for housing and the plan was envisioned to help address this need. The understanding was that if we don't add more land for new housing, people will still move here, housing prices will rise, and the community will experience more pressure for infill development at higher densities. The Preliminary Concept Plan did not speak to urban densities or the design of a particular area within Sherwood West. The Plan was intended to be a tool for residents and decision-makers to rely on as they make decisions about growth expansions, knowing that community values and needs may shift, tastes in housing may change, and densities and neighborhood form would be shaped through future refinement processes.

The Sherwood West Preliminary Concept Plan preferred alternative recognized four distinct subareas: the North District, the West District, the Far West District and the Southwest District. All four subareas were intended to provide a mix of housing.

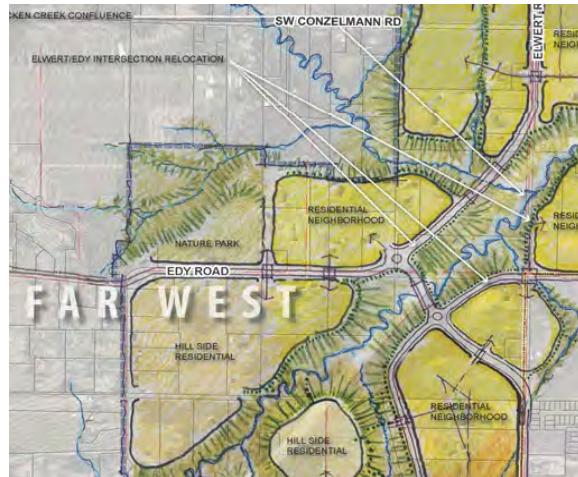
The North District is a mixed-housing neighborhood organized around a new school, neighborhood park, and mixed-use node. Residential intensities transition from center to edge of the neighborhood. Residential housing is oriented towards the collective open space. West of Elwert Road, residences are organized around a smaller neighborhood park that marks the high point of a topographic ridge.



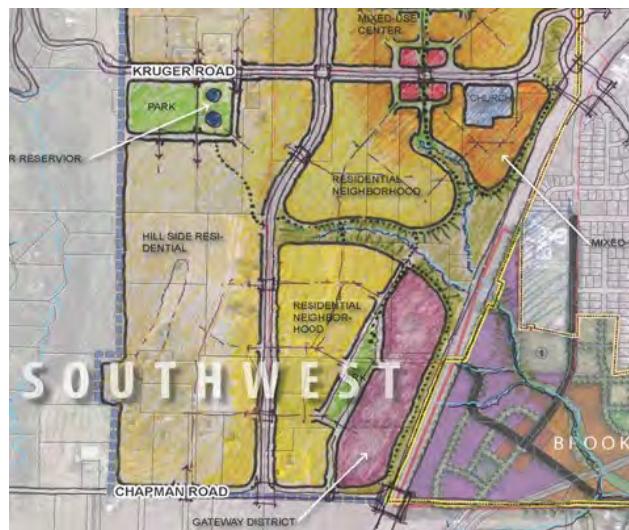
The West District is a mixed-housing district organized around a new school (Sherwood High School), neighborhood park, and mixed-use center. A new neighborhood connector street paralleling Elwert serves the neighborhood from the west side. The road follows the break in topography to create an area for residential development that is anchored by the school site. Housing intensities transition out from this mixed-use center (high to low) with hillside residential on the higher and steeper slopes.



The Far West District includes a mixed residential neighborhood, with the higher and steeper elevations envisioned to be hillside residential.



The Southwest District is a primarily residential neighborhood with varying intensities and hillside residential on the higher and steeper elevation slopes.



Land uses identified in the Sherwood West Preliminary Concept Plan are primarily residential, with varying degrees of intensity based on topography, natural features, proximity, and transition out from mixed-use centers (high to low).

Subsequent to the completion of the Preliminary Concept Plan, city staff prepared preliminary estimates of the housing capacity provided by the Plan. In 2018, staff provided a housing analysis of a proposed expansion on roughly 586 gross acres of the Sherwood West area out of the approximately 1,291 acres. The net developable acreage, after excluding roads, natural resource areas, land designated for parks

and open space, and an existing church, came to roughly 452 acres. Of the 452 developable acres, roughly 425 acres are designated Residential Neighborhood, Residential Hillside, and Residential Mixed-Use. These 452 acres should be thought of as two area types. The first type, an urban area, suitable for medium and higher density development. The second, a hillside area, which its topography makes it suitable for lower density development. It was envisioned residential intensity transitioning out from mixed-use centers (high to low) with hillside residential on the higher and steeper sloped areas. The overall assumed average residential density of the 452 acres was 8.5 dwelling units per acre. The 8.5 average residential density in the 452 developable acres would accommodate roughly 3,800 new housing units.

SHERWOOD'S COMPREHENSIVE PLAN UPDATE

The following section focuses on the City of Sherwood's 2019-2039 Housing Needs Analysis (HNA) adopted by Ordinance 2020-018 and the draft 'Housing' goals and policies developed through the city's comprehensive planning work. The goals and policies have not been adopted and may be refined during the adoption process scheduled for Spring/Summer 2021.

Sherwood Housing Needs Analysis

As part of the City's process to update its 1990 Comprehensive Plan, a Housing Needs Analysis (HNA) was conducted in March 2019. The Housing Needs Analysis provides Sherwood with a factual basis to support future planning efforts related to housing, including Concept Planning for Sherwood West, and prepares *the City* for updates and revisions to *its* Housing Comprehensive Plan policies. Understanding growth in terms of population, demographic, and development trend shifts is crucial for determining future housing needs.

How Has Sherwood's Population Changed In Recent Years?

Sherwood's population grew relatively fast in recent years from 3,000 people in 1990 to nearly 18,600 people in 2013, averaging 8% annual growth. Sherwood's fastest period of growth was during the 1990s, consistent with statewide trends. Between 2000-2013, Sherwood grew by 6,600 people, at an average rate of nearly 3.5% per year. For comparison, Washington County grew at 2.5% annually between 1990-2013 and the Portland Region grew at 1.6% per year.

Sherwood's population is aging. People aged 45 years and older were the fastest-growing age group in Sherwood between 2000 and 2010, which is consistent with state and national trends. By 2035, people 60 years and older will account for 24% of the population in Washington County (up from 18% in 2015) and 25% in the Portland Region (up from 19% in 2015). It is reasonable to assume that the share of people 60 years and older will grow relatively quickly in Sherwood as well.

Sherwood is attracting younger people and more households with children. In 2010, the median age in Sherwood was 34.3 years old, compared to Washington County's median age of 35.3 years and the State median of 38.4. Sherwood has a larger share of households with children (47% of households), compared with Washington County (33%) or the Portland Region (29%). The Millennial generation—people born roughly between 1980 to 2000—are the largest age group in Oregon and will account for the majority of household growth in Sherwood over the next 20 years.

Sherwood's population is becoming more ethnically diverse. About 6% of Sherwood's population is Latino, an increase from 4.7% in 2000. In comparison to Washington County and the Portland Region, Sherwood is less ethnically diverse. In the 2009-2013 period, 16% of Washington County residents, and 12% Portland Region residents, were Latino.

What Factors May Affect Future Growth In Sherwood?

If these trends continue they will result in changes in the types and amount of housing demanded or "needed" in Sherwood in the future.

The aging of the population is likely to result in increased demand for smaller single-family housing, multifamily housing, and housing for seniors. People over 65 years old will make a variety of housing choices, including: remaining in their homes as long as they are able, downsizing to smaller single-family homes (detached and attached) or multifamily units, or moving into group housing (such as assisted living facilities or nursing homes) as they continue to age.

The growth of younger and diversified households is likely to result in increased demand for a wider variety of affordable housing appropriate for families with children, such as small single-family housing, townhouses, duplexes, and multifamily housing. If Sherwood continues to attract young residents, then it will continue to have demand for housing for families, especially housing affordable to younger families with moderate incomes. Growth in this population will result in growth in demand for both ownership and rental opportunities, with an emphasis on housing that is comparatively affordable.

Changes in commuting patterns could affect future growth in Sherwood. Sherwood is part of a complex, interconnected regional economy. Demand for housing by workers at businesses in Sherwood may change with significant fluctuations in fuel and commuting costs, as well as substantial decreases in the capacity of highways to accommodate commuting.

Sherwood households have relatively high income, which affects the type of housing that is affordable. Income is a key determinant of housing choice. Sherwood's median household income (\$78,400) is more than 20% higher than Washington County's median household income (\$64,200). In addition, Sherwood has a smaller share of population below the federal poverty line (7.6%) than the averages of Washington County (11.4%) and the Portland Region (13.9%).

What Are The Characteristics of Sherwood's Housing Market?

The existing housing stock in Sherwood, homeownership patterns, and existing housing costs will shape changes in Sherwood's housing market in the future.

Sherwood's housing stock is predominantly single-family detached. About 75% of Sherwood's housing stock is single-family detached, 8% is single-family attached (such as townhomes), and 18% is multifamily (such as duplexes or apartments). 69% of new housing permitted in Sherwood between 2000 and 2014 was single-family detached housing.

Almost three quarters of Sherwood's residents own their homes. Homeownership rates in Sherwood are above Washington County (54%), the Portland Region (60%), and Oregon (62%) averages.

Homeownership costs increased in Sherwood, consistent with national trends. Median sales prices for homes in Sherwood increased by about 30% between 2004 and 2014, from about \$245,000 to \$316,500. The median home value in Sherwood is 3.8 times the median household income, up from 2.9 times the median household income in 2000.

Housing sales prices are higher in Sherwood than the regional averages. As of January 2015, median sales price in Sherwood was \$316,500, which is higher than the Washington County (\$281,700), the Portland MSA (\$269,900), and Oregon (\$237,300) median sales prices. Median sales prices were higher in Sherwood than in other Portland westside communities such as Tigard, Tualatin, and Beaverton, but lower than Wilsonville or West Linn.

Rental costs are higher overall in Sherwood than the regional averages, with a slightly lower-rental cost on a cost per square foot basis. The median rent in Sherwood was \$1,064, compared to Washington County's average of \$852. Average rent in the Tigard/Tualatin/Sherwood area submarket was \$1.13 per square foot in Fall 2014, lower than the regional average of \$1.22 per square foot. Between Spring 2010 and Spring 2013, average rent in Tigard/Tualatin/Sherwood area increased by 38%, consistent with the regional increase of 36%.

More than one-third of Sherwood's households are cost-burdened. Thirty-eight percent of Sherwood's households were cost-burdened (i.e., paid more than 30% of their income on rent or homeownership costs). Renters were more likely to be cost-burdened (40% of renters were cost-burdened), compared to homeowners (35% were cost-burdened) in Sherwood. These levels of cost burden are consistent with regional averages. In Washington County in the 2009-2013 period, 38% of households were cost burdened, compared to 41% in the Portland Region.

Future housing affordability will depend on the relationship between income and housing price. The key question is whether housing prices will continue to outpace income growth. Answering this question is difficult because of the complexity of the factors that affect both income growth and housing prices. However, Sherwood will need to provide the opportunity for development of a wider variety of housing, including housing affordable to low- and moderate-income households because the City is short over 500 units for people whose income range is less than \$55,520.

Sherwood's Housing Growth Forecast And Can That Growth Be Accommodated in Sherwood?

Sherwood is forecast to add 1,728 new households between 2019 and 2039. Of these, 700 new households are anticipated to be developed inside the existing city limits; and 1,029 new households will be added in areas that are currently outside city limits but inside the UGB (the Brookman area). Recently, three new subdivisions in Brookman have approved which will provide 232 new lots for development.

Sherwood's land base can accommodate most of the forecast for growth. Vacant and partially vacant land in the Sherwood Planning Area (all land within the city limits and the Brookman area) has capacity to accommodate 1,121 new dwelling units. Sherwood can accommodate about 65% of the forecast for new housing in its Planning Area.

Sherwood has a deficit of land for housing. Sherwood has a projected deficit of land for 608 dwelling units, which includes the Brookman area. The largest deficits are in Medium Density Residential-Low (154 dwelling units), Medium Density Residential-High (252 dwelling units), and High Density Residential (145 dwelling units).

To provide adequate land supply, Sherwood will need to continue to annex the Brookman area. Without the Brookman area developing, the City has a projected deficit of about 1,155 dwelling units. Sherwood will need to continue to annex the Brookman area in order to accommodate the City's forecast of residential growth.

What If Sherwood Grows Faster?

The forecast for growth in Sherwood is considerably below historical growth rates. Metro's forecast for new housing in Sherwood shows that households will grow at an average annual growth rate of 1.1% per year. In comparison, Sherwood's population grew at 3.4% per year between 2000 and 2013 and 8% per year between 1990 and 2013. If Sherwood grows faster than Metro's forecast during the 2019 to 2039 period, then Sherwood will have a larger deficit of land needed to accommodate growth.

At faster growth rates, Sherwood's land base has enough capacity for several years of growth. At growth rates between 2% to 4% of growth annually, land inside the Sherwood city limits can accommodate two to five years of growth. With capacity in the Brookman Area, Sherwood can accommodate four to ten years of growth at these growth rates.

Additional housing growth in Sherwood depends on the availability of development-ready land. The amount of growth likely to happen in Sherwood over the next few years is largely dependent on when the Brookman Area is fully annexed, when the Sherwood West area is brought into the urban growth boundary and annexed, and when urban services (such as roads, water, and sanitary sewer) are developed in each area.

What Are the Implications For Sherwood's Housing Policies?

Sherwood will need to either add additional land for residential purposes or increase the densities within the existing city limits to accommodate future growth beyond the existing city limits and Brookman area. The growth rate of Metro's forecast for household growth (1.1% average annual growth) is considerably lower than the City's historical population growth rate over the last two decades (8% average annual growth). Metro's forecast includes growth that can be generally accommodated within the Sherwood city limits and Brookman. Given the limited supply of buildable land within Sherwood, it is likely that the City's residential growth will slow until Sherwood West is made development-ready.

Sherwood has a relatively limited supply of land for moderate- and higher-density multifamily housing. The limited supply of land in these zones is a barrier to development of townhouses and multifamily housing, which are needed to meet housing demand resulting from growth of people over 65, young families, and moderate-income households.

The Housing Needs Analysis highlights questions for the update of the City's Comprehensive Plan and the Concept Planning of Sherwood West.

- Providing housing opportunities for first time home buyers and community elders (who prefer to age in place or downsize their housing) will require a wider range of housing types. Examples of these housing types include: single family homes on smaller lots, clustered housing, cottages or townhomes, duplexes, tri-plexes, four-plexes, garden apartments, or mid-rise apartments. Where should Sherwood consider providing a wider range of housing types? What types of housing should Sherwood plan for?
- Changes in demographics and income for Sherwood and residents in the Metro area will require accommodating a wider range of housing types. How many of Sherwood's needed units should the City plan to accommodate within the city limits? How much of Sherwood's needed units should be accommodated in the Brookman Area and in Sherwood West?
- What design features and greenspaces would be important to consider for new housing?
- What other design standards would be needed to keep Sherwood "Sherwood"?
- What is the appropriate mix of residential land and employment land in the City to balance the City's tax base?
- What is the mix of residential zones that reflect Sherwood's character?
- COVID-19 has changed how people live and work. What are some of the long-term impacts of the pandemic on residential housing trends and needs?
- The need to consider recent state legislation of House Bill 2001 to review and analyze density expectations assumed to result from the provision of middle housing that meets regulatory requirements.

Sherwood's Comprehensive Plan Update – Draft Housing Goals & Policies

The Comprehensive Plan is a planning document that directs all activities related to land use and the future of natural and man-made systems and services in Sherwood. The Plan helps manage expected population and employment growth through a set of goals, policies and implementation measures that align with the community's vision. City leaders use the Comprehensive Plan to coordinate public investments and make decisions about new development, existing neighborhoods, transportation, and various other topics. Given Sherwood's dramatic growth over the past 20 years, the 1990 Comprehensive Plan no longer represents the vision and values of today's residents and businesses.

The main components of the Comprehensive Plan include a vision, goals, policies, and objectives. The vision and goals describe what the community wants to be in the future. Policies and objectives are based on the vision and direct land use decisions and public investments. For example, the housing policies are the backbone that informs new development code language to achieve the community's goals and vision. The City is nearly finished with a multi-year comprehensive update to the Comprehensive Plan and the goals and policies identified below reflect the outcome from the housing block of that project. It should be noted, however that, at this time the City Council has not adopted the updated comprehensive plan goals, policies and objectives.

Adopted Vision for Attractive and Attainable Housing In Sherwood

"In 2040, Sherwood has a range of housing choices for a diversity of ages and income levels, providing community members the ability to live in Sherwood throughout all stages of life."

Draft Housing Goals

1. Provide the opportunity for a variety of housing types in locations and at price points that meet the needs of current and future residents.
2. Preserve and enhance the character of existing neighborhoods.
3. Plan new residential developments to integrate with existing Sherwood as complete neighborhoods where community members can live, learn, shop, and recreate.

Draft Housing Policies

Policy 1. Plan for a 20-year supply of suitable land for Sherwood to meet housing needs.

Objective 1.1 Identify opportunities to address land deficits shown in the Housing Needs Analysis within the existing city limits.

Objective 1.2 Accommodate future growth through annexation of areas within the Metro UGB and work with Metro to bring urban reserve areas into the Metro UGB as needed.

Objective 1.3 Ensure that the City has enough land to accommodate Sherwood's projected share of regional household growth, through regular monitoring and adjustments of available land in the Buildable Lands Inventory.

Objective 1.4 Maintain a minimum overall density of six (6) dwelling units a net acre, per the Metropolitan Housing Rule.

Policy 2. Plan for infrastructure development to support residential development.

Objective 2.1 Continue to coordinate capital improvement planning to ensure infrastructure availability on residential land and continue to pursue funding for needed infrastructure to support housing growth.

Objective 2.2 Coordinate with regional partners to develop infrastructure across the City to support housing growth across the City, ensuring availability of water and wastewater service and improving transportation access to the broader Portland Region.

Objective 2.3 Coordinate population, residential growth and infrastructure planning with the Sherwood School District to ensure that land is available for new schools as needed and that utilities can efficiently be provided to new school sites.

Policy 3. Maintain the quality of existing neighborhoods and ensure that new neighborhoods fit with Sherwood's character.

Objective 3.1 Encourage that existing neighborhoods benefit from access and connections to trails, parks, open space and neighborhood amenities as they are built in new neighborhoods.

Objective 3.2 Encourage infill residential development in areas near shopping, parks, transit and other major public facilities and services, with a focus on opportunities in the Old Town District.

Objective 3.3 Encourage housing is of a design and quality compatible with the neighborhood in which it is located.

Objective 3.4 Reduce the negative impacts of traffic, noise, parking, lack of privacy, and negative visual aesthetics, through compatible site and building design and buffering techniques, such varying densities and types of residential use and design features.

Policy 4. Foster complete neighborhoods that provide housing choice, serve daily needs, and are walkable, connected, safe and integrated with the natural landscape.

Objective 4.1 Utilize concept planning, master planning and the planned unit development (PUD) technique to foster flexibility, creativity and innovation in the division of land, siting of buildings and provision of community amenities such as trails and open space.

Objective 4.2 Encourage neighborhoods are designed in a manner that incorporates the following principles:

- (a) Cultivate a mix of housing types that are designed in a way to enhance neighborhood character.
- (b) Create walkable neighborhoods that respond to their surrounding landscape.
- (c) Provide safe and effortless connectivity to schools, parks, and commercial centers for pedestrians, cyclists, and cars.
- (d) Enhance existing natural assets and integrate greenspaces and parks into new development.
- (e) Enhance Sherwood's small-town character and historic core through architectural balance and design that is accessible and inviting to all.

Objective 4.3 Make use of density transfer as a means of preserving open space and developing recreational areas within a single development.

Objective 4.4 Promote housing and site design that supports the conservation, enhancement, and continued vitality of areas with special historic, architectural, or cultural value.

Policy 5. Provide opportunities for the development of a range of housing types that are attainable to current and future households at all income levels, as described in the Sherwood Housing Needs Analysis, to maintain Sherwood's high quality of life.

Objective 5.1 Identify opportunities to increase residential development to balance the housing supply. Ensure the housing supply includes a mix of housing types and unit sizes at a range of housing prices and amenities throughout the City.

Objective 5.2 Support a variety of housing types such as, but not limited to, townhomes, cottages, courtyard housing, accessory dwelling units, single story units, and extended family and multi-generational housing.

Objective 5.3 Support housing affordable to Sherwood's residents and workers at businesses in Sherwood, including housing options for first-time homebuyers, new families, the elderly, and persons with disabilities.

Objective 5.4 Support homeownership opportunities in multi-dwelling housing by encouraging the creation of condominiums, cooperative housing, and limited equity cooperatives.

Objective 5.5 Collaborate with nonprofit organizations to provide opportunities for development of low-income housing such as rent-subsidized housing and other low-income housing in areas that have access to jobs, transportation, open spaces, schools, and supportive services and amenities.

OREGON HOUSE BILL 2001: HOUSING CHOICES

In 2019, the Oregon State Legislature adopted HB 2001, Housing Choices. By June 30, 2022 cities in the Portland Metro region and Oregon's other largest dozen cities (those over 25,000 population) must allow people to build duplexes, triplexes, fourplexes, cottage clusters, and townhouses in residential areas. The rational for the new rules is that these houses can be more attainable and meet the housing needs of many younger people, older people, and people who work but can't afford a large single-family detached house of their own.

People can still build detached single-family homes, and we expect most homes in residential areas to be built as such. Many cities already allow some of these housing types in certain areas. Not many have been built. Local knowledge of how to build these housing types will grow over time, and how many are developed will depend on local housing markets. Cities can set clear and objective siting and design requirements for these housing types (often called "middle housing" types), but these standards must apply to *all* housing, include single-family housing.

For more information on HB 2001 please visit the Department of Land Conservation and Development public overview webpage: <https://www.oregon.gov/lcd/UP/Documents/HB2001OverviewPublic.pdf>

City of Sherwood Residential Design Standards Code Update and Implementation of HB 2001

The City of Sherwood is undertaking a development code audit and needed development code amendments to support a range of community housing choices. The development code audit project aims to understand the existing barriers and future solutions to promote a larger supply of housing options for the community. Future amendments to the development code will provide an opportunity for a variety of housing types at various price points community for members at different stages of life; from recent college students to empty nesters, and retirees.

It is anticipated that new Residential Design Standards will be adopted and incorporated into the City's development code in 2021 for *all* housing types. Additional housing choices (duplexes, triplexes, fourplexes, and cottage clusters) with development standards (lot areas, dimensions, setbacks, landscaping, etc.) are expected to be adopted prior to June 30, 2022, compliant with the requirements of HB 2001.

For more information on this project, please visit the City's project page:

<https://www.sherwoodoregon.gov/planning/page/residential-design-standards-code-update-and-implementation-house-bill-2001-housing>

How does Oregon House Bill 2001 affect Sherwood West?

The Oregon Land Conservation and Development Commission (LCDC) adopted Administrative Rules to help implement HB 2001. These administrative rules help prescribe standards guiding the development of new types (plexes, townhomes, cottage clusters) and establish minimum standards related to the siting and design. Sherwood West meets the definition for a “Master Planned Community” as a site area added to a Large City’s UGB after January 1, 2021 for which the Large City proposes to adopt, by resolution or ordinance, a master plan or a plan that functions in the same manner as a master plan. Sherwood West will need to plan for infrastructure to accommodate twenty (20) units per acre; however, the overall density of Sherwood West is not determined and ultimately could be less than twenty (20) units per acre. The overall density of Sherwood West will be identified through this Concept Planning process and set through Metro’s ordinance incorporating this area into the regional UGB.

APPENDIX C

Public Engagement Plan



PUBLIC ENGAGEMENT PLAN

DRAFT | May 14, 2021

Prepared by:

Angelo Planning Group
City of Sherwood

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Project Overview

The purpose of this project is to prepare a concept plan for the 1,291-acre Sherwood West area by updating the Sherwood West Preliminary Concept Plan. The Preliminary Plan was approved by the Sherwood City Council in 2016. It was developed as a long-range planning tool to help guide future community discussions and decisions about the City's long-term growth. However, there have been significant changes in Sherwood and surrounding areas since the Preliminary Concept Plan's local approval: the Sherwood School District constructed a new 350,000 square foot high school on 73 acres inside the Sherwood West area; Washington County completed its Urban Reserve Transportation Study (URTS), which provides detailed transportation impact information to help with future planning in urban reserve areas; and the City is nearing completion on a major update to its Comprehensive Plan, which has not been updated since 1990. In addition, the State of Oregon adopted House Bill 2001 in 2019, which allows for the development of middle housing types within areas zoned single-family residential. This Concept Plan project will take another look at the Sherwood West area to address new land use and growth patterns, new transportation plans, new State rules related to housing, and new opportunities for employment and economic growth. The outcome of this "re-look" will be a Sherwood West Concept Plan that is compliant with Metro Title 11, Planning for New Urban Areas.

Goals and Outcomes

Outreach will be an integral part of this project, both for specific details of the Concept Plan and as part of the community's broader ongoing conversation about housing, employment, transportation, and cost of services. Community members who live and/or seek future annexation and development opportunities in the Sherwood West area will be most affected by the project's outcomes. Other key stakeholders are expected to include area neighbors, local business owners, property owners, students at the new Sherwood High School, and community members from historically-underserved populations. **The City of Sherwood is committed to an inclusive and transparent planning process. Community engagement is crucial to guide the development of a representative, sustainable plan.** The goals of the public engagement process for this project are to:

- Communicate complete, accurate, understandable, and timely information to the greater Sherwood community throughout the course of the project.

- Help participants in the process understand the benefits and challenges of planning issues and alternatives for Sherwood West.
- Actively seek input from individuals, businesses, and organizations who are most likely to be impacted by the outcomes of the planning process.
- Intentionally engage culturally-diverse community members and those whose voices have been historically under-represented in previous planning processes.
- Provide meaningful opportunities for all community members to provide input into the plan, and clearly demonstrate how that input has influenced the process.

The outcome of this public engagement process will be a Concept Plan that reflects the community's vision and desires for the Sherwood West area, balance the diverse interests of project stakeholders, and is feels true to Sherwood.

A NOTE ABOUT THE COVID-19 PANDEMIC

Due to the ongoing COVID-19 pandemic, the majority of public engagement activities are expected to occur virtually. The project team will continue to monitor the situation and will resume in-person events and meetings if and when it becomes safe to do so. We hope to see you in person soon!

Key Messages

The City will be the key point of contact for all communications with the public regarding this project. The City will also be the lead for notifications, emailing lists, media contact, and event logistics. The following key messages summarize the **what, where, why, when, who, and how** of the project, and constitute the basic talking points when communicating with the public about the planning process.

- **What:** The City of Sherwood is taking a second look at Sherwood West to prepare a Concept Plan for the area. The Concept Plan will address new land use and growth patterns, new transportation plans, new State rules related to housing, and new opportunities for employment and economic growth in Sherwood. This plan is not starting from scratch; it will build from the Sherwood West Preliminary Concept Plan, which was adopted in 2016.
- **Where:** Sherwood West is a 1,291-acre area located west of the existing city limits and outside the Urban Growth Boundary (UGB). It is bound by SW Lebeau Road to the north and SW Chapman Road to the south. Sherwood West is a designated Metro urban reserve (Urban Reserve Area 5b) and is the largest of Sherwood's three future growth areas.
- **Why:** Sherwood has seen significant changes since the adoption of the Preliminary Concept Plan in 2016, both on-the-ground and in the regulatory and planning context. In 2018 the Sherwood School District annexed a portion of the Sherwood West area into city limits and constructed a new 350,000 square foot high school, which was completed in 2020 and is expected to open to students in 2021. The State of Oregon adopted new housing rules (House Bill 2001) in 2019, which allow for the development of middle housing types within areas zoned single-family residential. In 2020

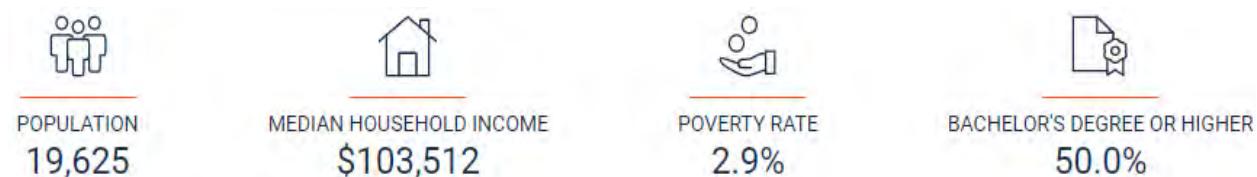
Washington County completed its Urban Reserve Transportation Study (URTS), which provides detailed transportation impact information to help with future planning in urban reserve areas such as Sherwood West. In addition, the City is nearing completion of a three-year planning and visioning process to update its citywide Comprehensive Plan, with adoption of the new plan expected to occur in summer 2021.

- **When:** This project will kick-off in May 2021 and will take approximately 15 months to complete.
- **Who:** The Concept Plan project team includes staff from Sherwood's Community Development Department, supported by a team of consultants led by Angelo Planning Group that includes Walker Macy (urban design), Leland Consulting Group (economics), and DKS Associates (transportation). The process will be guided by input from two advisory committees. The Community Advisory Committee (CAC) is made up of community members who live or own property within the City and Sherwood West, and representatives from the City's Parks Board, Planning Commission, City Council, Police Advisory Board, and the Sherwood School District. The Technical Advisory Committee (TAC) will be comprised of public service provider representatives: City Public Works, Engineering, Community Services, the Police department, Clean Water Services, Oregon Department of Transportation, and regional economic and housing development professionals.
- **How:** As this project gets underway, the Sherwood community will see articles in local community newsletters; city social media posts to Facebook, Twitter, Nextdoor; public meeting notices online and flyers; 'pop-up' engagement at local community events (consistent with COVID-19 protocols); online surveys; engagement with Sherwood High School students and families; and Frequently Asked Questions sheets. In addition to these opportunities, feedback is always welcome via email at any point in the process.

If you would like to submit a comment or question to the project team, or you are interested in subscribing to the Sherwood West Re-look Email Interested Parties list, please send an email to: palmere@SherwoodOregon.gov

Sherwood Demographics

The following demographic profile is a snapshot of Sherwood today.



Source: 2019 American Community Survey 5-Year Estimates

According to estimates from the American Community Survey (ACS), the population of Sherwood in 2019 was 19,625. Around 89 percent of Sherwood residents identify as White, and nearly six percent identify as Hispanic or Latinx. Over five percent of residents identify as Asian (alone or with some other race), almost two percent identify as American Indian or Alaskan Native (alone or with some other race), one percent identify as Black or African American (alone or with some other race), and less than one

percent identify as Native Hawaiian and Pacific Islander (alone or with some other race).¹ ACS data also indicates that nearly 90 percent of Sherwood residents speak English at home, and nearly four percent speak Spanish at home.

In addition to these demographics, recent trends identified in the City's 2019 Housing Needs Analysis indicate that:

- **Sherwood's population is growing.** Sherwood grew by 6,600 people between 2000 and 2013, at a rate of nearly 3.5% per year—well above the regional average.
- **Sherwood's population is aging.** People aged 45 years and older were the fastest-growing age group in Sherwood between 2000 and 2010.
- **Sherwood is attracting younger people and more households with children.** Nearly 50% of Sherwood households have children, which is significantly higher than in Washington County or the Portland region generally.
- **Sherwood's population is becoming more ethnically diverse.** Sherwood's percentage of people who identify as Hispanic or Latinx grew from 4.7% in 2000 to about 6% in 2019.

Communications and Outreach Tools

The City is committed to equitably engaging the public on this project and is employing multiple types of communication and outreach tools in order to engage the full range of Sherwood community members. The following table includes informational tools and activities that will be used throughout the project to inform a broader public audience and solicit input related to needs and possible planning concepts. Where possible, project materials developed as part of these tools and activities should be made available in both English and Spanish.

Tool/Activity	Description	Audience	Timing
Community Advisory Committee (CAC)	The CAC will be made up of community members who live or own property within the City and Sherwood West, and representatives from the City's Parks Board, Planning Commission, City Council, Police Advisory Board, and the Sherwood School District. The City Council will appoint CAC members through an open application process. CAC meetings will be open to the public, and each meeting will include dedicated time for non-CAC members to provide input.	General Public	May 2021 through May 2022 (7 meetings total)
Technical Advisory Committee (TAC)	The Technical Advisory Committee (TAC) will be composed of public service provider representatives: City Public Works, Engineering, Community Services, the Police department, Clean	Agency Partners & Service Providers	May 2021 through May 2022

¹ 2019 American Community Survey 5-Year Estimates

Tool/Activity	Description	Audience	Timing
	Water Services, Oregon Department of Transportation, regional economic and housing development professionals will also provide input into this work. City staff will lead the recruitment of TAC members.		(7 meetings total)
Community Open Houses and Surveys	<p>Two community open houses will be held at key points in the planning process. These community-wide events are intended to engage the greater Sherwood community and provide opportunities for a diverse range of community members to review and comment on issues, alternative approaches, and draft recommendations. They are expected to include a combination of live events (either online or in-person, depending on the status of the COVID-19 pandemic) and will also include an online survey component that will remain open for several weeks to gather additional feedback from community members who were unable to attend the live event. Community members will be notified about upcoming open house events through the use of social media posts, emails, postcards, newsletter advertisements, and website banners.</p>	General Public	Fall 2021 and early Spring 2022
Stakeholder Interviews	<p>As part of the project team's research on economic opportunities and potential challenges, Leland Consulting Group will conduct five interviews with local and regional economic development officials to explore how technology, health care, office, hospitality including farm to table concepts, retail, and other employment uses might evolve in Sherwood West.</p>	Economic Development Officials	June 2021
Project Website	<p>A project website hosted by the City's will be used as the main repository of project information, including draft and final deliverables, upcoming meeting announcements, and contact information for project staff. The website will be updated frequently over the course of the project to keep interested parties up to date on current information and opportunities to be involved.</p> <p>https://www.sherwoodoregon.gov/planning/page/sherwood-west-preliminary-concept-plan-re-look</p>	General Public	Ongoing
Interested Parties Email List	The City will maintain a database that includes email addresses for interested parties and important	General Public	Ongoing

Tool/Activity	Description	Audience	Timing
	stakeholder groups in the project area. The database will be updated as the project progresses and will track individuals and groups who express interest in the project. The database will be used for notification of upcoming engagement opportunities and communicating project progress, draft deliverables, and key milestones.		
Local Newsletter	Articles with project information will be included as part of the City's e-newsletter and will be shared with past and current subscribers to share information, increase project awareness, and provide additional avenues for community input.	General Public	Ongoing
Social Media	The City's social media accounts will be used to share information, increase project awareness, and provide avenues for community input.	General Public	Ongoing
Pop-Up Events	The City anticipates conducting several pop-up engagement events at planned local events such as farmers markets, fairs, or festivals. Specific dates or events have not yet been identified. Any engagement that occurs as part of these events will be conducted in accordance with current COVID-19 social distancing protocols.	General Public	Ongoing, beginning in summer 2021
Property Owner Mailings	To ensure that all property owners and residents in the Sherwood West area are aware of the project and process, the team will send postcards and/or pamphlets with project information via mail at key points in the process, including at the outset of the project, prior to community-wide events, and prior to the final CAC/TAC meeting.	Area Property Owners and Residents	Ongoing
Project Snapshots/FAQs	The project team will prepare public-friendly summaries of project progress, findings, alternatives, and conclusions at key points in the process. These "snapshots" are intended to capture and distill project information and in a fun and easily-digestible way for consumption by the greater Sherwood community.	General Public	Ongoing
Printed Materials	The project team will develop eye-catching graphic posters, postcards, flyers, and/or brochures with project information to display at local businesses, community centers, parks, grocery stores, and other locations frequented by community members. These materials will include links to the project	General Public	Ongoing

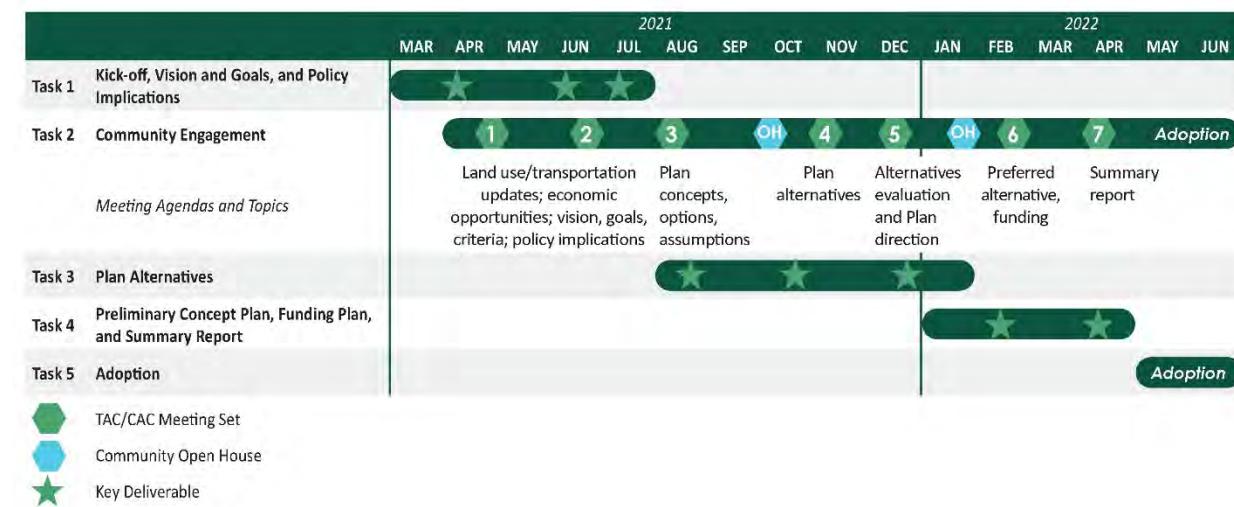
Tool/Activity	Description	Audience	Timing
	website, information about upcoming opportunities to engage, updates on project milestones, and contact information for project staff.		

Project Schedule

The following schedule outlines the tasks and key deliverables, as well as preliminary timing for TAC/CAC meetings and community open houses. This schedule is preliminary and subject to change; it may be updated over the course of the project.

PROJECT SCHEDULE

Last Update: 3/15/2021



APPENDIX D

Open House #1 (Online) Summary



OPEN HOUSE #1 SUMMARY

TO: Sherwood West Community Advisory Committee and Technical Advisory Committee
FROM: Kyra Haggart and Joe Dills, Angelo Planning Group
DATE: April 28, 2023

Introduction

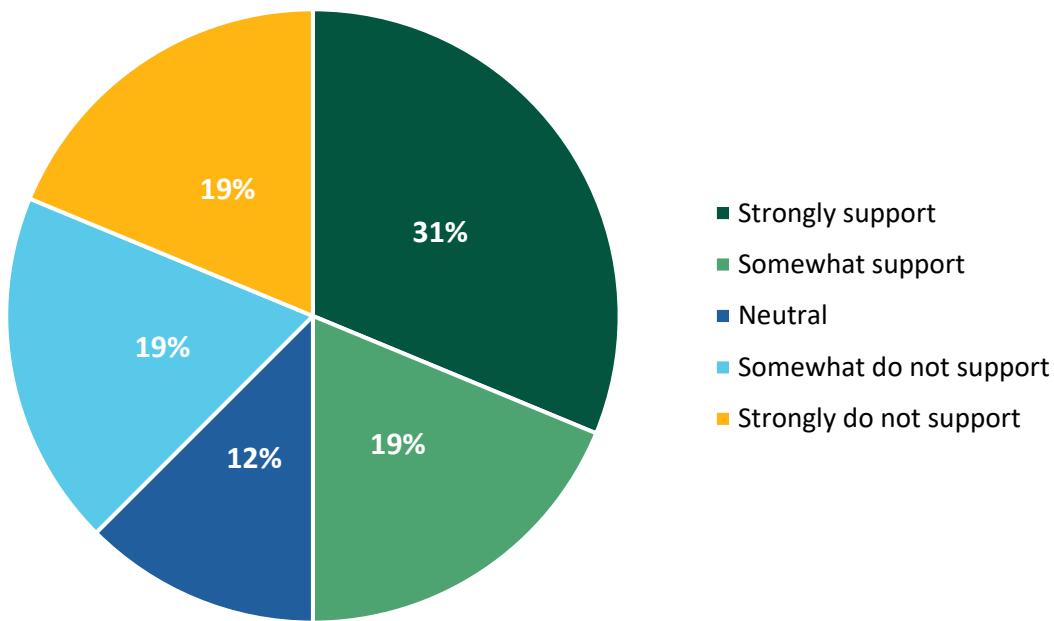
This memorandum provides a summary of the results from the Sherwood West Concept Plan [Online Open House #1](#). The Online Open House survey questions were available from Wednesday, October 6 through Sunday, October 24, 2021. A link to the Online Open House was posted to the project website and the City's social media accounts (Facebook, Twitter, and Nextdoor), sent to the project's interested parties email list and all City boards and commissions email lists, included on flyers posted in five downtown sign monuments, and at Sherwood High School for student engagement. Open house participants were invited to enter into a drawing for one of five \$10 gift cards to local businesses as a thank you for their participation. The Online Open House received 135 responses to the survey questions.

The Online Open House provided some background about Sherwood West; presented the project vision, goals, and evaluation criteria; and shared a summary of each of the six Plan Concepts. Because of the breadth of information covered in the open house, participants were invited to select explore any topics that interested them from a menu of pages.

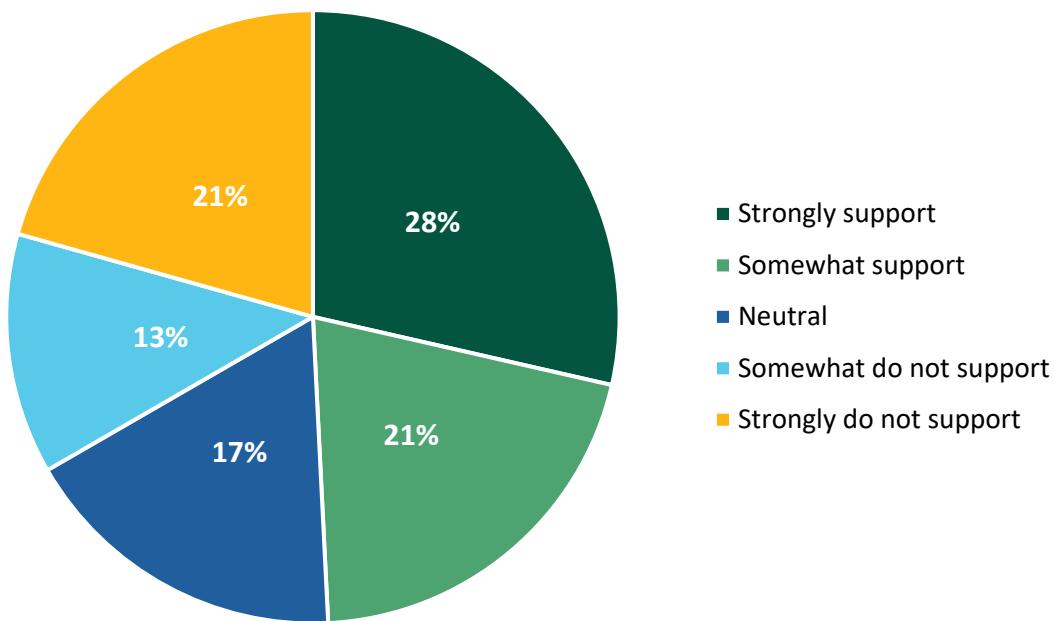
Survey Results

VISION, GOALS, AND EVALUATION CRITERIA

What is your level of support for the vision statement?



What is your level of support for the goals and evaluation criteria?



Do you think that the vision and goals represent the values of the greater Sherwood community? Why or why not?

- Yes, the vision and goals reflect the values of the greater Sherwood Community. Please make certain that in the aggregate considering all new development in Sherwood West well provide a well-balanced and fully functioning community that continues to be attractive and well serve all current and future residents and businesses.
- There is no need for added business/industrial development in this area. Actually, even residential should be put on hold until all current land within the Sherwood boundaries are fully explored and subsequently developed.
- Not the values of keeping Sherwood a small town with neighborly feel. These designed areas with added business and industry just turn Sherwood into more and more of a cookie cutter suburb with more traffic and more hustle and bustle.
- Sherwood West is a pipe dream. The infrastructure in Sherwood is a joke. There is a strong need to drive from pt A to pt B, but it takes soooo long to traverse those points. The increase in tax base only seems to drive an increase in taxes, I don't understand how that works. Sherwood has lost its identity and the reason people decided to move here in the first place. It's no longer affordable and now we're only adding to the issue. Are we going to become the next Hillsboro? Growth is inevitable, but do it smartly; this is just outright a simple money grab and politicians trying to make a name for themselves.
- Yes, great job!
- I don't think there should be industrial or office development on this side of town. Everything else looks great.
- The vision and goals represent Sherwood which is essentially to continue what was created with the development of the Woodhaven neighborhood. A neighborhood that is connected and can be walked.
- Expanding Sherwood's borders will only bring increased traffic and property taxes. The new development will not pay for itself, so please don't tell me that my already high taxes won't go up. Bringing MAX to Sherwood would give homelessness, drugs and increased crime to the area. Hillsboro is an excellent example of this. This proposal will only benefit a handful of people, namely the landowners and developers. The citizenry of Sherwood will see a decreased quality of life
- I appreciate the focus on preserving existing greenways and habitat. On the topic of walkable communities, it would be great to see Sherwood utilize more multi-use building developments (retail space, office space, and apartments) to improve density.
- As long as it doesn't turn into what is on Roy Rogers and Scholls Ferry, I support the vision and goals. High density/medium density housing doesn't fit with Sherwood's look and feel. Sherwood has a small town atmosphere and it should stay that way. It is one of the many reasons people move to Sherwood.
- yes.... bring more commerce to sherwood - while keeping the small town feel - and quality of life.

- I do not believe now is the time to look at a project with such a huge impact on the city. We are dealing with very uncertain times and adding to an already strained infrastructure. As a 25 year plus resident I see allot of industrial add especially along Tualatin/Sherwood Rd that has made traffic along that route ineffective to say the least. As these projects are submitted and approved who bears the burden of the roadway strain, the traffic increase, the environmental impact? I don't see anything the vison or goals that places that responsibility directly on those who stand to make the most profit from the project.
- Seems like a fair representation.
- Continuing the small town feel (I live in Old Town), keeping natural environments clean, and "ignoring" the dividing 99 highway
- Yes. Sherwood is a friendly, welcoming town. These goals and vision would promote growth that is aligned with that lifestyle.
- No. No neighborhood values. Trees, walkable streets. Schools.
- In some ways yes and in some ways no. In my mind, goal #2 of attracting large employers and developers stands in stark contrast to the maintaining the heritage and small town feel of Sherwood, as described in goal #1. Furthermore, I'm very alarmed with warehouse after warehouse that's consuming every commercial lot coming down Tualatin Sherwood Rd. Those buildings destroy sense of community, design esthetic and/or of a master plan. Business parks should look more like the Nike campus or like those in North Hillsboro, of which many are leased by Nike as satellite offices. High berms, nice landscaping, variety of sizes, different assistance, limited entry, etc. I'd love to see more stringent/cohesive criteria for all new commercial building construction such as architecture, area improvements, landscaping requirements, etc. to make sure Sherwood continues to feel and look like Sherwood, even though it'll be "bigger."
- Many businesses are looking to escape the violent climate of downtown Portland. This helps attract small businesses to leave Portland for a better and safer community.
- Yes, the vision and goals seek to grow our community while maintaining a connection to our beautiful natural Oregon resources, preserving our small town feel, and creating opportunities to diversify our community.
- Although many of the goals and considerations are on target and thoughtful, and could be used as models in planning for communities across our country, the underlying concept that Sherwood needs to increase is population is disturbing. More residents, more traffic, more congestion should not be goals. Improving the lives of existing residents should be the focus. We moved here to escape the rampant growth of population and traffic and congestion of our previous community. We really do not want to face that condition yet again. Keep our growth at a maximum of 1 1/2 percent per year, not an iota more.
- While the vision and goals may represent the values of the Sherwood community, I don't believe it. This area, like previous expansion of Sherwood will just turn into a bedroom community while developers cash out and fails gt benefit Sherwood as a whole. Increase the strength of statements for large employers and reduce the dependence on residential.

- Housing (both affordable and other) continues to be a challenge for the area. Designing a neighborhood around the new high school makes sense to anchor the community.
- No I think its a tax grab and doesnt serve the community. One of the things that makes Sherwood unique (and why people live here) is the small town feel with the rural surroundings. Youre taking that away just to create more suburbia. I think your goals would be FAR FAR better served by investing that money into upgrading transportation, upgrading the employment near and around highway 99 and by investing more into parks and schools. This is a bedroom community not a big employment hotspot. Youre going to devalue peoples property, lower values of home and ruin a sense of community if you keep going. This isnt Tigard. If we wanted sprawling excess growth we would live there instead.
- Yes, I think the vision and goals are well written and make sense. I feel that protection of our natural resources and areas should be one of the highest priorities. As cities expand and developers move in to lobby for that expansion, the natural areas and transportation are the first things that become "too expensive" to make the investment. Sherwood should make sure that these portions of the plan are well protected to avoid future government from bypassing them in haste for more tax money. also, transportation of people will likely be much different in the future, maybe everyone won't own a car, but limited parking is also an eyesore and issue because developers cant sell parking spots. So the streets that were meant for transportation turn into parking lots. They also cant sell bike paths, or sidewalks so those also get removed. These should all be thoroughly protected.
- yes, somewhat
- Yes: neighborhoods, walkability, and greenspace mixed with local jobs.
- We want to keep Sherwood the existing size that if currently is
- NO, Let the rest of metro become a traffic mess, the current Tualitan Sherwood Road plan is joke and will be at capacity the moment it is opened...
- We are witnessing the poor traffic planning that was done with the new high school as we have School Administration on top the building in the early fall trying to figure out how to alleviate the massive morning and afternoon congestion.
- Sherwood West of course will Not have enough parking and the streets will be filled with cars. Initially it looks fine but as the area ages the families grow older the kids need cars and the quantity of cars increases. The developer is long gone and the city streets are his parking plan. (See Villebois, Wilsonville, Langer Parkway Sherwood, Woodhaven Sherwood) If you can limit on street parking and make the a realistic assessment of the parking issues and mandate a real world number of spaces then I would be more supportive. (See Wilsonville Charbonneau area) somewhat. not sure the longtime residents are being heard that live outside the current city limits.no
- Concerned that long time residents that live outside the current city limits are being heard.
- "The greater Sherwood community lives here, because we are not in favor of housing density and instead appreciate the country and generous lot sizes. We want to be able to move freely about. Traffic is already a huge problem, and packing more people in here, whether it's to live or work here,

will further reduce our quality of life. Instead of chasing after more and more property tax revenue, why don't you prioritize existing Sherwood residents who are your voting constituents? You heard the outcry from Sherwood residents a few years ago - what makes you think we've changed our minds?

- This plan of growth will put further strain on Sherwood's water supply. Residents have already been urged to limit their water usage, so what's going to happen when thousands more users are added?"
- No not at all, what makes Sherwood Sherwood is it being and staying small... the size that it is period.
- NO. We have development & building background. Okay with thoughtful housing but not crowded subdivisions, and most certainly, NOT THE BLIGHT THAT IS SOUTH HILLSBORO AND THAT UNSIGHTLY RIVER TERRACE SUBDIVISIONS.
- The size of Sherwood is great the way it is, the majority of residents are here for the smaller town that it is, it's already gotten way bigger, we're done with the growth. End of story
- Yes, enjoy the goal to support the small town feel. Walkability is something that is a challenge for some of the outlying areas of Sherwood so it is nice to see that as a focus to improve and have as a goal for this expansion plan.
- No! You are planning on taking valuable farm land and wet lands and turn it into high density housing. The wet lands at the intersection on Elwert and Edy are not conducive to building and would ruin the habitat for many native animals and plants. I don't think the current community wants high density housing ruining our beautiful natural and farm areas. If your looking for tax revenue take back land bought by Metro (baker creek area) and get that back on the tax base.
- No one is asking for Sherwood to grow except for the money hungry developers and builders and if it's the Mayor too we'll get him replaced... a group of us are going to organize and fight this just as much and more..as you are pushing this on our community
- No, I believe it supports money hungry politicians who are trying to make a name for themselves. Please why not leave the land alone and let the farmers make a living and have places of natural habitat rather than constantly and continually destroying the lands. Sherwood is big enough as it is and all you are doing is taking away the livelihoods of many generational farmers who provide product for the rest of us. It is time to stop the expansions and start putting your monies into remodeling and redesigning existing areas, especially those where we have closed buildings or empty houses that are run down and eye sores!
- Is it being developed too quick then any road development? How about improve/build more ""roads"" first before start to do any more development? Currently 99 and Sunset traffics were bad enough, not even talk about Edy road and Elmer.
- What you have here sounds just like the horror of building that has happened along Scholls Ferry and Roy Rodgers. You say transportation and neighborhoods will be connected, fine, but what about actually getting to this area? The traffic density all around the area will increase and it's already awful during many parts of the day. You need to look at the bigger picture of quality of life for everyone in Sherwood, not just your new project. This is not a good idea.

- Being 'complementary' to other expansion is your problem. You should strive to be better, much better. What's been happening nearby is awful. It sucks the life out of people. It's depressing.

Is there anything else you'd like to tell us about the vision, goals, or evaluation criteria?

- We are particularly interested in the economic development and employment center aspects of the Vision and Goals which will need to be carefully integrated and connected with the residential and commercial aspects centered on multi-modal transportation goals. Then, Sherwood will become great destination for living and working into the future.
- Sherwood West is mostly agricultural land at present, as well as wild undeveloped land. It would be great if this were to remain untouched by major development.
- "preserve the community's heritage and small-town feel" mentioned in goal #1 is not possible when we keep cramming in high-density housing, increasing the town population by leaps and bounds. Sherwood used to be a small town, but now feels like it is just another suburb.
- We need a 55and up single level home neighborhood, smaller homes, 1800-2200.
- To create this vision the whole Sherwood West Area will most likely need to be brought into the UGB at the same time in order for land developers to work together with the city to build out the plan. Bringing in portions of the area into the UBG over different periods of time would threaten the ability to fulfill the plan.
- you have no mention of maintaining housing values of the boarding homes. How you develop Edy Road will make or break family's livelihoods.
- I currently live in the Woodhaven neighborhood and absolutely love the abundance of nature trails. This feels like a unique characteristic of Sherwood and love to see this tradition continue with newer developments.
- I'm not really in favor of large employers or industrial/technology parks in Sherwood West. I would rather see smaller businesses, retailers, etc, and keep the larger employers in the existing Sherwood/Tualatin/Tigard industrial areas. I am strongly in favor of preserving our natural spaces and would love to see a network of walking trails, paths, and parks included in the Sherwood West plan.
- With the changes we are facing as a greater region, Sherwood has a chance to be a leader in developing criteria based off more than the short term tax base gain. As far as employment opportunities, currently our local businesses are hard pressed to have enough staff to keep their doors open! If the city is not looking at the immediate and long term impact any project has on power consumption, projected water use, impact on traffic patterns, and long term environmental impact, then I can only assume we are a for profit managed city and if so need to look at my ongoing residency of Sherwood, a city I have loved to be part of for over 25 years and as a lifetime Oregonian and resident of the greater Portland metro all my life I have seen managed growth and for profit growth in many areas, the difference is easy to see with time. I want to know there is enough water to put out a house fire and generate electricity for many generations to come.

- Transportation vision within Sherwood West is great. But with the potential for thousands of new jobs and residents within the area how do those that don't live in Sherwood get to those jobs and those that live in the area but work elsewhere reliably get to those places of work. Existing infrastructure, even with widening of Tualatin-Sherwood Road will certainly not meet the growing demand. Southern arterial plan should instead be Southern Expressway with dedicated transit lanes/express lanes in order to adequately connect Sherwood West and the rest of Sherwood to I-5.
- Greater emphasis should be placed on safe biking and walking routes since there is already a major highway bisecting the town that is unsafe to cross at times.
- I will say that if we can incorporate an area as well thought out and designed as Wilsonville's Villebois area, people would come in droves. The area is beautifully landscaped, has lots of elevation changes (roads, buildings, etc.), different building plans (so they don't look cookie cutter), common/recreational areas, etc. They have a great mix of high, medium, and low density design plans to attract buyers of all incomes and budgets.
- Traffic management and road surface quality must be a top priority. Tualatin-Sherwood Rd must be improved and accommodate the businesses newly placed on SW Olds Place/ SW Arrow.
- A few goals I would like to see are:
 - Multiple public charging stations for electric vehicles
 - A noise abatement program to get the noisy vehicles refitted with appropriate sound muffling equipment. Traffic cameras cannot detect and remedy ""glass pack syndrome"" We need regulations with specific maximums on db level, and then enforcement of same.
 - The more development continues, the smaller our wonderful downtown area becomes in proportion. I think this is lost in the above planning. If we choose not to grow, we will not need to do all this expensive planning. *However, we could be spending the energy developing plans and programs to improve and upgrade many of the residential and retail structures that are in disrepair or just need updating. Also putting in place and enforcing minimum landscaping requirements, especially on rental units. "
- I just want to ask everyone involved in this Sherwood West Concept Plan to completely think through what we want Sherwood to look like in the future. Let me just reference one current project. This is the home building project on Brookman Rd. I don't live on Brookman Road, but I drive on it occasionally. There will be a lot of homes that will be built and I fear that the traffic could be hazardous. The road somehow needs to be widened and the S-curve on the east end of Brookman Road needs to be straightened. What I don't understand was why Sherwood was forced to incorporate that parcel of land into the city limits. As I remember it, the citizens of Sherwood voted three times to reject adding that land to the city. When I contacted Kim Thatcher, she said that state law required us to incorporate the land. Let me be clear and say I am not against growth. That will come. What we need to do, and hopefully you agree, is the growth needs to be planned and managed. Good Luck
- While I recognize the vision statement is mostly an aspirational statement, I feel the wording of "High Paying Jobs" will cause problems. How will that be measured? Does that mean that restaurants will be excluded? Certainly some of those jobs are not high paying. I think using "Well

"Paying Jobs" is more ambiguous and allows more wiggle room as we measure success against the vision.

- I am concerned about the special interest groups pushing industrial and commercial near that high school. I do not think that is in the best interest of the Sherwood community. The Tualatin Sherwood Road area is already an established and growing industrial and commercial zone. There is no reason to plant industrial and commercial zoning around or near the high school.
- Instead of worrying about ""complementing"" the growth on Urban Boundary's western edge, why not protect the rural feel we have and instead build better roads, expand them and help revitalize downtown? I think if you asked the citizens you would find most have no desire for Sherwood to get bigger. That abomination of homes on Roy Rogers and Scholls Ferry drives taxes I am sure but not a single person I have talked to thinks it improves Tigard in any meaningful way. Its one of the reason I left that city. All money, no heart. Sounds like Sherwood is headed that way too. The vision is misguided. Goals are better served investing in the community at hand.
- Include a focus on wine and food oriented hospitality.
- It would be nice to see more hospitality industry along the 99 corridor to accommodate wine tourism - hotel, restaurant, etc.
- It's bad enough seeing all the development and farm land taken away at the end of Roy Roger's and Scholls ferry... we don't want it continued down to us in Sherwood.
- Without a West Side bypass this plan is a Mess. With the massive development to the North, South Beaverton, the massive King City project and lack of long term transportation network this is going to be a mess. No major manufacturing or distribution company is going be land locked from a major highway system i.e. I-5, 217, 26. The idea that we crowd the roads to the point of misery to get people out of their cars is not and will not be an effective plan, just wishful thinking and piss poor planning.
- There is already an epidemic of clear cutting trees on rural lots, and I don't want to see it get any worse. Your statement: "Existing mature trees and areas of dense tree canopy are preserved WHERE FEASIBLE" means that developers like Metropolitan Land Group and Randy Sebastian of Renaissance Homes don't have to bother - it's cheaper for them to destroy all of the trees so their heavy equipment can roll through faster and their profits add up faster too (to them, it's not feasible to save any trees). Frankly, I don't care about their profits - I care about my community. It happens over and over again. The little tiny trees they commit to planting in their developments are not equivalent to the 100-year-old fir trees that provide shade & oxygen, and rid CO₂ from our environment. These monstrous developments, like Metropolitan Land Group's River Terrace 1 & 2, are speeding up global warming. I urge you to stop this plan.
- Reverse the sale...give the developer/ builder all who is involved money wise... give them their money back!
- PLEASE DON'T LET IT HAPPEN
- It is a very delicate balance to keep small town feel and walkability with transportation growth and integration of nearby urbanizing areas. The inevitable compromises that come with these projects

will need to be anchored by this vision to maintain the proper balance, no easy feat! The map so far in this presentation has not shown the proposed boundaries for business/residential/recreation, but I'm sure that will come later in the presentation. That is where the balance will be key.

- Think about what this area looks like now and what you would be leaving for future generations by putting in high density housing. the steepness of the terrain would create nothing but water run off and erosion issues into Chicken creek thus destroying even more habitat for native species.
- It is a shame that our elected officials find it necessary to destroy our lands, our farms, and our history all for the sake of making money and using funds which need to be directed to protect the lands and current farms. We are tired of the takeover and the fact that you do not allow people to vote on these projects before you begin the work. People should have a say as to what they want done with the land prior to your posting documentation such as above. A simple vote as to asking the people do you want the land developed or left as is, that is all you need to do. If the people say leave as is, then go find something else to do and stop the moving forward. **YOU NEED TO ASK THE PEOPLE WHAT THEY WANT..IT IS NOT UP TO A FEW OF YOU TO MAKE THESE DECISIONS FOR THE MASSES.**
- I bought a house here because I loved the privacy and view of my back yard. But it is no more. All trees were gone now. I will see my ""neighbors"" after a year or two. I ""disapprove/hate"" it but I could not do anything about it. As people said money did talk. I bet no city leaders even live in here or they may have big properties and not care about regular residents.
- You paint a rosy picture of this perfect community you want to create. The reality is that you will create more congestion, more ordinary ugly houses and another area demonstrating that the dollar is really the driving force of development and not innovative vision and imagination. It will cater to the lowest common denominator and be another development blight on our landscape.
- Wake up and try to be really innovative and different. Don't cater to the bare minimum. Have the courage to really be imaginative and do something different and exciting. Yet another cookie cutter neighborhood isn't needed or wanted.

MIXED EMPLOYMENT AREAS

Think about the map of potential mixed employment areas. Do these areas look about right to you? Do you have any comments or suggestions?

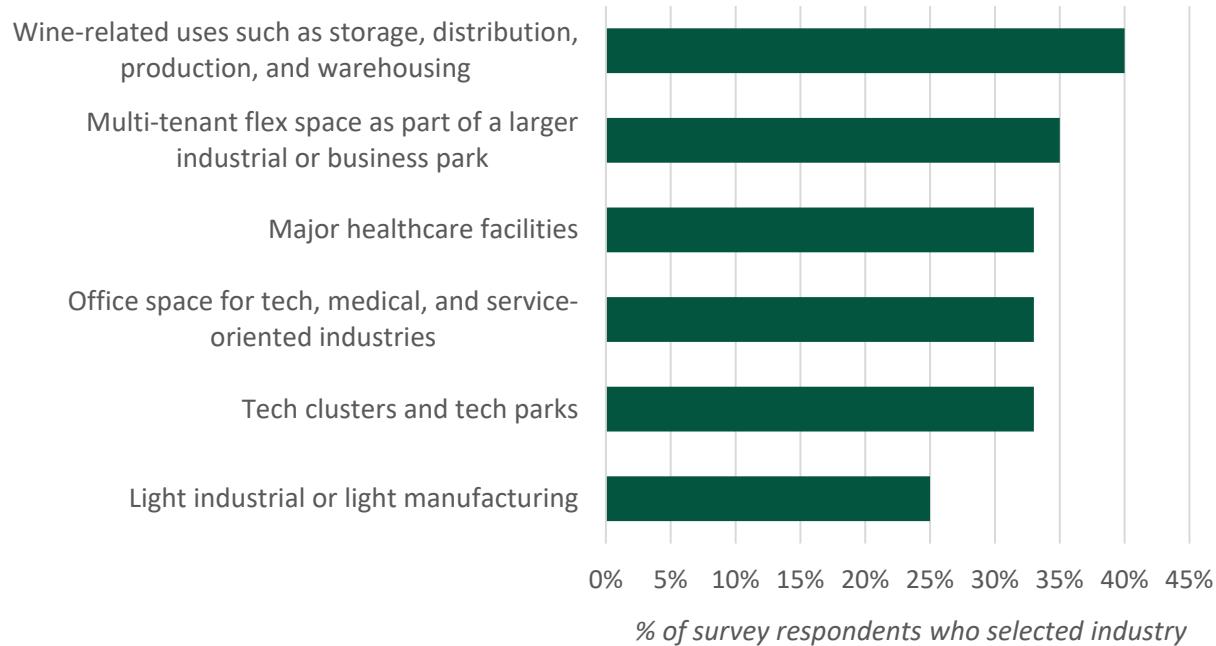
- No, no, no! There are many "For Lease" signs all around Sherwood in industrial sites and strip malls. This means that there is a great deal of unused business real estate at present, and so there is no need to develop more business land/properties. Use the current vacant properties first, and only once we have 100% occupancy should we consider more development. We should not carry on with the assumption that development is good in and of itself. We are a small town - let's keep it that way!
- Yes, transportation infrastructure including multi-modal is most important for the success of each area. Yes, about right as long as the re-looked "concept" can have a level of flexibility that allows creative and attractive mixed uses on the fringes of each transitioning to multi-family and single family residential uses.

- Area #2 seems poor for transportation flow to High School. So many of these small commercial corners are difficult for businesses to stay afloat.
- We have too many giant, industrial buildings arising between Sherwood and Tualatin. Do we really need more on the west side of town as well???
- Area 3 really needs to have at least one grocery store.
- i don't think putting commercial or industrial next to the high school makes any sense at all. Why wouldnt we want nice residential neighborhoods right next to the school/ i cant think of another recently built school that has anything but residential next to it .
- Yay! More traffic for our already over burdened roads.
- They generally look right to me. I think the emphasis on mixed employment is good. I think retail locations need to be minimized along 99W. I don't want 99W in Sherwood to look like 99W in Tigard which is a visual and traffic abomination.
- Don't do it. Period.
- I agree with areas 3 and 4 because of their proximity to Hwy 99 and visibility. There would also be less impact to existing residential areas
- Area one is too big and appears to completely disregard the creeks through the middle of it. Looks like no consideration for green space.
- With the extreme growth already existing and in progress by off Scholls and Roy Rogers, near the Mountainside High School, I fear the level of traffic and congestion is already past the threshold of livability. More development in this area is a bad idea. When the plan sites a need for more employment, it does not specify how many sherwood residents are currently employed, nor does it state a specific goal for how many residents should be employed. Nor does it give any specific target for existing average pay nor goals for such. This all seems like good intentions, but how do we gauge success? Is it providing jobs for one percent more of our residents, is it raising the mean average wages by two percent? Of the new jobs created in Sherwood, what percentage will be Sherwood residents, and what percentage will be new commuters, clogging our existing infrastructure. I don't see anything in place to measure the success of these plans.
- "One of the goals is for ""Neighborhood retail nodes provide residents with walkable access to goods and services"". Given the map, the only way to accomplish this is to have mixed commercial/residential development, similar to what has transpired in Orenco and Villebois. The committee should review the success of these ventures prior to finalizing the document.
- It looks good. I am fine with this.
- Area 1 is problematic, depending on Roy Rogers for transportation will be a disaster, it already is a problem. There are also significant woodland resources in this area that would be destroyed by industrial parks.
- As someone who lives off of Lebeau Rd. I am disappointed but not surprised to see Area #1 as priority development land. This was slated as sports fields and potentially a school in the 2016 plan. I hate to say I imagine large box buildings like what is along Tualatin Sherwood road placed here,

rather than something more like a more open Langer's Farm development but with a business park (similar to Mohawk or Kruse Way).

- Would area 3 be a possible location for hospitality, food and wine oriented development?
- All except 2. I'm not sure I'd want to see commercial space there
- Looks ok.
- Area #2. Traffic at Elwert and Haide is a mess at the start of the school day. Putting businesses in that area would add to the congestion.
- "Traffic! Elwert Road cannot handle any more traffic, as there has already been a noticeable increase in traffic and accidents, including rollover crashes, since new housing developments and the high school have gone in. It was never intended for semi-truck traffic, and that is exactly what industrial and manufacturing businesses will bring. Please don't expand this country road to a 4-lane highway – these are ecologically sensitive areas with creeks and wildlife. Let's not put more wear and tear on the roads and diesel exhaust in the air.
- 99W also has problematic traffic congestion, and ODOT and Metro have listed it as a ""Tier 2"" priority level, not Tier 1. Apparently, they don't think there is a problem. With more development, it will only get worse.
- Area #2 is certain NOT ""mostly flat"". Have you traveled up Edy Road?
- No none of it looks right, we have empty retail space that has been empty for years... and the existing business have reduced hours now because they can't hire workers... no one wants to work. Sherwood is great the way it is...
- Agree with these areas being along the busy main roads and seems to be the best areas for the required business tax base to sustain the city's growth. As a resident near Edy/Elwert I have concern over the North/South traffic plan, but assume that will be addressed later in the presentation. I would hope there will be some architectural standards in these areas to emphasize the inviting and higher class the images of existing business represent and that these areas do not just become large flat front buildings with no character or charm. Sherwood's shopping centers and standalone offices have done a fairly good job with this, but I worry about the more industrial setting of zone 1.
- On Area 3 you say "some slopes" it is steep!!! Take a walk and look at it. what isn't steep is a wet land area. Get out of the office and take a look at the areas! Not the place for Mixed employment areas. There are High Voltage lines that run thru the area too and building is not permitted under those anyway.
- I don't understand why the creek space/green space in area 1 is not protected??

Which of the target industries would you like to see developed in Sherwood West?



Are there any other employment uses that you think would be a good fit for Sherwood West?

- Clean industry Corporate Headquarters uses which is somewhat inherent in the "tech park" but without being limited to "tech" uses. Need more definition. Will read the above reports.
- small, locally owned businesses
- I dont support employment uses for Sherwood West. That should all be on the eastern side of town where there is tons of new industrial lands being developed.
- restaurants
- Absolutely not
- Restaurant space and grocery
- We need more local businesses, and a locally operated grocery store. If I see one more big box chain store in Sherwood I will cry into my Symposium coffee. This town is incredibly family friendly-what about a decent space for more childcare centers or a children's museum? You mention centers for high-paying jobs, but we won't be a filling those jobs if people don't have childcare.
- For area four, I could see wine related business development, but what would make this a big win for Sherwood, is if we had a significant ""Sherwood, Gateway to WV Wine Country "" statement piece [sculpture or ???] similar to what we see entering Napa Valley Wine Country in California. It is an iconic landmark. Sherwood could really benefit from this. And this area 4 could be successful with upscale wine themed restaurants, as Napa put in place as their wine region was developing early on.
- Could use another grocery store on the south end of Sherwood.

- A Wine Country hotel and restaurant would be great. The view of Mt Hood and the valley would be a draw for visitors. Don't waste the green hillside and creeks on industrial uses.
- Maybe more recreation.
- Consider options for a more integrated design of civic uses. housing, employment, food and beverage, retail etc., not strictly segregated into separate zones. Encourage enough density to create the body heat needed to give the location a sense of identity and community.
- Farms!
- No none
- The list created seems to be thought-out and comprehensive. With carbon initiatives set out by state and regions it may be worth pulling renewable energy out of "tech & light manufacturing" to be its own category.
- None. Put it on the East where the infrastructure is already there.
- I think there should be a library on this side of 99 and that a focus should be making the area walkable like the other side of the highway all connects to downtown. This side of the highway feels excluded from what Sherwood has to offer. Repeat what you did on the other side.

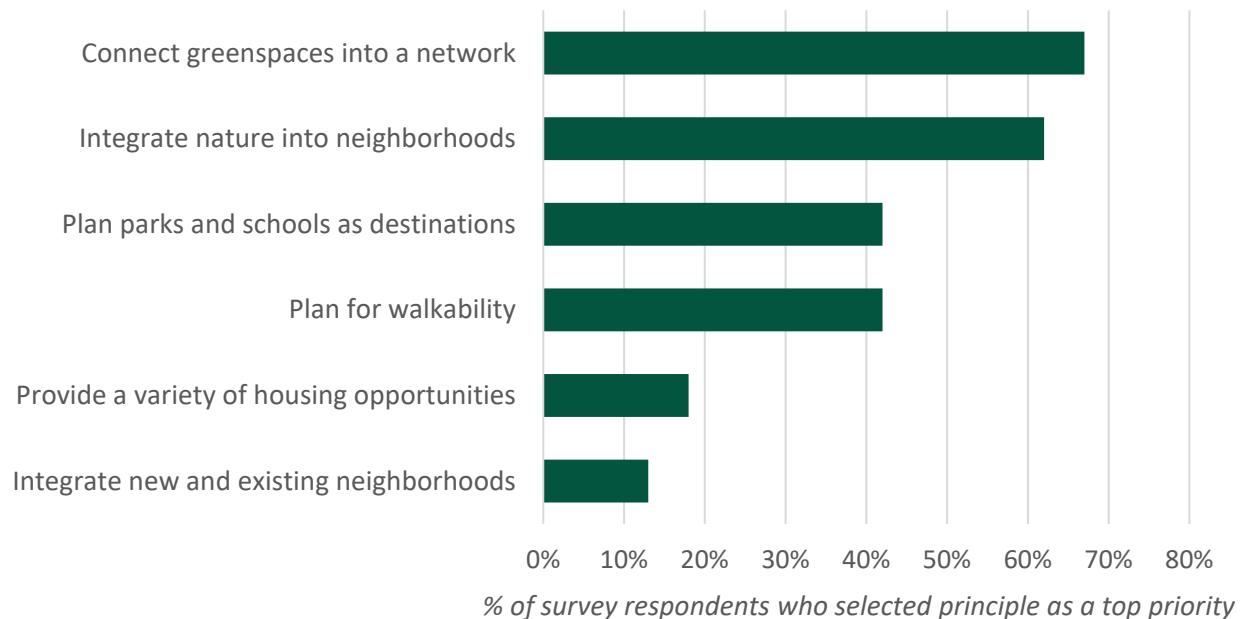
Is there anything else you would like to tell us about mixed employment in Sherwood West?

- See my Comment #1 above.
- The City needs to ultimately establish the right balance between local jobs and housing (and commercial) with the focus on limiting the length and number of daily trips now that many of us are working out of homes which appears to be the trend for the foreseeable future.
- Sherwood was a nice place to live as a "bedroom" community. Let's not bring a bunch of large industrial buildings to town. Support local business owners, even if they are smaller.
- it doesnt make sense at all
- Terrible idea
- Please build the trails that benefit existing residents FIRST.
- I can see the Kruger rd / Elwert rd circle traffic overload with area 3.
- Please stop building the 'strip mall' style mixed use business parks. They are soulless, and do not add to the beauty of our town.
- Maybe instead of looking for new mixed employment structures, the city would be better served working with consultants and developers to improve the existing business areas, be they strip malls, mini business parks that look tired and run down. Funny how reimagining what we already have can be so much more productive, And in the process, if the goal is to employ more city residents, get a commitment from these businesses that we help update their locations and in exchange they give preference to hiring locally.
- Not enough.

- Keep it green and visually appealing. We need clean air and solar powered buildings. No tall buildings or unsightly manufacturing, please. Low to moderate traffic is better.
- I feel like the big industrial parks are covered with all that are going in on Tualatin Sherwood rd.
- Please don't do it.
- Understand that most residential folks don't want business in their backyard, but without the business tax base their community suffers. The balance of easy to access businesses with keeping traffic low in neighborhoods is one of those key balance points that will be hard to maintain here. It looks like this plan may have a path to success here once we get further into transportation to see how roads are directed north/south.

GREAT NEIGHBORHOODS

Which great neighborhood principles are the most important to you?



Are there any other principles that you think are important to consider when planning new neighborhoods?

- Traffic congestion is a major concern. This development will create a terrible mess on the existing roads, which are already crowded. I live off of Edy Road near to the intersection with Elwert. There are already too many cars, driving way too fast, and more neighborhoods will mean a tremendous increase in road traffic. This is not good.
- Put the houses further apart. As close as they put the new ones together, they might as well be apartments or townhouses.
- Cul de sacs, wide streets, minimal street parking
- Affordability is vitally important and because developers always have to pass their costs onto the consumer, one important aspect of affordability is infrastructure costs. We do not want Sherwood

West to create spaces that are so upscale as to be unattainable financially. Affordability will drive diversity will enhance the lives of all who desire to make Sherwood West their home and work destinations.

- Yes, I would select Integrate nature into neighborhoods as well.
- On site parking for any apartments or townhouses, with guest parking too. Creekview Crossing residents use Handley for their parking. Cannery Row apartments use surrounding streets as their free parking. Sunfield Lakes residents use Century Blvd as their parking lot. At least one car garages and driveways big enough to park a car / SUV with out blocking sidewalks
- Impact on school crowding
- BIKING!
- NO HIGH DENSITY HOUSING. Focus primarily on single family dwelling. The traffic impact is terrible otherwise.
- plenty of travel lanes to get in and out of the neighborhoods to 99W and Tualatin Sherwood Rd
- The travel lanes that support the neighborhoods needs to be efficient and in good condition.
- Plan for them to be in other cities, not Sherwood. We have more than enough residents. The photos examples shown here are pretty much all tasteful and could be used for cities that need go grow. However how about we use these principles in reimagining and refreshing our existing dwellings? More is not necessarily better.
- Stick to single family residence as much as possible.
- Dont ruin the current property value, dont ruin the look and feel of neighborhoods, don't ruin the sense of connectedness with nature. That said, all of these do that. Every single one.
- A variety of housing opportunities, but the existing parts of Sherwood should be prioritized for conversion especially closer to facilities and transportation along Hwy 99.
- Maximize housing being close to schools so to minimize traffic issues. Be respectful of existing homesites.
- Stop new developments! We don't need them or want them. Once the country is erased, you can never get it back.
- Parking for anywhere that has multi family living. That it will not spill over into surrounding living which is a problem in other parts of Sherwood.
- No new neighborhoods!!!
- Traffic patterns
- Think about what the high density house will do to the countryside.
- There needs to be better, safer pedestrian crossings at multiple places on Edy and Elwert.
- Single story homes primarily for elderly would be welcome.

Think about the map of walkable neighborhood areas. Do these neighborhood areas look about right to you? Do you have any comments or suggestions?

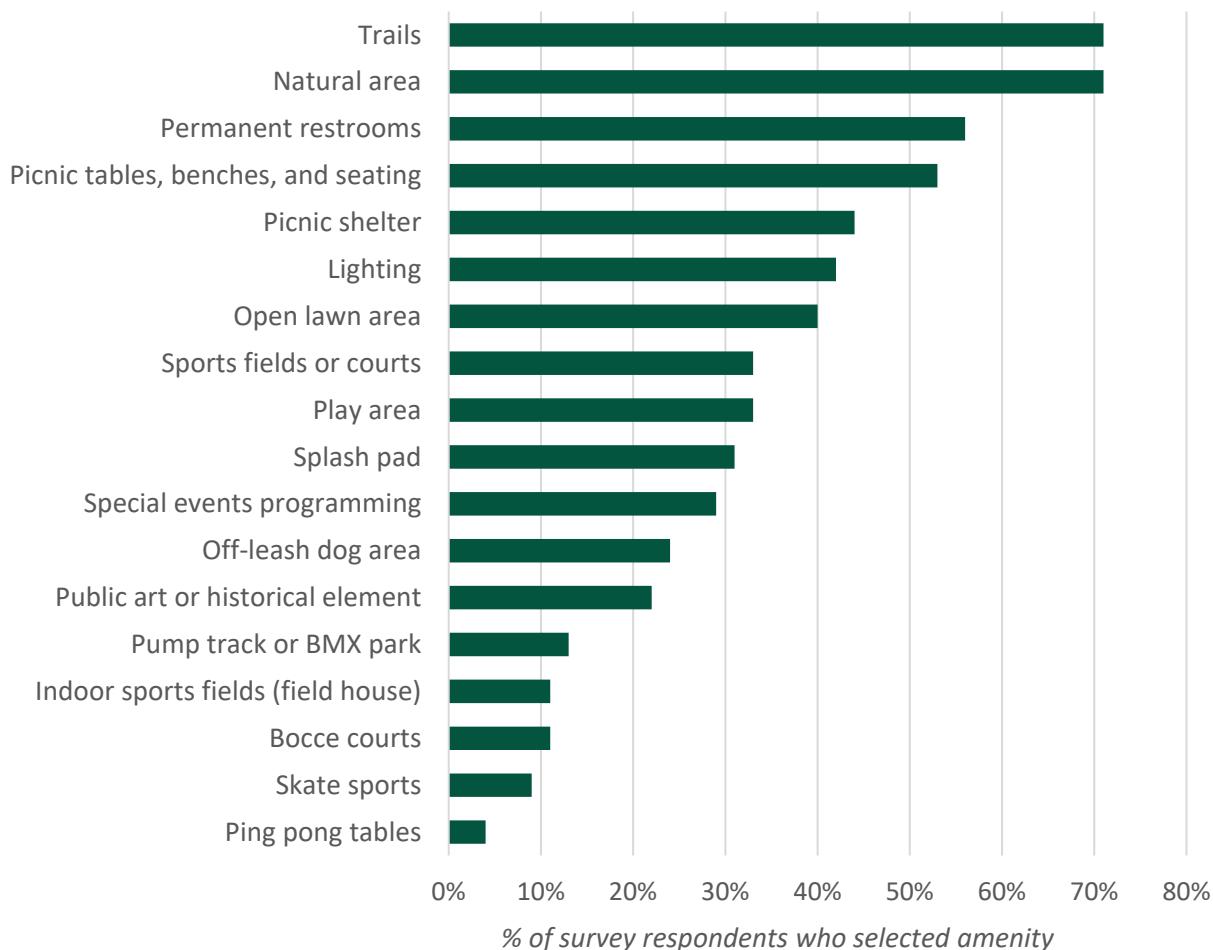
- Let's fully occupy, or even build up, existing land within Sherwood before expanding into this western area. Looking at item #4 below: Why does Sherwood need to grow? ""If you build it, they will come." This will prove true. The opposite also holds: Don't build and the town remains small - which I view as a good thing.
- Give kids more space to play in larger yards with houses further apart!
- Yes, related to the above statements, we notice that the above referenced maps are still showing the very expensive reconfiguration of the Elwert/Edy Road intersection and related configurations, which now appear to conceptually show a minimum of two bridges across Chicken Creek and one of its tributaries as well as an apparent east-west overpass (?) of Edy over Elwert. More to study and discuss and to comment on when we address transportation infrastructure in more detail. Improving the existing intersection with its existing natural resource crossings with the addition of ped/bike crossings will be less expensive and impactful on Chicken Creek and on affordability and neighborhoods and parks in that area. Please provide several alternative development scenarios for multi-modal transportation with real costs and impact analyses to each of the several alternatives and let the Sherwood community comment and decide which works best.
- they look pretty good
- Don't do it
- I am not familiar enough to offer specific insights.
- Need a plan for walking to commercial/retail, or revise the goals.
- I like this look alot.
- I have a hard time understanding what the goal is. I really want to be constructive but these are all just awful and short sighted and illogical.
- There should be a trail from Lebeau down the west side of the North Development Area. You could probably get BPA to move their transmission line to make that land more contiguous.
- Mixed feelings but overall concept looks reasonable.
- Don't do it. Leave the farms and nature and the existing large country residential plots.
- Good network of multiuse trails. Like the connection to schools and existing trails
- At the Intersection of Elwert and Edy the road (Edy) goes up steeply. there would be nobody walking that hill anyway. So it would be wasted to put anything there.
- I like the concept, but concerned about the reality of even more kids needing to cross or walk on roads that don't have sidewalks or safe crossing areas.
- Looks good.

What housing types do you think will be most important to build in Sherwood West's neighborhoods to help meet the City's goals related to housing?

Order below represents results of survey participants ranking types from most to least important

- 1.** Small Single-Family Detached
- 2.** Standard Single-Family Detached
- 3.** Cottage Cluster
- 4.** Townhouse
- 5.** Duplex
- 6.** Live-Work Unit
- 7.** Triplex
- 8.** Accessory Dwelling Unit (ADU)
- 9.** Courtyard Apartments
- 10.** Mixed Use Building
- 11.** Fourplex
- 12.** Apartments

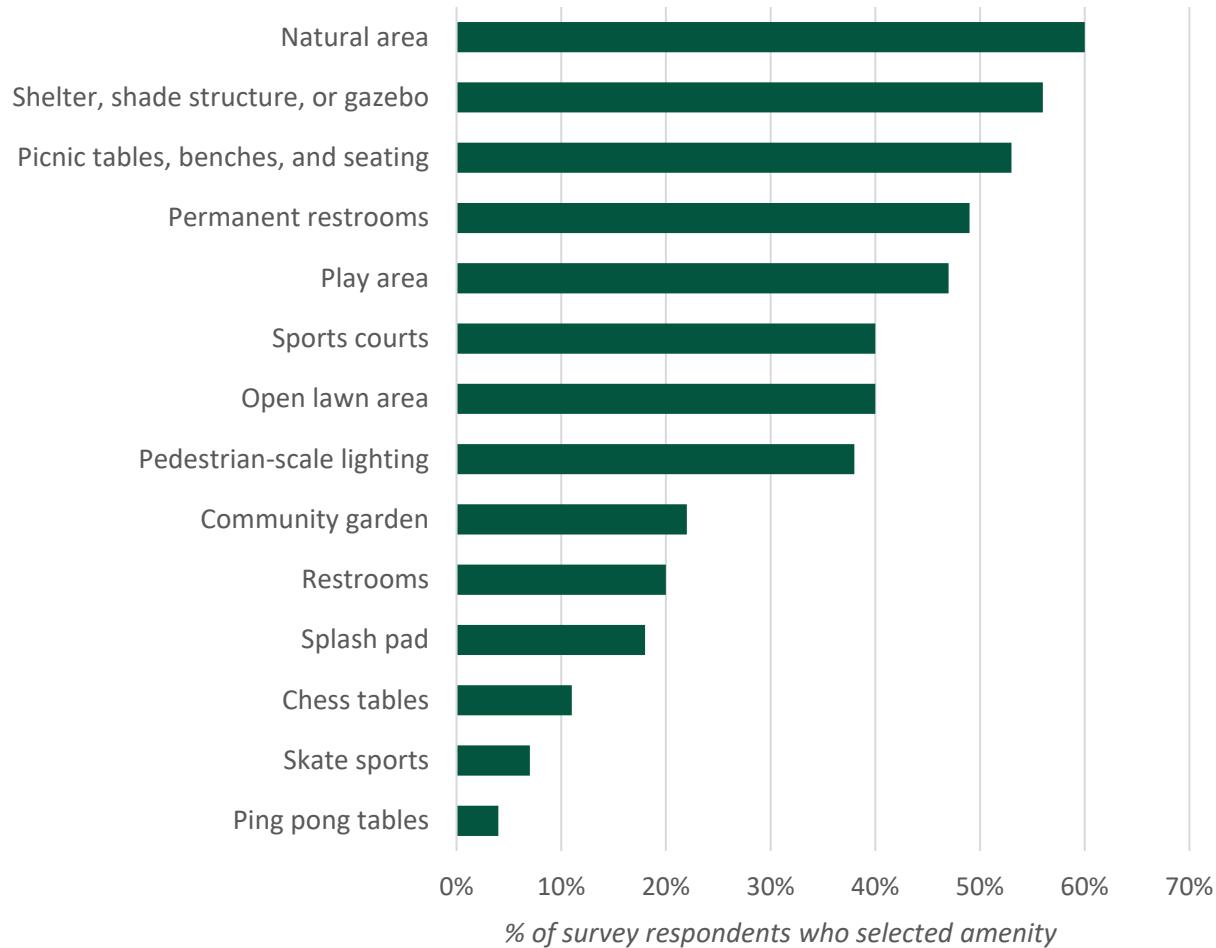
What types of activities and resources would you like to see at a future community park in Sherwood West?



Other:

- Pickle Ball, Par Course, Practice putting greens
- I would like to see nothing done on the west side. wrong place for it.

What types of resources would you like to see at future neighborhood parks in Sherwood West?



Other:

- Par Course, practice putting greens, pickle ball courts
- None. Parks invite the homeless to "camp"

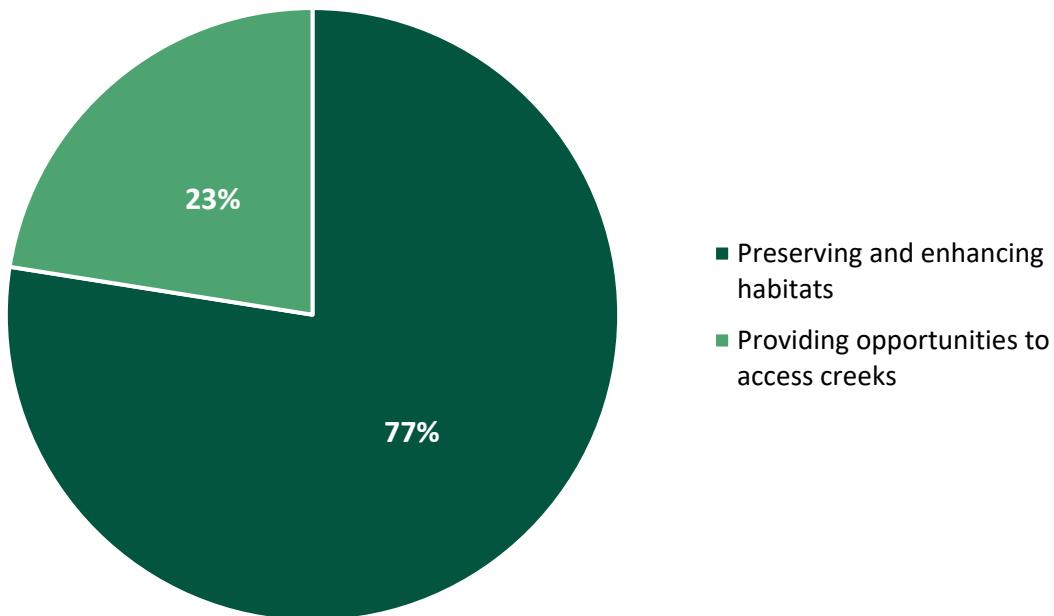
Is there anything else you'd like to tell us about creating great neighborhoods in Sherwood West?

- Please do not expand into the Sherwood West area at all!
- Please please please help muffle the sound of Roy Roger's and even Elwert and Edy.

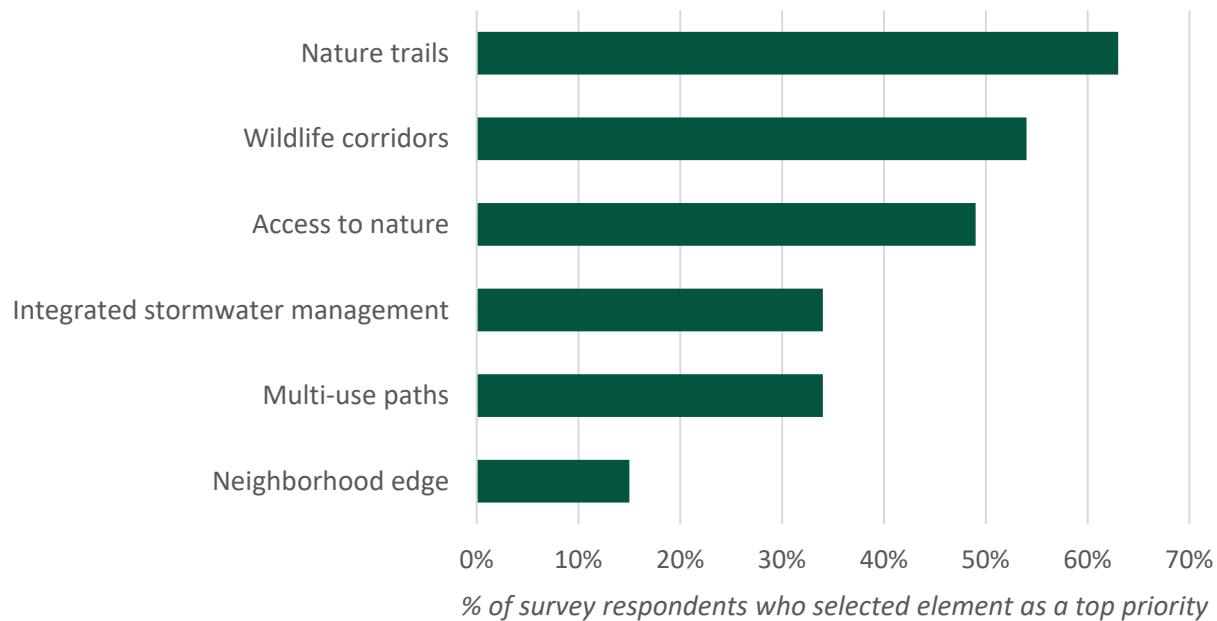
- Middle housing and attainable housing is a must. Better opportunities to purchase, Mixed neighborhoods are needed.
- Walkability and natural areas Sherwood and Joe Dills and his team have got down, but multi-modal connections between neighborhoods and all other uses in Sherwood West need to be carefully planned and safe for all.
- A variety of housing includes a variety of lot sizes. Setbacks need to be increased - house footprint to lot size is too small in Sherwood!
- Create areas for parks BEFORE planning for housing.
- Dont build them there. Sherwood West is a bad idea.
- I thought the plan showed there was enough land within existing Sherwood. I'll have to go look at it again.
- I wouldn't like to see any increased housing or parks in Sherwood West. Please don't do it.
- You said it here... the city does not have enough land to accommodate... so the question has been answered. No land! no building anything!
- Understand the housing report showing not enough land. I am tired of small lots with houses on top of each other. So if there is opportunity to have high density housing near the business sectors, but keep some larger (1/4, 1/3, 1/2 acre) lots on the edges to help blend from high density city centers to more open feel near the edges that blend with surrounding farmland
- Keep it on the east side where there is infrastructure.
- Many people who purchased homes on this side of 99 did so because of the open space. Please maintain open and green space.
- The type of housing ranking in this Survey DID NOT WORK! Apartments always showed up second and could not be changed.

CHICKEN CREEK GREENWAY

What do you think is most important: providing more opportunities to access the creek corridors, or preserving and enhancing creek corridor habitats?



Which greenway elements are most important to you?



In addition to Chicken Creek, are there any other natural areas in Sherwood West that you think should be protected as part of a greenspace network?

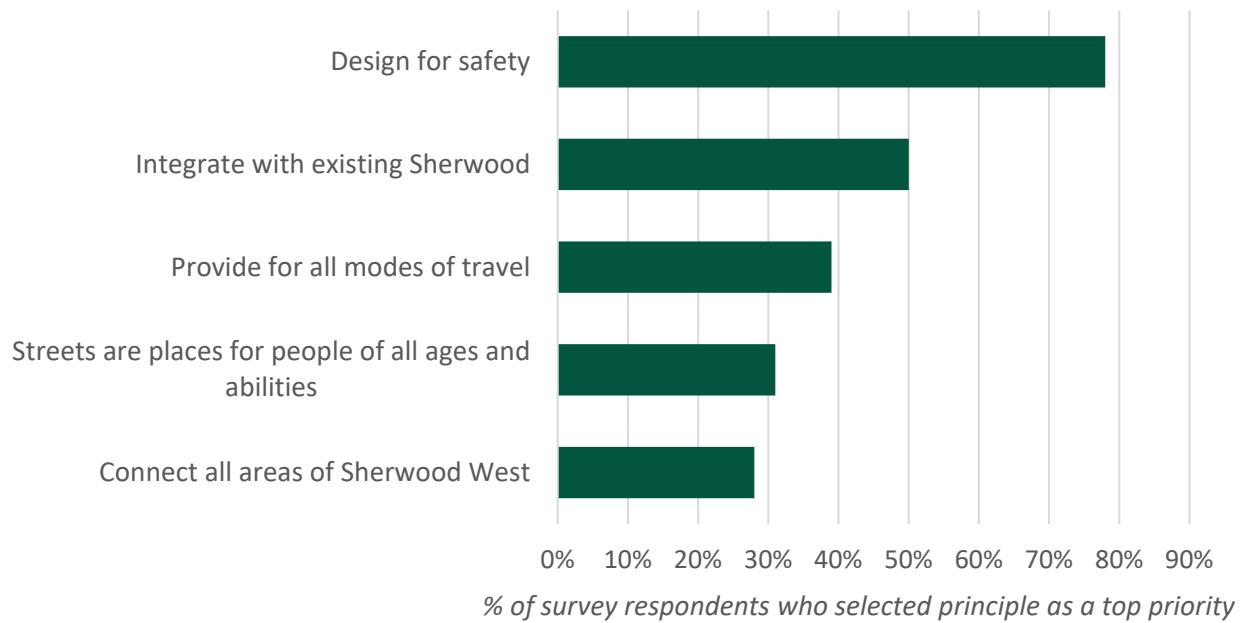
- As much of the forest as possible.
- No, great job!
- cedar creek
- No
- Sherwood is just a very sad story. Our family is looking to move out towards McMinnville. All you see everywhere in Sherwood is destruction. Tualatin Sherwood, every little piece of land going to development. And this shooting range... My god, this is ridiculous. It's just a little piece of red America. Oh well, I guess we had good memories while it lasted.
- Cedar creek
- This sounds good: "The Sherwood West Concept Plan offers an opportunity to preserve and enhance these natural corridors, provide wildlife crossings, incorporate stormwater management practices, and provide access to nature through a network of connected walking trails." But better would be to leave the land as is. The pictures provided above as models show how much "development" has replaced nature.
- All that are not yet developed
- Cedar and Goose Creaks
- Cedar and Goose Creeks
- the entire thing
- Existing habitat areas should not be fragmented. The continuity and contiguousness of the existing areas should be preserved and this aspect should be noted and be made a priority for preservation. It doesn't matter if you have 100 acres of green space if the are all 1/4 acre parcels that are not interconnected. The greenway is not just for humans it is also a path for wildlife.
- No.
- I think all of the existing natural areas should remain untouched by your plan.
- Yes all of it should be protected... don't touch anything!
- North of the Chicken Creek and Cedar Creek intersection, inside of the proposed business zone. I'm not proposing full protection here, but some element of drainage retention within the business park where an element of nature makes a good gathering place for lunchtime walks and having your lunch outdoors by a nature pond that helps filter drainage from the industrial area before flowing into Chicken/Cedar creeks. Similar comment at Goose Creek - not full protection but some element of nature in the business park
- the whole west side around Chicken creek
- Cedar Creek pathway constructed from Stella Olson Park to chicken creek with bike and pedestrian access

Is there anything else you would like to tell us about Chicken Creek Greenway or other greenspaces in Sherwood West?

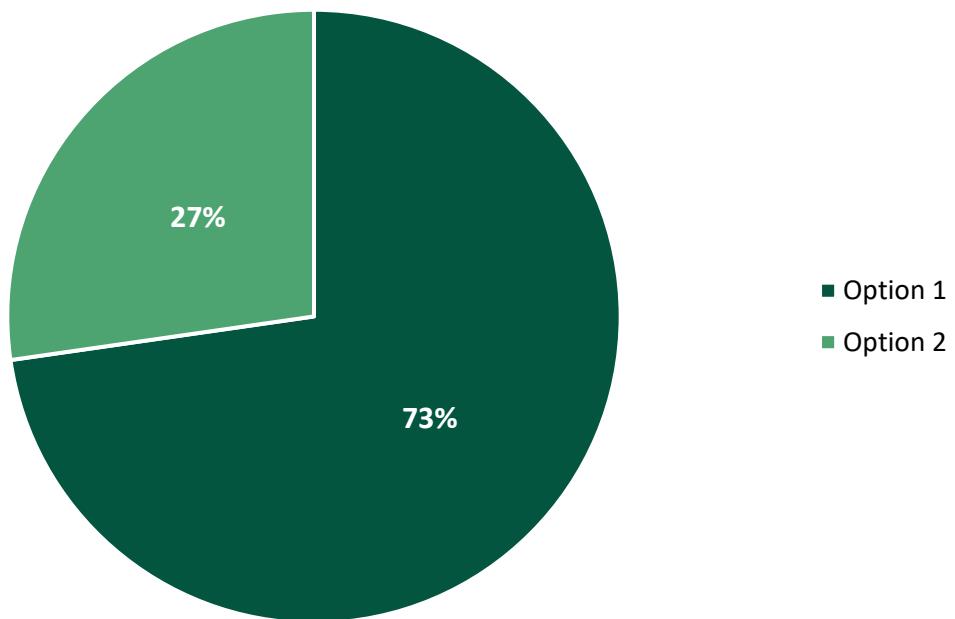
- This is where my house is. Keep the area as it is; keep it safe for existing homes and existing wildlife.
- As we move into the Community Planning Stage for Sherwood West, the less impactful balance will be required between the affordable and efficient provision of the gravity sanitary and storm sewer systems and the natural resources areas, which typically recover quickly with careful regrading and replanting of indigenous native plant species. These public systems along with water and transportation too should be carefully planned and developed to keep costs down and development affordable which results in enhancing the general overarching goal of affordability for all residents and businesses. If what we build is too expensive, then the goal of diversity of development and opportunity for all will suffer.
- this is a very important part of the livability of Sherwood and i support this part of the plan
- I live in the Sherwood school district, on Baker Road outside of the city limits. The sprawl north of Sherwood is discouraging and it is discouraging that Sherwood's elected leaders want more of the same here.
- I like all of the photo examples that appear here. The more we can do to provide for this, the better
- Dont build near it.
- Good job with the keeping the road plan from 2016 that minimized impacts to the creek and slows traffic on Elwert.
- Please don't mess up a good thing. It is great as it is, please leave it be.
- Sherwood does not want to be Beaverton or like any other town..
- Have you looked or walked on the Fanno creek trail? it is filled with homeless camps. it's not even safe to walk this trail anymore. is that what you want for Sherwood?
- Connect Cedar Creek trail

LIVABLE AND CONNECTED STREETS

Which livable & connected streets principles are the most important to you?



Which of the two street options do you think will best serve Sherwood West?



Looking at the rest of the street plan, are there any specific roads or intersections you would like to comment on?

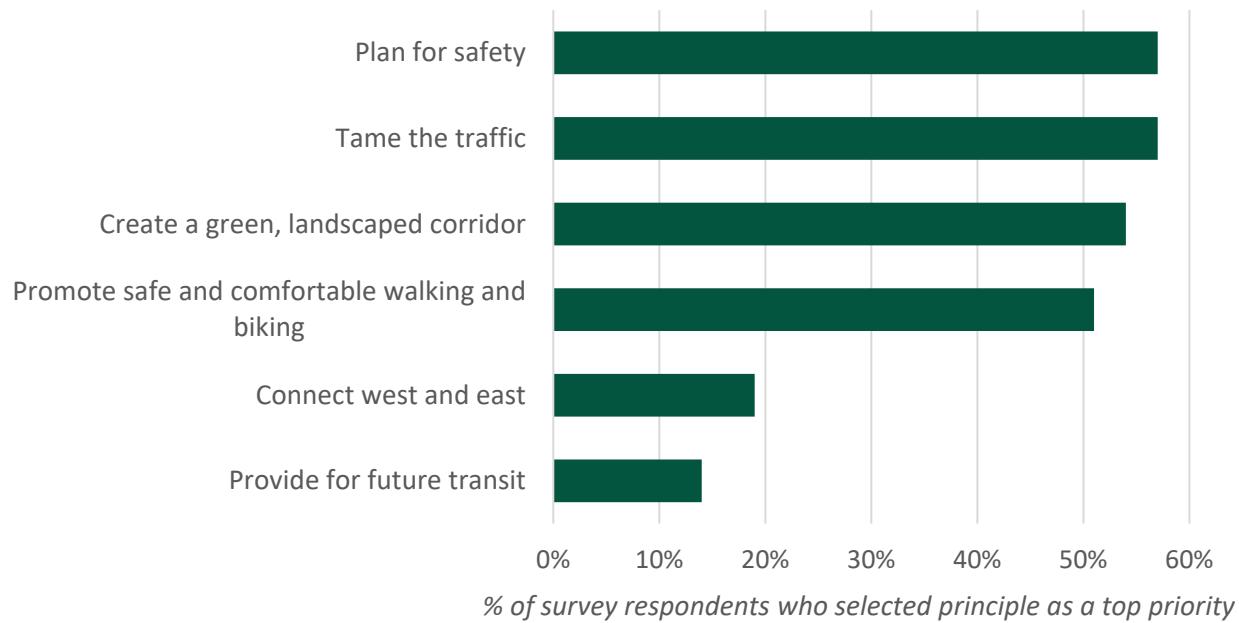
- Edy & Elwert intersection, in its current form, is extremely dangerous. Option 1 is far better than Option 2. Also, Edy Road should be repaved. The current asphalt is rough and creates very loud road noise. A smoother surface is needed for this road.
- We like the idea of developing as many of the new minor collector roads as shown linking the neighborhoods serving the north side of Area 3, the west sides of Areas 3 and 4, and the south side of Area 5 as Sunset Blvd type street section (treed with planter strip and adequate left turn refuges. With the expectation that significant traffic will continue to be a problem for all existing major collectors (Elwert and Edy as well as Kruger and Chapman), they should all be developed as generous ROW width boulevards with center planter strips and two travel lanes both directions with generous left and right turn refuges, maybe including Haide to the rear of the HS and the final approach to 99W on Chapman. Obviously, Sherwood working with the County will be generous on the arterials of Roy Rogers and Scholls Sherwood Roads. We want to avoid the problems associated with Tualatin Sherwood Road when originally planned and developed.
- There needs to be a light at Chapman and 99
- Edy and Elwart intersection. Needs to be rerouted for safety.
- Elwert Road needs to be upgraded so that it is no longer seen as a Sherwood bypass
- No, as I have not spent any significant amount of time in the area at question.
- If this plan is developed, the current Edy Road will become the primary East/West traffic path. Edy Road is not anywhere near capable of handling the load that will transpire. It should get a similar makeover as anticipated for Elwert, namely 3 lanes including a turn lane, sidewalks and bike paths on both sides, and the same level of amenities as exist on Sunset Blvd.
- Option 2 destroys my home/property. It would be devastating for me and my family to be forced to move from our home because you would build a road right through it. I am at 16365 SW Sherwood road. McConnell family.
- Brookman - Chapman Road will be required to have a stop light controlled intersection.
- Elwert is going to at least quadruple in usage if you build sherwood west. Go ahead and make it at least as busy as Tualatin Sherwood/Roy Rogers. If you go ahead with this plan, it'll need to be 4 lanes.
- I'd have to spend a lot more time to study this. Trusting that the people on the CAC did that.
- Does Option 2 keep Elwert two lanes and no turning lanes?
- What are you planning to do with all of the existing homeowners in that space? People have farms, vineyards, stables, and homes that have been around for years. It is unconscionable to displace these residents.
- Leave them all alone. Enough is enough
- There should be a roundabout at the Scholls-Sherwood, Lebeau, Elwert Intersection.

Is there anything else you would like to tell us about livable and connected streets in Sherwood West?

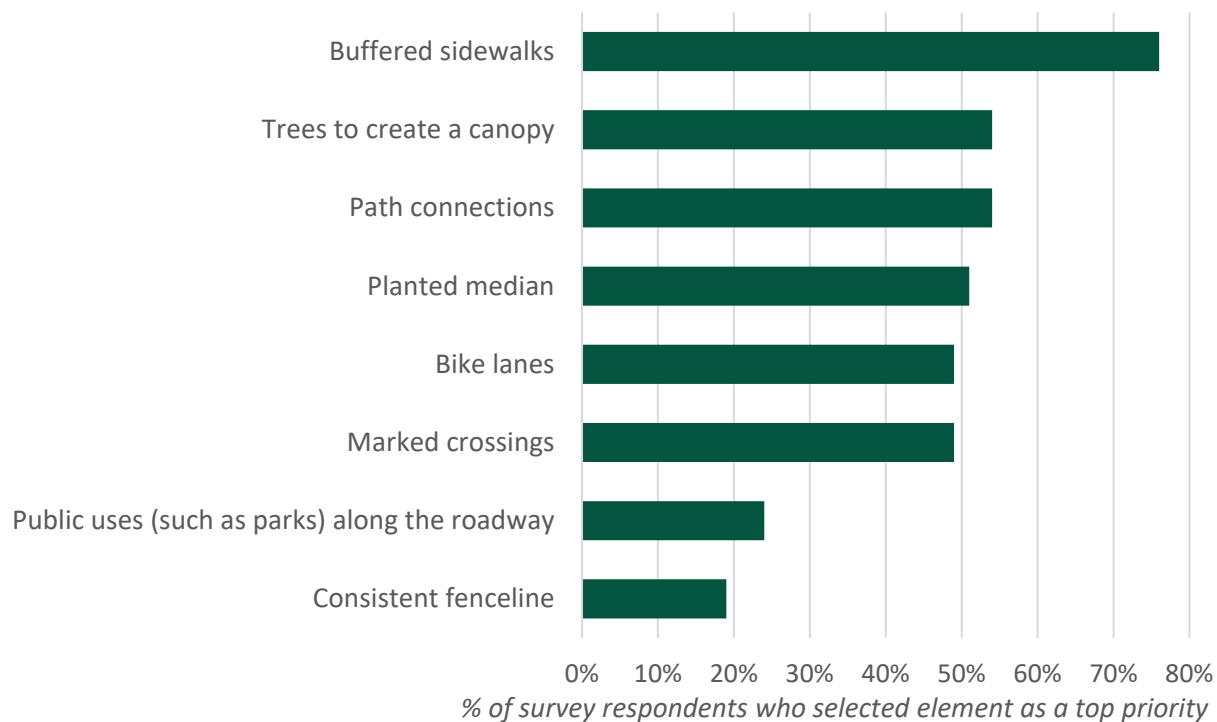
- the need to be wide enough for traffic and parking
- I worry about the increased traffic in general. None of the existing roads are designed to handle increased traffic. Edy and Elwert are already over used today. I cannot imagine the quality of life (I life off of Edy road in the Oregon Trail HOA neighborhood) if this Sherwood West development goes forward. I will probably sell (at a nice profit!) and move away - far away.
- Yes, but only as it relates to site specific development which can be addressed at the Community Planning level of analysis, which we expect will occur soon after this Re-Look process.
- i dont think industrial buildings as those that seem to be contemplated here and "livable neighborhoods' can be in the same concept. It doesn't make sense
- more bike and pedestrian friendly
- Will Elwert rd become bogged down with stops, or continue thru ?
- Not just "mitigating impacts of regional through-traffic' but mitigating the mentality that we can continue to add local traffic onto our streets without it having a negative effect on the quality of life for our existing residents. To think otherwise is to deny reality.
- Please go with option 1. My wife and I want to retire in our current home and option 2 would force us out.
- Roy Rogers is going to become a disaster.
- None of these are really viable unless there is massive street expansion
- Provide access from HWY 99 to Wine Country Gateway development with hospitality, food and beverage, retail, etc.
- Please consider cars. We aren't giving them up, so please accommodate for them
- Plan 1 eliminates access to several properties.
- Provide pedestrian and bike paths.
- Scrap the Sherwood West plan. It will mess up a beautiful area that people don't want changed.
- Very strong preference for #1
- the intersection of Elwert and Edy is a wet land. In the last year a traffic light has been installed and I have personally had two close calls where people run the red light on Elwert. There will be a fatality here at this intersection and putting more housing is only going to make it worse.

ELWERT ROAD DESIGN CONCEPT

Which of the following principles are the most important to you regarding the future design of SW Elwert Road?



Which of the design elements would you most want to see on SW Elwert Road?



Other:

- you have trees to create a canopy. we have that now before you destroy it.
- Fewer cars than we already have. The impact we see today as a result of the new high school is already a mess.

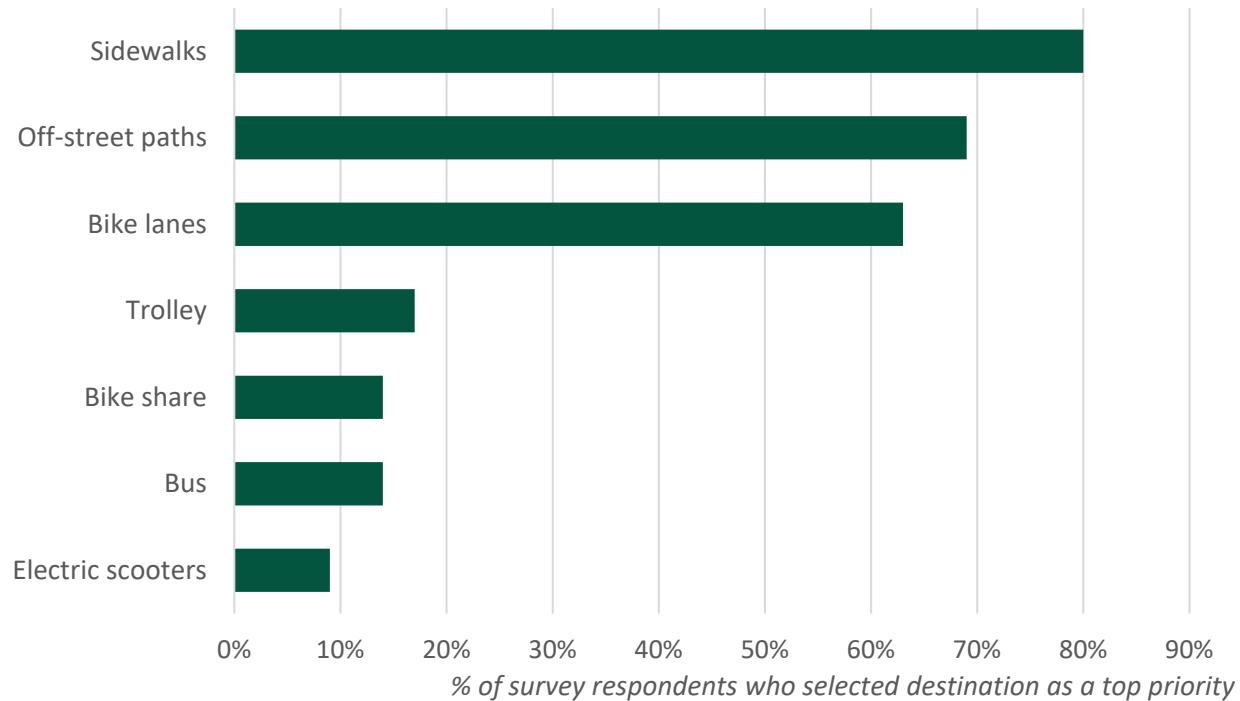
Is there anything else you would like to tell us about the design of SW Elwert Road?

- Elwert is a rural road at present. It would be nice to keep it that way.
- As above, Option 2 should be the new preferred alternative based on affordability issues and less impact on the existing Chicken Creek natural resource areas. Redeveloping the existing Elwert and Edy intersection can be done in a manner that could even provide for a larger roundabout located in the NE and/or SW quadrant which appears to be partially developed and farmed upland areas to protect the existing riparian and natural habitat areas along the Creek. Enhanced wildlife crossings will have to be developed in those areas to which wildlife has already been displaced by the existing traffic problems. Developing wildlife crossings and mitigating the impacts of Option 2 should be significantly more affordable than the substantial realignment and infrastructure improvements planned for Option 1. Given the current state of affairs in our City, State and Country, we owe it to our citizens to plan for efficient and cost effective development at every level.
- Edy and Elwart's intersection needs to be moved west.
- need to connect pedestrian/bike the rest of the way to Edy SOON. it is used and is so much more dangerous now with increased HS traffic.
- it carries about 9,000 average daily trips today and is forecast to carry 14,000 average daily trips in 2035". In traffic analysis, the effect of moving from 9 to 14 K trips will be more like tripling the congestion. I think only a minority of people looking at these options realize that the congestion grows exponentially, not linearly. And the more lanes we build, the more cars will be attracted to use those lanes. It is a vicious cycle, and if we do not realize that upfront, we will continue to spend more and more on street widening projects and just get more and more frustrated with the results. The same treatment needs to be applied to Edy Road.
- Its going to have to expand massively. The traffic is so bad on 99 and Roy Rogers, if you build Sherwood West you're going to have at least 14,000 visitors right away (not 2035) because you create a faster way to get through. right now its more difficult for people to access because its single lane but when you make it the ONLY choice for more people, its going to be a mess.
- Does it remain only two lanes with mini minimal turning lanes?
- Connect into regional bike paths
- There are high-voltage towers and lines that run in that area. It is not suitable to place homes near them. Please don't build in Sherwood West - I'm begging you.
- With no further growth is fine the way it is so nothing needs to be done.
- Why do you have pictures here that are over a year old? The intersection has a traffic signal light at it now. Again get out of the office and look at what is existing.
- Traffic circles work

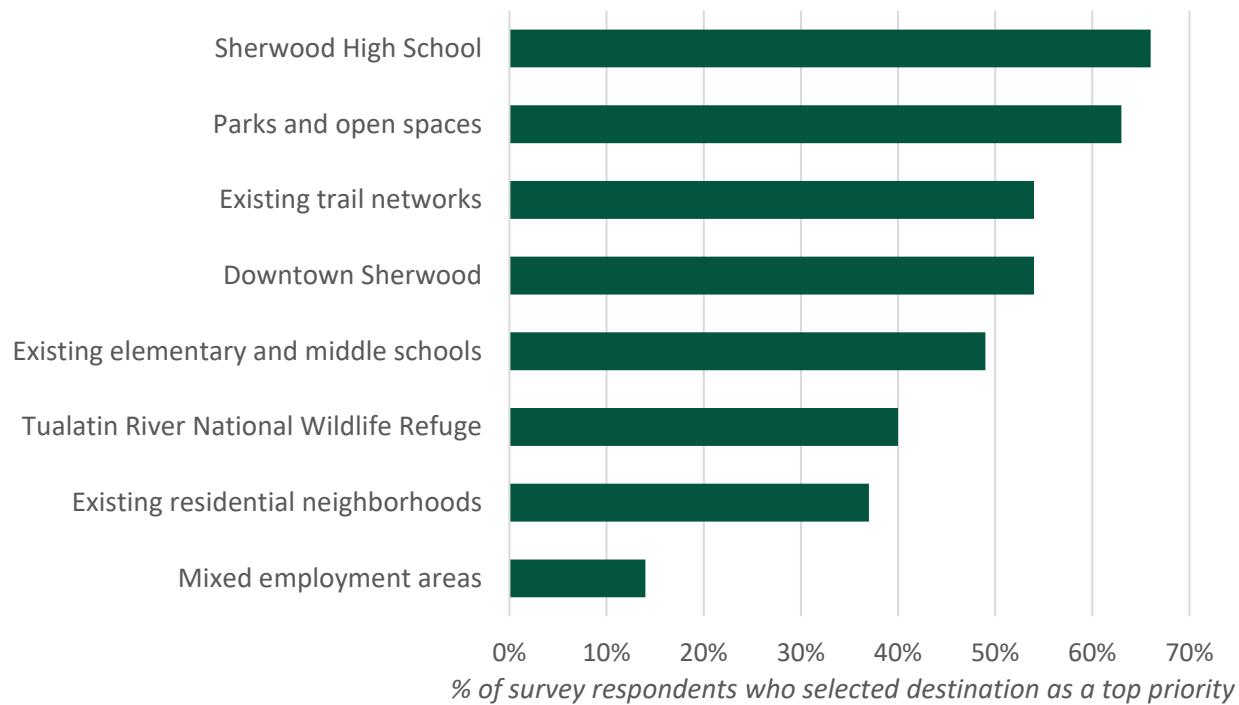
- Better foot paths to the High School - over passes potentially so traffic is not impaired and can accommodate the high influx and exodus of traffic to and from the High School.

ACTIVE TRANSPORTATION

What destinations do you think are the most important to connect Sherwood West's future neighborhoods to by walking and biking?



What types of active transportation infrastructure or programs would you like to see in Sherwood West?



Other:

- There are no bike lanes all the way up Edy and it is heavily travelled by bikes. someone is going to get hit here eventually.

Is there anything else you would like to tell us about active transportation in Sherwood West?

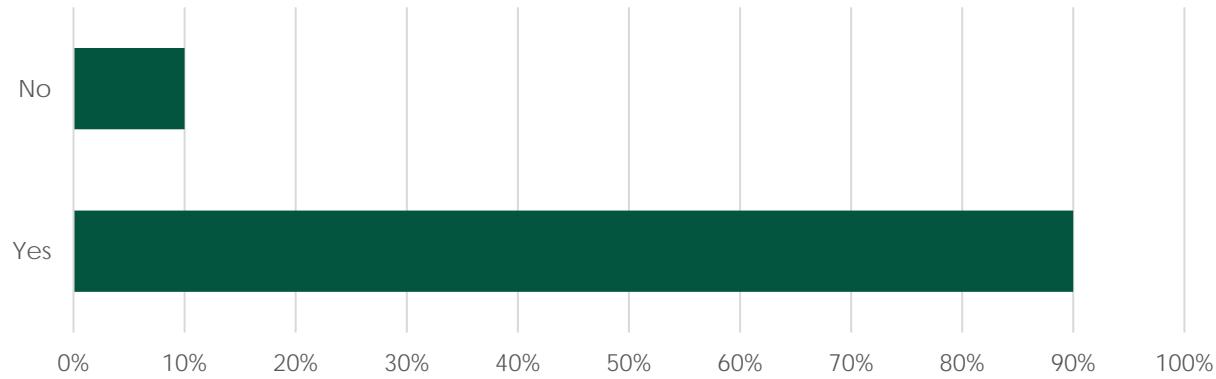
- We like the idea of the Chicken Creek Greenway and active transportation and trail system as conceptually planned. We like the idea of affordable bus service through Sherwood West and believe that the Elwert/Edy Option 2 plan with roundabout in upland areas in the SW and/or NE of that intersection would provide the best and most direct transit service between the new employment areas and neighborhoods, connecting to 99W and Downtown and existing neighborhoods.
- Transportation here has to be about safety, families and kids
- Address the 99w traffic that cuts thru Elwert to Roy Rodgers rd. Also traffic that uses Sunset as a bypass around the 'six corners' intersection.
- I'm absolutely against bus, shared bikes and scooters. Especially a bus on sunset or going through Woodhaven. It will ruin the quality of life for all that live off of it. Scooters have been a disaster in Portland. It's asking for trouble. I don't want bikes and scooters tossed and left sitting wherever. I'd

like to keep a more urban/suburban feel. Please don't open us up to being crowded like Beaverton and Portland.

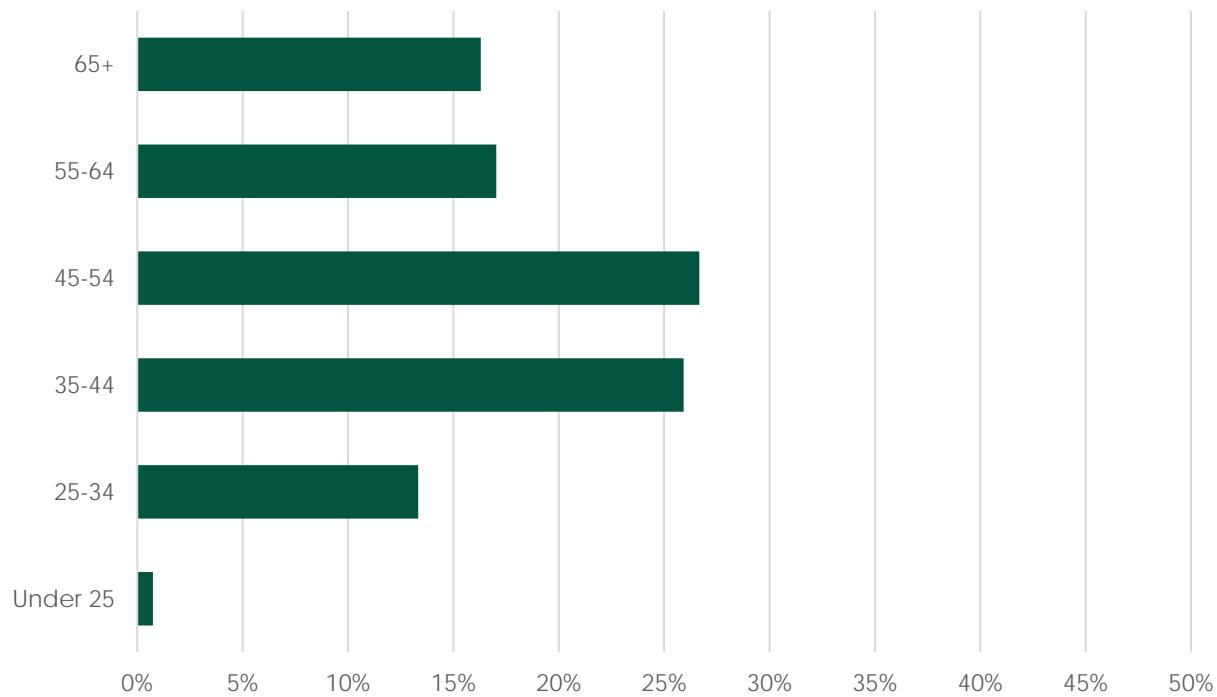
- Connect Sherwood to regional bike paths. I would like to safely bike across Sherwood but being able to safely connect to other communities is important too.
- There are better places to bike and walk. I don't want the environment changed to accommodate bikers, pedestrians, more homes, and businesses. There are plenty of other options, and we don't need any more residential construction in Sherwood. Period.
- No one is asking for Sherwood to grow except for the money hungry developers and builders and if it's the Mayor too. We'll
- Are off-street Paths (multiuse- pedestrian & bike), if so I like that more than bike lanes on the roads. Sherwood has many young families and having the ability for small children to ride away from the road with parents and older siblings is important for supporting the family friendly draw of Sherwood.
- with all the upgrades to the roads that are needed who is going to pay for it? Not fair to make the existing community pay for these upgrades to the roads that are just fine for our use now. if they develop a ton of houses make the developer pay for the infrastructure upgrades.
- Please do not put electric scooters in. They have not legitimate purpose and we will just have scooters strewn about this side of town.
- There should be a trail that connects further up Lebeau at the northwest corner.

Survey Respondent Demographics

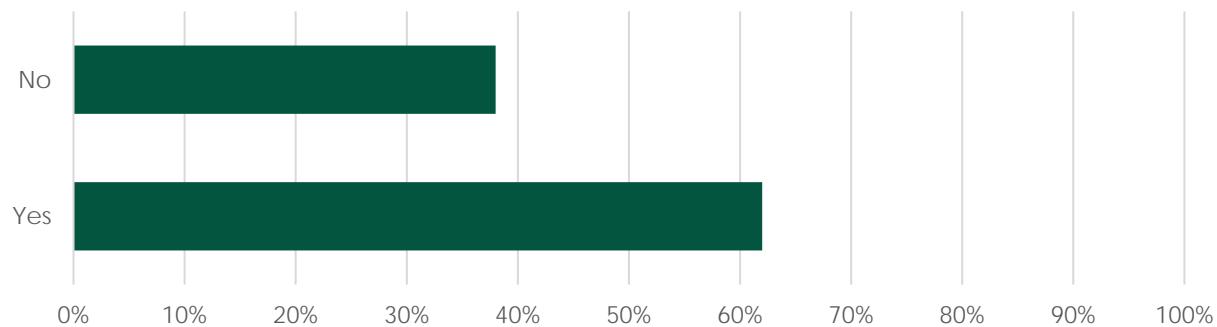
Are you a resident of Sherwood?



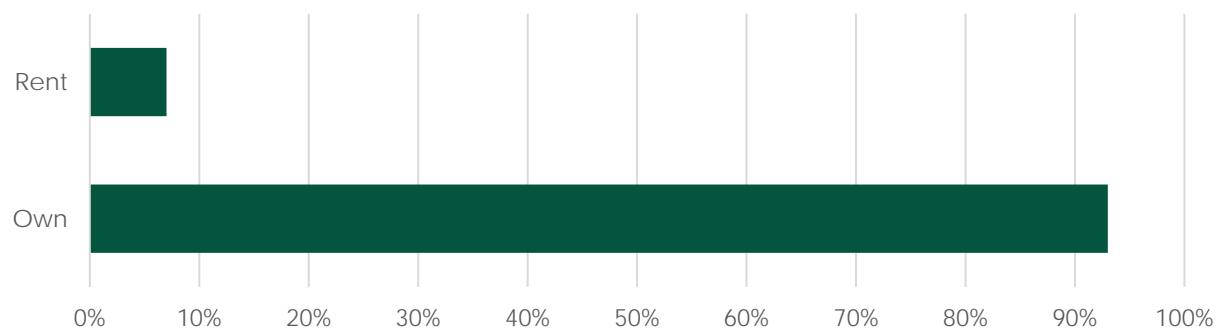
What is your age?



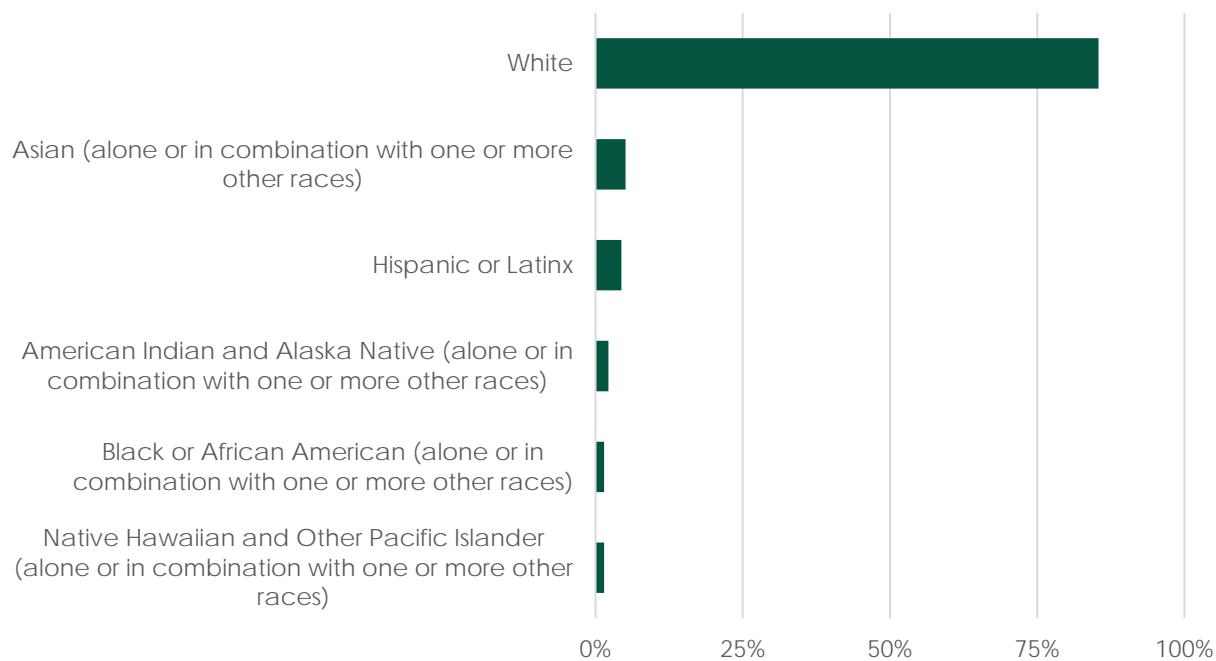
Are there children in your household?



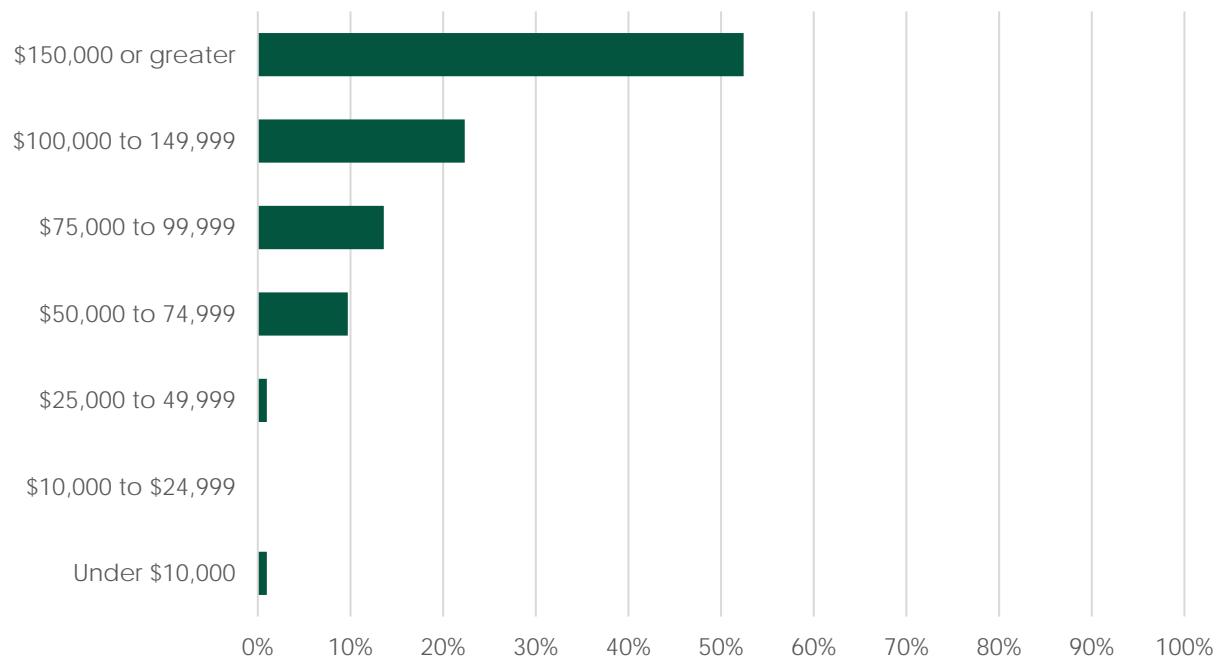
Do you rent or own your home?



How do you identify your race or ethnicity?



What is your annual household income?



APPENDIX E

Open House #2 and Survey Summary



OPEN HOUSE #2 SUMMARY

TO: Sherwood West Community Advisory Committee and Technical Advisory Committee
FROM: Sherwood West Project Team
DATE: November 10, 2022

Introduction

This memorandum provides a summary of the results from the Sherwood West Concept Plan Open House #2, which included both in-person and online participation options.

Open House

The in-person open house took place at Ridges Elementary School on October 20, 2022, from 5:30-7:30 PM. The open house was advertised through a mailed postcard to all Sherwood West property owners, the project's interested parties email list, all City boards and commissions email lists, the City's utility email billing list, the City's social media accounts (Facebook, Twitter, and Nextdoor), and a printed flyer and the City's reader board. A total of 60 people signed in at the event, and an additional 20 to 30 people attended without signing in.

The open house provided an opportunity for attendees to review presentation boards and other information and ask questions of the project team. The presentation boards provided the following information:

- **Background and Overview** – Project purpose, vision/goals, and timeline.
- **Plan Concepts** – These boards summarized concepts related to trails, the Chicken Creek Greenway, Elwert Road design, housing choices, and mixed employment areas.
- **Land Use Alternatives** – These boards provided information about three alternative ways that land uses could be arranged in Sherwood West. The alternatives were presented and compared by subdistrict—North, Far West, West, and Southwest.
- **Transportation Concepts** – These boards provided a map and information about several key transportation improvements that are being studied through the Concept Plan Re-Look process.

Copies of the Land Use Alternatives posters were also placed on tables and attendees were encouraged to rank the alternatives in order of preference by placing dot stickers (labeled 1, 2, and 3). Participants could also write comments on the posters. See Attachment A for a summary and photos of the results of this exercise. Conclusions from the results of this activity are as follows:

- North District – Alternatives 1 and 2 are tied for most 1st choice votes; however Alternative 1 has more 2nd choice votes.
- Far West District – Alternative 1 has most support.

- West District – Alternative 1 has most support.
- Southwest District – Alternative 2 has most support.

In addition, hard copy questionnaires provided another opportunity to weigh in on the land use alternatives and transportation concepts. The questionnaire asked the same questions as in the online survey (see below). Four questionnaires were submitted—see Attachment B.

Online Open House / Survey

An Online Open House provided similar information as was presented at the in-person open house—it is still available online at this link: <https://arcg.is/044vDW>. Because of the breadth of information covered in the open house, participants were invited to select and explore any topics that interested them from a menu of pages. The open house also included a link to an online survey, which was available from October 20 through November 3, 2022. A link to the Online Open House was posted to the project website and promoted through the same digital outlets as the in-person open house. The survey received a total of 104 responses.

The main purpose of the survey was to solicit input on the three land use alternatives. The survey presented information about each alternative and, for each district, asked respondents to rank them in order of preference (or to select “none of the above”). For each district, respondents were also asked:

- What do you like in the alternatives?
- What do you not like in the alternatives, or what would you change?
- If you selected “None of the above”, please tell us why and what you think the long term plan should be for this area.

The survey then presented a “Bonus Topic” of Key Transportation Improvements Under Study--similar to what was presented at the in-person open house. The five potential transportation improvements include:

- Elwert Design Concept
- Elwert Realignment
- Overpass Connection to Brookman Area
- Pedestrian Overcrossing
- Conceptual North-South Connector

For each improvement concept, the survey asked if respondents had any comments or questions.

Lastly, the survey asked a set of demographic questions to get a sense of who took the survey.

Survey Results – Land Use Alternatives

Below are the results from respondents' ranking of land use alternatives for each district. The first, more detailed, chart indicates what percentage of respondents ranked each alternative as Rank 1, 2, 3, or 4. The second chart indicates a weighted average score for each selection—these charts give a sense of which alternatives were generally favored over others.

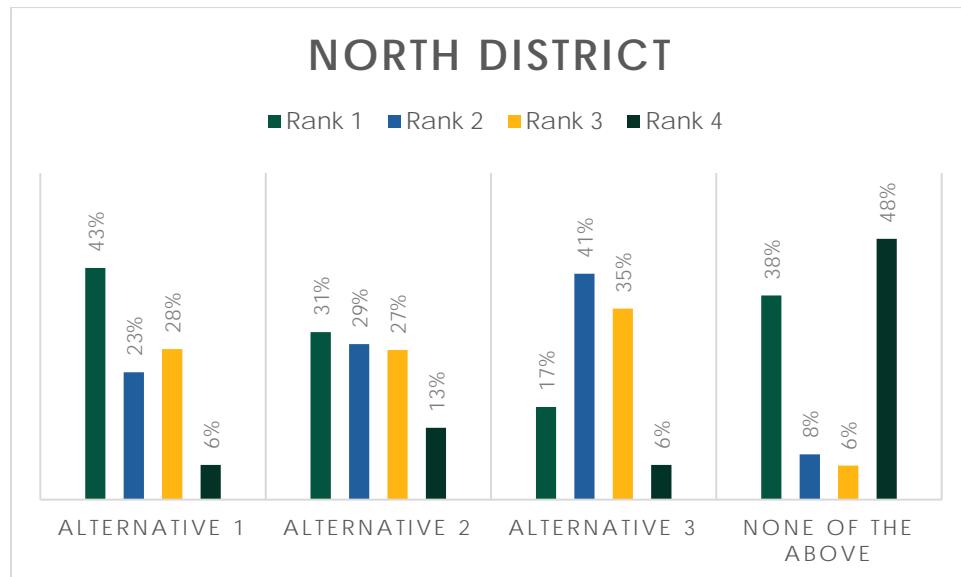
Following each chart is a summary of the key themes from the written responses (what did you like/not like, etc.). A full survey report with all individual written responses is included as Attachment C.

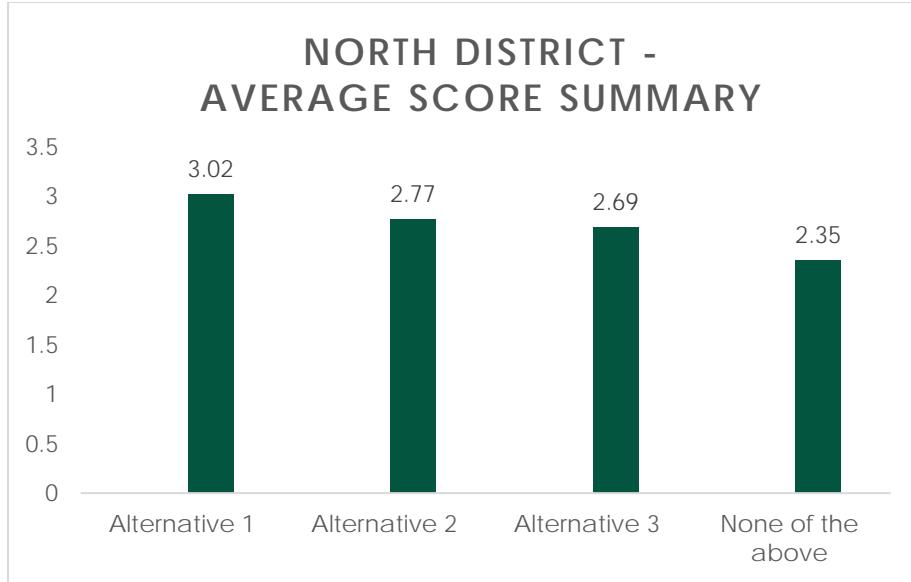
[NOTE: This is not a scientific survey. The online open house was intended as an additional way for people to get information and participate, but it does not reflect a representative sample of Sherwood resident's opinions about Sherwood West.]

NORTH DISTRICT

If the City were to choose to grow into the North District in the future, how should the Concept Plan guide that growth? Rank your preferences among the three land use alternatives for the North District. (If you do not like any of the alternatives, rank "none of the above" as #1.)

[102 answered; 2 skipped]





Themes from Written Responses:

Likes:

- Parks
 - Some specifically mentioned parks at Edy Rd
 - Greenspace around Chicken Creek
 - Parks near multi-family
- Employment focus
 - Jobs compatible to Sherwood for people to live and work in community
 - Employment on the edge near transportation corridors (Scholls Sherwood/Roy Rogers)
- Housing
 - Medium density housing/multi-family near employment
 - Keeping employment buffered from housing
 - Good balance of housing and employment/commercial uses
 - Some specifically mentioned Alternative 2 best mix of uses
 - Cottage clusters near Chicken Creek

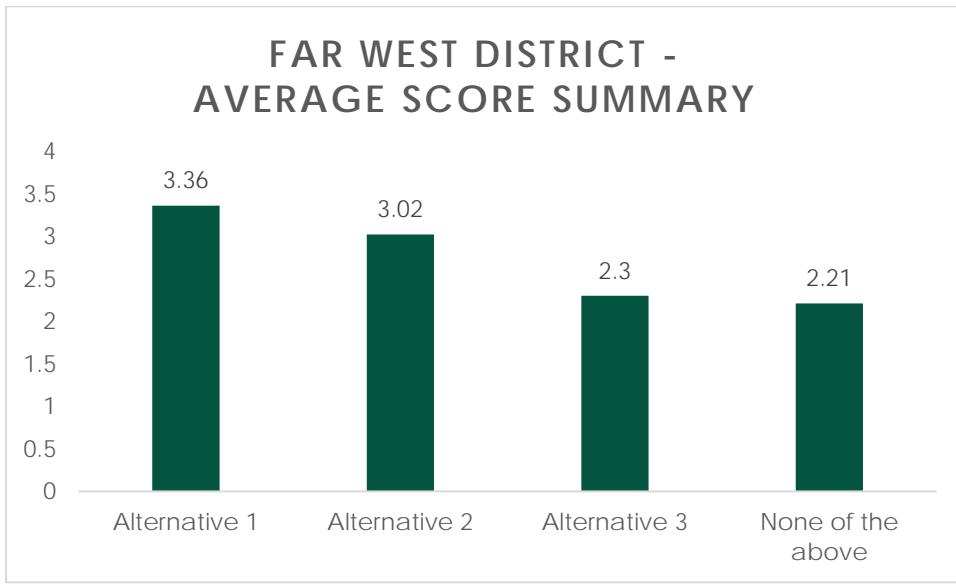
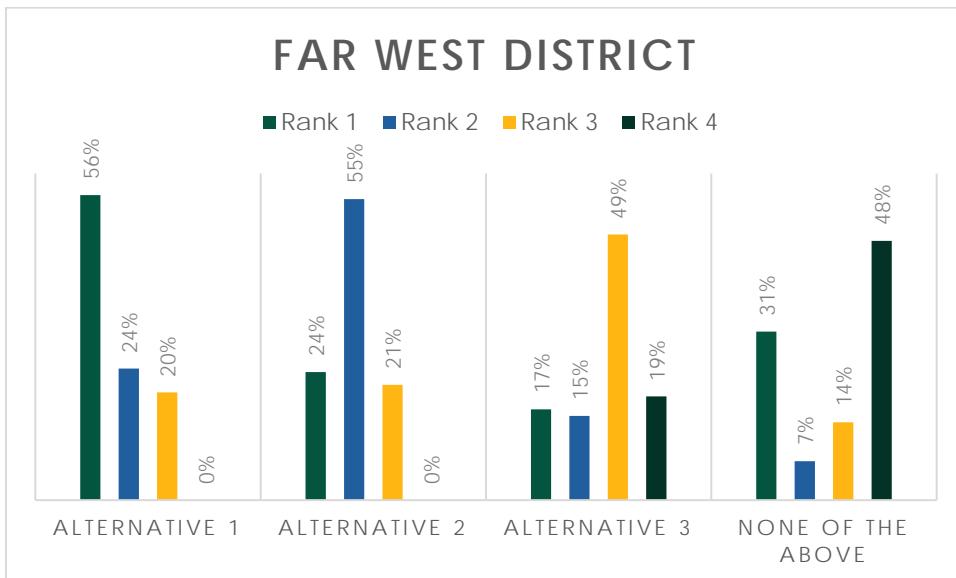
Changes:

- Area too focused on employment
- Employment near Chicken Creek
- Medium density housing near Edy/Elwert intersection – The amount of traffic existing on Edy/Elwert
- Place housing east of Elwert on Edy near existing subdivisions (Oregon Trail, Mandel Farms)
- Hybrid of Alternative 1 and 2
- Traffic congestion on roadways with new development

FAR WEST DISTRICT

If the City were to choose to grow into the Far West District in the future, how should the Concept Plan guide that growth? Rank your preferences among the three land use alternatives for the Far West District. (If you do not like any of the alternatives, rank "none of the above" as #1.)

[98 answered; 6 skipped]



Themes from Written Responses:

Likes:

- Parks
 - Balance of open space and housing

- Access and protection of the Chicken Creek Corridor
- Parks in neighborhoods and access to trails
- Housing
 - Low and Medium density housing
 - Cottage cluster housing

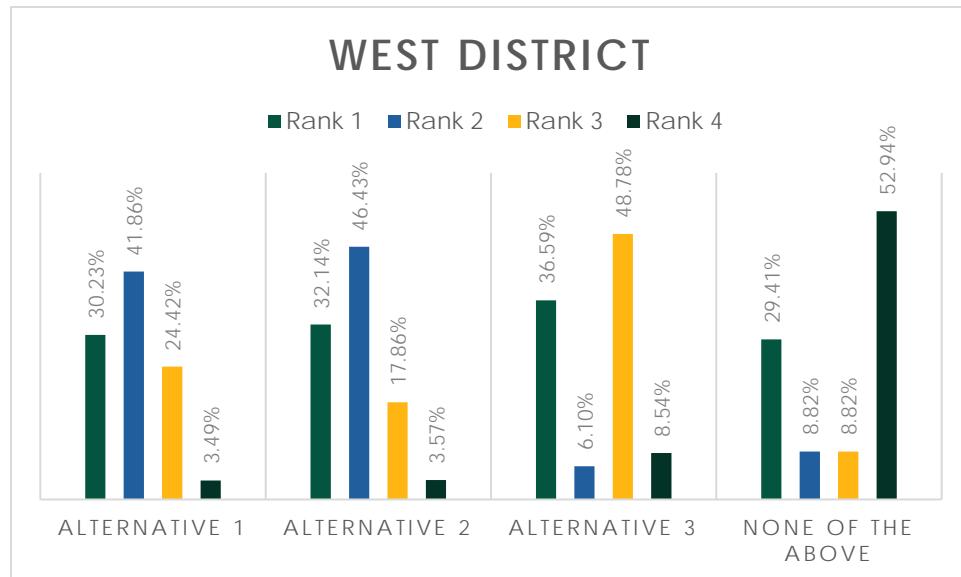
Changes:

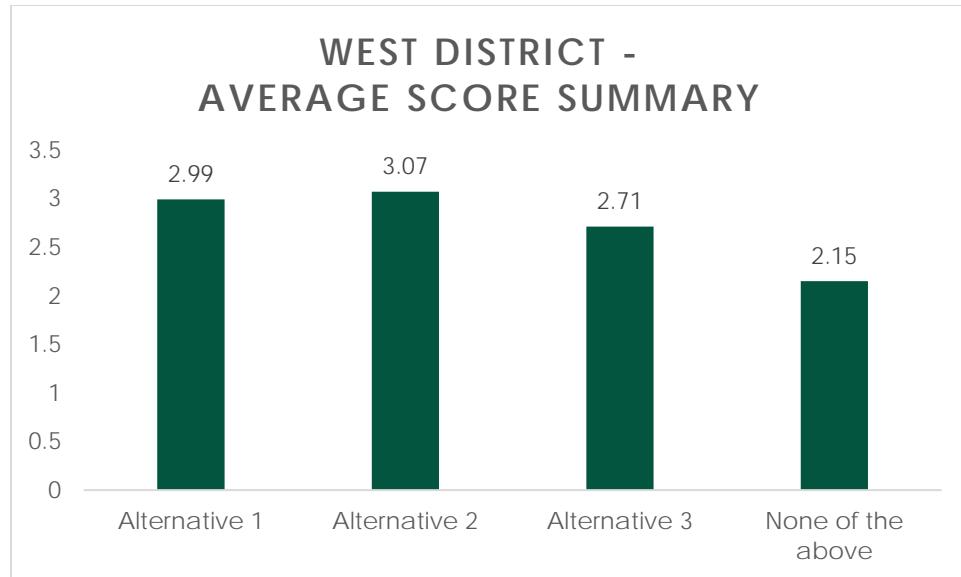
- Lesser density housing in areas of steeper slopes
- Impacts to existing Eastview neighborhood – proposed road connection
- Intersection at Edy/Elwert is dangerous
- Traffic impacts in the area with additional housing

WEST DISTRICT

If the City were to choose to grow into the West District in the future, how should the Concept Plan guide that growth? Rank your preferences among the three land use alternatives for the West District. (If you do not like any of the alternatives, rank "none of the above" as #1.)

[94 answered; 10 skipped]





Themes from Written Responses:

Likes:

- Parks
 - Large park and trails
 - Access to Chicken Creek Corridor
- Housing
 - Housing near high school – kids can walk to walk/bike to activities
 - Higher density and mix of housing and uses near the high school
 - Cottage Cluster housing
- Mixed Use
 - Mix of uses near high school
 - Smaller commercial/retail uses and eateries
 - A neighborhood anchor development –inspiration Orenco type of concept

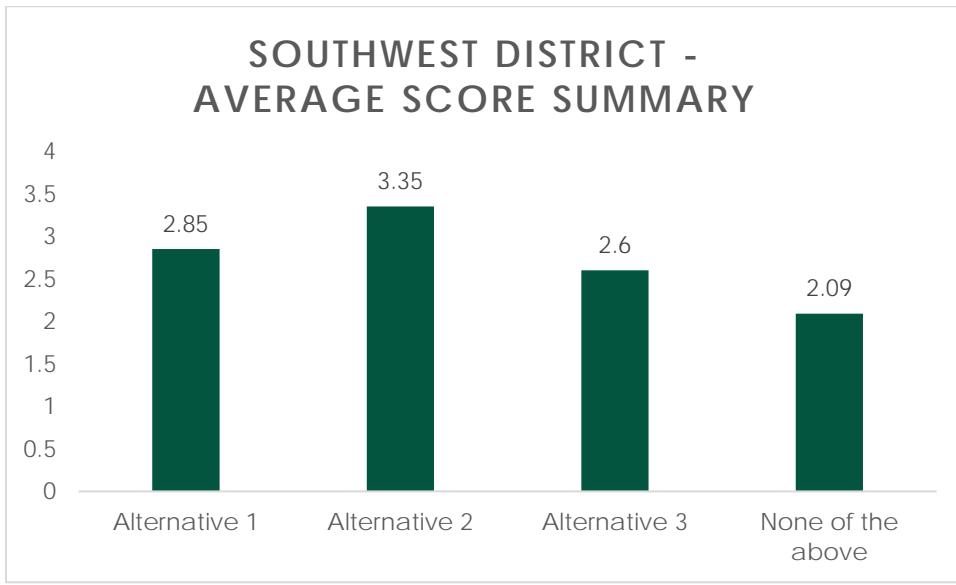
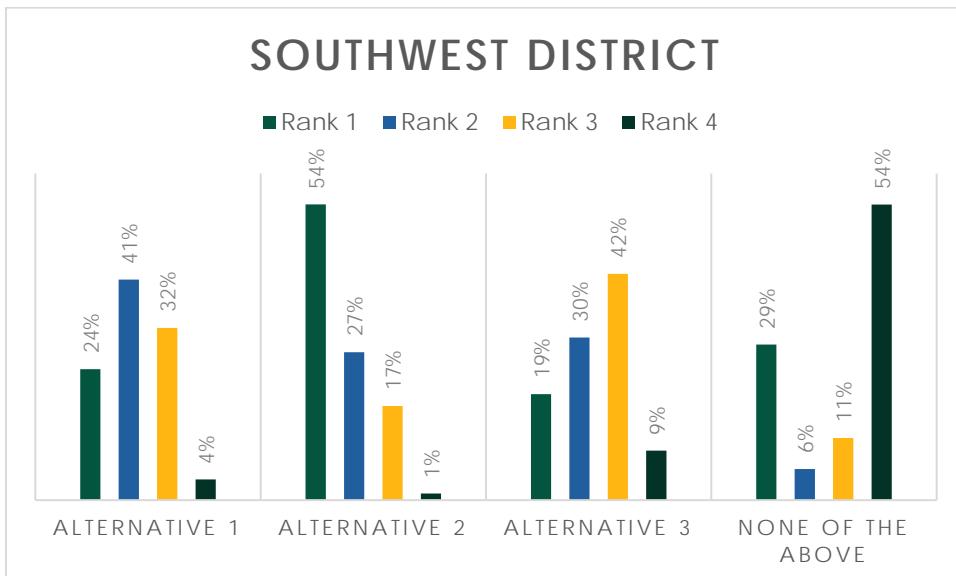
Changes:

- Increase of traffic
- Edy/Elwert intersection is dangerous
- Extension of Eastview Rd is not practical
- Cottage cluster housing near high school – less likely to have children going to school
- Relocation of Elwert
- Too much high density and cottage cluster housing
- More employment commercial will impact traffic

SOUTHWEST DISTRICT

If the City were to choose to grow into the Southwest District in the future, how should the Concept Plan guide that growth? Rank your preferences among the three land use alternatives for the Southwest District. (If you do not like any of the alternatives, rank "none of the above" as #1.)

[91 answered; 13 skipped]



Themes from Written Responses:

Likes:

- Park
 - Some specifically liked the large park in Alternative 2

- Mixed Uses
- Hospitality uses and commercial along Highway 99W
 - Some specifically called out hospitality and employment areas in Alternative 1 and 2
 - Some specifically called out Alternative 3 that clusters uses together (e.g. employment and housing)
 - Additional restaurants, possible new grocery store
- Gateway to wine country theme

Changes:

- Roads to accommodate additional traffic impacts
- More employment near Highway 99W
- What is hospitality area (unclear)
- More parks and trails in this area

Survey Results – Transportation Improvements

Below is a summary of key themes from the written responses for each potential transportation improvement.

Do you have any questions or comments about the Elwert Design concept?

- Likes – buffered sidewalks, median plantings and street trees, similar to Sunset

Do you have any questions or comments about the Elwert Realignment concept?

- Maintain existing Elwert alignment but look for ways to slow it down and create neighborhood feel
- What is the cost of improving Elwert with two crossings over Chicken Creek?
- Traffic circles will not improve traffic flow
- The realignment of Elwert will increase safety, slow down traffic
- Lower the speed on Elwert to 25 mph
- Roads should be built prior to development

Do you have any questions or comments about the Overpass Connection to the Brookman Area?

- If the overpass connects to existing arterial (Elwert) it would be reasonable. It should not connect to proposed n/s connector road.
- Why would you need an overpass if intersection of Chapman/Brookman is signalized?
- Seems expensive
- Work with ODOT to reclassify Highway 99W in Sherwood; 35 mph within Sherwood City Limits
- Why does the overpass not connect Chapman/Brookman intersections?

Do you have any questions or comments about the planned Pedestrian Overcrossing?

- Pedestrian overcrossing is needed
- Why was it not built with new high school?

- Seems unnecessary

Do you have any questions or comments about the conceptual North-South Connector?

- This road is not viable due to unsafe grades, environmental impacts and safety hazards
- What traffic would use this road?
- Elwert Road needs to be widened, focus on improving Elwert Road
- The second alignment, running parallel to Chicken Creek is better option, as it impacts less homes
- A new road will negatively impact Chicken Creek
- Keep studying this as a long-term option
- An expensive idea

Survey Respondent Demographics

See Attachment C for a summary of respondent demographics.

APPENDIX F

Development Trends and Implications Memo

Sherwood West Concept Plan

Development Trends and Implications

Date July 18, 2021
To Joe Dills, Kyra Haggart
Angelo Planning Group
From Sam Brookham, Chris Zahas
Leland Consulting Group

Executive Summary

Note: The City of Sherwood adopted an updated Economic Opportunities Analysis (EOA) in June 2023, after this document was completed. The adopted EOA includes updated information about employment land needs in Sherwood and is available on the City's website: <https://www.sherwoodoregon.gov/planning/page/2023-economic-opportunities-analysis-update>

Introduction

This Development Trends and Implications memo is intended to highlight a variety of key trends that will be explored in more detail in another memo to determine the specific opportunities for Sherwood West. It is not intended to answer the question of what Sherwood West can be; instead, it serves to provide a baseline summary of high-level findings from existing City of Sherwood planning documents and the current land use, transportation, and development conditions in the greater Sherwood area.

The Economic Opportunities and Challenges memo that will follow this memo will provide more specific information about assets, opportunities, constraints, economic development strategies, options for long-term job creation, and recommended land uses in Sherwood West.

This memo is organized as follows.

- **Planning Document Summary.** The memo includes summaries of two existing City of Sherwood planning documents: the Housing Needs Analysis (HNA) and Economic Opportunities Analysis (EOA). The HNA and EOA¹ provide information about supply and demand for residential, commercial, and employment lands in the City of Sherwood over 20 years. As both documents are policy-oriented and based on regional growth rates, there may be additional or different opportunities for Sherwood West that will be discussed in the Economic Opportunities and Challenges memo that follows. The summary of these documents in this memo, therefore, reflects just one perspective that may require an updated assessment.
- **Development Trends.** It also summarizes the team's evaluation of recent land use, transportation, and development conditions that impact Sherwood West, including new/pending developments in King City West, River Terrace, and Cooper Mountain, residential and employment growth areas in Sherwood (Brookman and Tonquin), and other development trends in Sherwood.

The key findings from this memo include the past development trends that offer insights into future development prospects for various land uses in Sherwood West, the key takeaways from the HNA and EOA.

Past Development Trends

The development trends of the past can provide an insight into the current and emerging opportunities for new growth. Relative to many other cities in the Portland metropolitan region, Sherwood's building stock is quite new, with most of the buildings constructed during the mid-to-late 1990s and early 2000s. During this time, construction activity was

¹ The 2018 EOA was not adopted by City Council. It is simply included in this memo to highlight baseline conditions.

dominated by single-family residential homes, industrial, and retail. While single-family residential construction declined significantly going into and since the recession of 2007-2008, construction activity for industrial and retail space has remained relatively high. Multifamily construction has been limited but consistent over the past three decades. And construction activity for office, healthcare, and hospitality space has been very limited, although new and emerging trends may result in growth opportunities, particularly for Sherwood West.

ES-1. City of Sherwood Residential Units and Square Feet of Development by Decade Built

Year Built	SFR Units	Multifamily Units	Industrial	Office	Retail	Health Care	Hospitality
Pre-90s	672	225	177,139	29,319	164,187	0	0
'90 to '00	2,844	256	709,574	38,265	107,812	52,893	0
'00 to '10	1,655	261	332,881	127,036	402,803	0	0
'10 to '20	349	249	626,206	20,000	327,462	0	70,993
Total		1,668,661		185,301	838,077	52,893	70,993

Source: Costar, Metro RLIS (SFR Data)

Below is a summary of the trends relating to each real estate development sector.

- **Employment (office, industrial).** The industrial sector has generally been shielded from the worst effects of the COVID-19 pandemic, and rapid growth in demand for distribution facilities has spurred significant new investment activity. There are trends and opportunities on which Sherwood may capitalize, including automation, shifting consumer behaviors (e.g., ecommerce), the emergence of the "hub and spoke" offices, and the electrification of vehicles. Sherwood's office market is locally oriented, and construction and absorption have been limited. It has been more than 10 years since an office project was delivered and the pandemic remains a major disrupter to the economy at large and creates uncertainty in the development and investment community. The Tonquin Employment Area (TEA) is Sherwood's primary growth area for new employment. Several industrial buildings totaling 535,000 square feet are in various phases of planning and development at the T-S Corporate Park—the first project since the creation of the concept plan in 2010. Other projects are in the early stages of planning in the TEA, per the City, including plans for multi-tenant industrial buildings totaling 900,000 square feet on 60 acres and project interest on 30 acres that was recently annexed and an adjacent 20 acres. Between these prospects and additional interest in new development in the TEA, there is reason to believe that most of the 200 acres of usable land in the TEA will be accounted for sooner than was originally anticipated in the 2018 EOA.
- **Retail/Commercial.** New construction has averaged approximately 50,000 square feet annually over the past five years, although nothing has been built in the past year since the COVID-19 pandemic began. Except for Parkway Village South (described below), there is very little new development in the pipeline and Sherwood does not appear to face a burgeoning wave of development supply pressure. With that said, investment in new retail typically follows household growth; in the southwest Portland metropolitan region, there are several large growth areas expected to generate significant demand for new retail services and amenities. Sherwood West may capitalize on this increased demand and capture a portion through new development.
- **Residential.** Significant growth in the population aged 55 and over has given rise to the growing demand for certain housing types, including apartments, assisted living facilities, and small-format single-family detached and attached residential. Sherwood's owner-occupied housing market is considered competitive, with a sale-to-list price ratio of around 101.3 percent and averaging less than 20 days on the market before going pending. Apartment occupancy is currently at 95.9 percent—close to the five-year high—indicating demand for new development.

Sherwood West is one of several planned expansions in the southwest metro region. Others include Tigard River Terrace, Beaverton Cooper Mountain, and King City West. How and when these areas develop will directly impact the market and compete with the study area. However, it is expected that these areas will be predominately residential with limited commercial and employment development. As Sherwood West develops, there may be increasing opportunities for it to be a sub-regional hub for employment. There may also be opportunities to add retail services, but we expect the primary trade area for these other southwestern growth areas to be oriented to the north and east, rather than to Sherwood.

The following table summarizes the scale of planned development in each of these expansion areas.

ES-3. Summary of Planned Development in SW Metro Region Expansion Areas

Expansion Area	Planned Commercial / Employment	Planned Residential
Tigard River Terrace 1.0	25,000 to 40,000 sq. ft. (building area)	2,587 units (about 1,200 units built to date)
Tigard River Terrace 2.0	10 to 30+ gross acres of employment and/or commercial uses	Up to 4,500 total units
Cooper Mountain (CM), Beaverton	10-acre main street commercial Est. 80,000 to 120,000 sq. ft. (building area)	South CM: 3,430 units; Urban Reserve Area: 3,760 units; North CM: 300 units
King City West	Est. 54,000 to 85,000 sq. ft. (building area)	3,576 units

Planning Document Summary

The table below highlights the strengths, weaknesses, opportunities, and land supply and demand considerations described in Sherwood's EOA and HNA. These documents offer a potentially conservative depiction of the supply and demand factors for employment and residential growth in the City of Sherwood over the next 20 years.

While this information is helpful context, it is important to recognize that the documents reflect conditions at a certain point in time that are based primarily on an agreed-upon projected growth rate. Given that Sherwood is a relatively small city compared to most others in the Portland metropolitan region, modest developments can have significant impacts on employment and household growth. Growth could be further impacted by a proactive approach by the City, causing businesses and developers to locate in planned employment centers in Sherwood West beyond what was forecasted in each document.

There are, therefore, limitations to these documents which necessitate a fresh look at opportunities for Sherwood West. Because both the EOA and HNA are policy-based documents that follow a required framework, neither provides a discussion of emerging trends that may serve as opportunities for Sherwood West, nor do they include a complete depiction of the development pipeline in Sherwood, particularly for industrial projects. The remainder of this memorandum, as well as the next Economic Opportunities and Constraints memo, will revisit this baseline information and explore more specific opportunities and constraints for Sherwood West.

Table 1. Summary of Key Planning Documents

	Economic Opportunities Analysis	Housing Needs Analysis
Economic Strengths	<ul style="list-style-type: none"> • Suitable attributes for attracting new business. • Proximity of new residential growth areas. • High quality of life. 	<ul style="list-style-type: none"> • Strong residential growth, particularly in younger families and senior populations. • Relatively high incomes compared with the rest of the Metro region.
Economic Weaknesses	<ul style="list-style-type: none"> • Congestion and the distance from I-5 hinder both industrial and residential prospects. • Lack of infrastructure in new growth areas. • Reliance on Tonquin Employment Area for meeting industrial land needs. 	<ul style="list-style-type: none"> • Relatively high proportion of single-family detached housing relative to other housing types • Reliance on development of the Brookman Area for meeting residential land needs.
Opportunities	<ul style="list-style-type: none"> • Citywide growth potential in the industries of manufacturing, professional and business services, wholesale, and visitor and resident services. • Population growth will drive growth in retail businesses. 	<ul style="list-style-type: none"> • Ageing population driving demand for smaller single-family housing, multifamily housing, and housing for seniors. • The growth of younger and diversified households is likely to result in increased demand for a wider variety of housing.
Land Supply & Demand	<ul style="list-style-type: none"> • Sherwood had 242 acres of unconstrained employment land in 2018, of which half is in the Tonquin Employment Area (TEA). • Employment growth is projected to drive demand for 86 gross acres of industrial land and 85 gross acres of commercial land. • Sherwood has a 24 gross acre surplus of industrial land and a 57 gross acre deficit of commercial land. The surplus is, in reality, much less given the new development coming online. 	<ul style="list-style-type: none"> • Land base can accommodate 65 percent of forecasted population growth. • Limited supply of land for moderate- and higher-density multifamily housing, causing a barrier to the development of townhouses and multifamily housing, which are needed to meet housing demand resulting from the population growth of seniors, young families, and moderate-income households.

Source: City of Sherwood

Economic Opportunities Analysis

The 2018 EOA is “an analysis of the community's economic patterns, potentialities, strengths, and deficiencies as they relate to state and national trends.”

The primary goals of the EOA are to:

- (1) project the amount of land needed to accommodate the future employment growth within the Sherwood City Limits and employment land areas in the Urban Growth Boundary (UGB), namely Tonquin Employment Area and Brookman Annexation Area, between 2019 and 2039;
- (2) evaluate the existing employment land supply within Sherwood to determine if it is adequate to meet that need; and
- (3) fulfill state planning requirements for a twenty-year supply of employment land.

While the EOA provides an indication of the strengths and weaknesses for job creation and highlights specific opportunities for Sherwood West, it is important to note that the Sherwood City Council decided not to adopt the 2018 EOA and to make updates closer to the adoption of the Comprehensive Plan. The reasoning for not doing so was primarily due to discrepancies between the rate of employment growth projected in the EOA and by Metro. Other

information provided in the EOA, such as broader economic trends and land availability, are still relevant and are discussed here.

The key points of the 2018 EOA are as follow. It is important to emphasize that this section simply summarizes what the EOA indicates, rather than a comprehensive discussion of the specific opportunities for Sherwood West.

Land Supply and Demand

The EOA included a discussion of land supply for employment and commercial development. Key findings are listed below (all findings are as of 2018).

- In 2018, Sherwood had 242 acres of unconstrained land², 141 of which is vacant and 101 of which is potentially redevelopable (i.e., underutilized but not vacant sites). Nearly 60 percent of the vacant land (and 40 percent of the redevelopable land) is in the Tonquin Employment Area (TEA). Most were sites less than five acres, nine sites were between five and 10 acres, and three were larger than 10 acres, including just one 50+ acre site in the TEA and two 12-acre industrial sites. Small industrial sites are considered an issue by the City and its economic development partners; the Metro Employment Land Site Readiness Tool Kit describes smaller sites with multiple owners and limited infrastructure as a regionwide issue in the Portland metropolitan area.
- While there has been little new development since the 2018 assessment for the EOA, anecdotal evidence from the City of Sherwood indicates a more constrained land supply than what is portrayed in the EOA. Sherwood West has a potential opportunity to capitalize on regional demand for large industrial sites, particularly given the aforementioned regionwide shortage.
- Sherwood's employment base was 8,340 jobs in 2018. The EOA forecasts 11,785 jobs by 2039, an increase of 3,446 that is projected to result in the demand for 86 gross acres of industrial land and 85 gross acres of commercial land.
- **Industrial.** Most of the buildable vacant employment land in Sherwood is designated as industrial as opposed to commercial, retail, or other types of employment. Sherwood has a supply of 110 acres of suitable land designated for industrial uses, which is a forecasted surplus of 24 gross acres over 20 years, per the analysis conducted for the EOA. There is a greater surplus with the addition of the TEA and the Brookman Addition.
- **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 20 years, 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. In total, this land is likely to sufficiently meet both industrial and commercial demand over the next 20 years. However, if the rate of development increases as expected beyond what was forecast in the EOA, there will likely be a shortage of appropriate sites—particularly sites in excess of 10 acres—for employment growth in the City of Sherwood, thereby creating development opportunities in Sherwood West. These opportunities will be further explored in the Economic Opportunities and Constraints memo.

Sherwood's Economic Strengths and Weaknesses

The EOA included several strengths and weaknesses that affect Sherwood's ability to attract and accommodate job growth. A summary is provided below.

² The physical constraints used in the Sherwood buildable lands inventory includes areas subject to landslides, areas with slopes greater than 25%, lands within the 100-year flood plain, Metro's Title 3 land (including Water Resource Conservation Areas), lands within Metro's Title 13 Habitat Conservation Areas (Class I and II, A and B), Wetlands, and public facilities.

Strengths

- Sherwood's attributes that may attract businesses are its location along Highway 99; quality of public facilities and services; general availability of vacant land serviced by utilities³; quality of schools; and overall quality of life.
- Proximity to new residential growth areas—including the areas along the Roy Rogers Corridor north of Sherwood West—may increase demand for services and employment for new nearby residents. The growth expected in these areas is summarized later in this memo.
- High quality of life due to the Tualatin River National Wildlife Refuge, cultural amenities and events, and access to high-quality education and medical care, among other factors.
- The region's high-quality natural resources present economic growth opportunities for Sherwood, ranging from agriculture and wineries to amenities that attract visitors and contribute to the region's high quality of life. Proximity to Wine Country offers potential opportunities for manufacturing, hospitality, commercial, and other uses.

Weaknesses

- The current transportation network is considered a disadvantage for both residents commuting to jobs (both in and out of Sherwood) as well as businesses that need a distribution route to access the region. Several transportation projects, including the widening of Roy Rogers Road and Tualatin-Sherwood Road, may improve the prospects of attracting new industrial, technology, and commercial users to Sherwood. These opportunities will be explored more in the Economic Opportunities and Constraints memo.
- Distance from I-5 is a disadvantage for attracting some types of businesses, such as warehouses and distribution or manufacturers that need close access to I-5 for heavy freight.
- There is a lack of infrastructure needed to support employment growth on large vacant sites.

Opportunities for Sherwood West

The EOA describes several economic trends and opportunities that could apply to the Sherwood West area. These are described below.

- Growth in population in Sherwood will drive modest growth in retail businesses, including commercial centers and neighborhood retail. It should be noted that the 2018 EOA did not specifically reference the potential opportunities and the new market dynamics that will arise as a result of the substantial new household growth along the Roy Rogers Corridor to the north. While this new growth is unlikely to increase demand for retail businesses in Sherwood, there are likely to be opportunities for additional employment development that capitalizes on Sherwood West's proximity to this sizeable talent base.
- Approximately 1,719 new jobs (83.5 percent of total new jobs) in Sherwood are expected to require vacant or partially vacant land. The forecasted growth of 1,719 new employees will result in the following demand for employment land: 61 gross acres of industrial, nine gross acres of retail commercial, and 41 acres for office and commercial services.
- Approximately 16.5 percent of jobs in Sherwood are located in residential plan designations, including 12 percent of industrial, 15 percent of retail, and 21 percent of office and commercial service employment. Over 20 years it is expected that the proportion of employment located in residential areas will remain the same. These

³ Anecdotal information provided by the City of Sherwood indicates that utility service throughout the City is inconsistent, with some existing industrial parks and infill location lacking the necessary utility services. The constrained capacity of existing services can be a barrier to economic growth and detrimental to development prospects.

jobs include home offices for industrial employment, such as construction companies and office and commercial medical offices, or small personal service businesses such as banks or hair stylists.

- The industries identified as having potential for growth in Sherwood include manufacturing, professional and business services, wholesale, and services for visitors and residents.
 - **Manufacturing.** Sherwood's attributes may attract manufacturing firms, such as Technology and Advanced Manufacturing, Machinery Manufacturing (Metals and Machinery), and Clean Tech.
 - **Professional and business services.** Sherwood's high quality of life, access to quality schools, existing population and business base, and location within the Portland region may attract professional and business services that prefer to locate in a smaller city like Sherwood, such as Software and Media, Clean Tech, Athletics and Outdoors, and other services.
 - **Wholesale.** Sherwood's access to Highway 99 may make the city attractive to the continued growth of wholesale businesses.
 - **Services for visitors.** Growth in tourism, especially related to agriculture and wineries, will drive demand for services for visitors such as specialty retail, wine tasting rooms, restaurants, and hotels.
 - **Services for residents.** Growth in population in and around Sherwood will drive the growth of businesses that serve residents, such as medical services, legal services, financial services, retail, personal services (e.g., barbers), and restaurants.

The following table is also from the 2018 EOA and shows the concentration of Sherwood's existing businesses by industry. The **bolded** industries have a high location quotient⁴ (i.e., highly specialized compared to national employment in the industry), high employment (i.e., have more than 200 employees in Sherwood), and higher than average wages in Sherwood. These industries have the highest growth potential, given existing businesses and the higher concentration of employment.

With that being said, the table is a summary of Sherwood in 2018 and does not reflect an exploration of potential growth industries. Sherwood has up to now been attractive to certain types of industries, yet there is an opportunity to encourage the growth of industries that may not currently exist but see Sherwood as a competitive location in the Portland metropolitan region. For example, while most economic growth is due to the expansion of existing businesses, the City may be able to capitalize on the demand for large sites in excess of 50 acres that are in short supply in the region.

⁴ Location quotients are ratios that allow an area's distribution of employment by industry, ownership, and size class to be compared to a reference area's distribution. If an LQ is equal to 1.0, then the industry has the same share of its area employment as it does in the nation. An LQ greater than 1 indicates an industry with a greater share of the local area employment than is the case nationwide.

Table 2. Concentration of Industries and Employment, City of Sherwood, 2016

	High Employment	Low Employment
High Location Quotient	<ul style="list-style-type: none">• Waste management and remediation services• Specialty trade contractors• Heavy and civil engineering construction• Machinery manufacturing• Merchant wholesalers, durable goods• Building material and garden equipment and supplies dealers• Amusement, gambling, and recreation industries• General merchandise stores• Food and beverage stores• Food services and drinking places	<ul style="list-style-type: none">• Construction of buildings• Real estate• Wholesale electronics markets and agents and brokers• Plastics and rubber products manufacturing• Personal and laundry services
Low Location Quotient	<ul style="list-style-type: none">• Merchant wholesalers, nondurable goods• Miscellaneous store retailers• Truck transportation	<ul style="list-style-type: none">• Professional, scientific, and technical services• Ambulatory health care services• Utilities• Administration and support services• Nursing and residential care facilities• Social assistance

Source: Oregon Employment Department, QCEW, 2016 (Table recreated from EOA)

Housing Needs Analysis

Sherwood's HNA provides a factual basis to support future planning efforts related to housing, including concept planning for Sherwood West and the update and revision of the City's Comprehensive Plan policies. The most recently completed HNA for the City of Sherwood provides analysis through twenty years from 2019 – 2039.

Demographics

According to the HNA, Sherwood has experienced rapid population growth since 1990, reflecting its situation as a major growth area on the edge of the Portland metro. Growth has consistently outpaced Washington County and the Portland Metro region. While the population is aging on average, Sherwood has started to attract a greater proportion of younger people and more households with children. The population is also becoming more ethnically diverse.

The aging of the population is likely to result in increased demand for smaller single-family housing, multifamily housing, and housing for seniors. The growth of younger and diversified households is likely to result in increased demand for a wider variety of affordable housing appropriate for families with children, such as small single-family housing, townhouses, duplexes, and multifamily housing.

Sherwood households also have relatively high incomes compared to the rest of the Metro region, which affects the type of housing that is affordable. Income is a key determinant of housing choice.

Housing Stock

Sherwood's housing stock is predominantly single-family detached, which accounts for about 75 percent, with single-family attached accounting for eight percent, and multifamily accounting for 18 percent. Approximately 69 percent of new housing permitted in Sherwood between 2000 and 2014 was single-family detached housing.

Projections.

Sherwood is forecast to add 1,728 new households between 2019 and 2039. Of these, 700 new households will be inside the existing city limits; 1,029 new households will be outside the current city limits in the Brookman Area.

According to the HNA, the forecast for growth in Sherwood is considerably below historical growth rates. Metro's forecast for new housing in Sherwood shows that households will grow at an average annual growth rate of 1.1 percent per year. In comparison, Sherwood's population grew at 3.4 percent per year between 2000 and 2013 and 8.0 percent per year between 1990 and 2013.

Land Supply. Sherwood's land base can only accommodate 65 percent of the forecasted population growth. Vacant and partially vacant land in the Sherwood Planning Area can accommodate 1,121 new dwelling units of the forecasted need for 1,728 units, leaving a deficit of land for 608 units. If Sherwood grows faster than Metro's forecast during the 2019 to 2039 period, then Sherwood will have a larger deficit of land needed to accommodate growth.

The largest deficits are in Medium Density Residential-Low (154 dwelling units), Medium Density Residential-High (252 dwelling units), and High-Density Residential (145 dwelling units).

At faster growth rates, Sherwood's land base has enough capacity for several years of growth. At growth rates between 2.0 to 4.0 percent of growth annually, the land inside the Sherwood city limits can accommodate two to five years of growth. With capacity in the Brookman Area, Sherwood can accommodate four to 10 years of growth at these growth rates.

Additional housing growth in Sherwood depends on the availability of development-ready land. The amount of growth likely to happen in Sherwood over the next few years is largely dependent on when the Brookman Area is developed, when the Sherwood West area is brought into the UGB and annexed, and when urban services (such as roads, water, and sanitary sewer) are developed in each area.

Sherwood has a relatively limited supply of land for moderate- and higher-density multifamily housing. The limited supply of land in these zones is a barrier to the development of townhouses and multifamily housing, which are needed to meet housing demand resulting from the population growth of people over 65, young families, and moderate-income households.

Development Trends

This section describes the general development trends for residential, commercial, and employment development in and around Sherwood, including a discussion of planned development in each of the nearby UGB expansion areas of King City West, Tigard River Terrace, and Beaverton's Cooper Mountain.

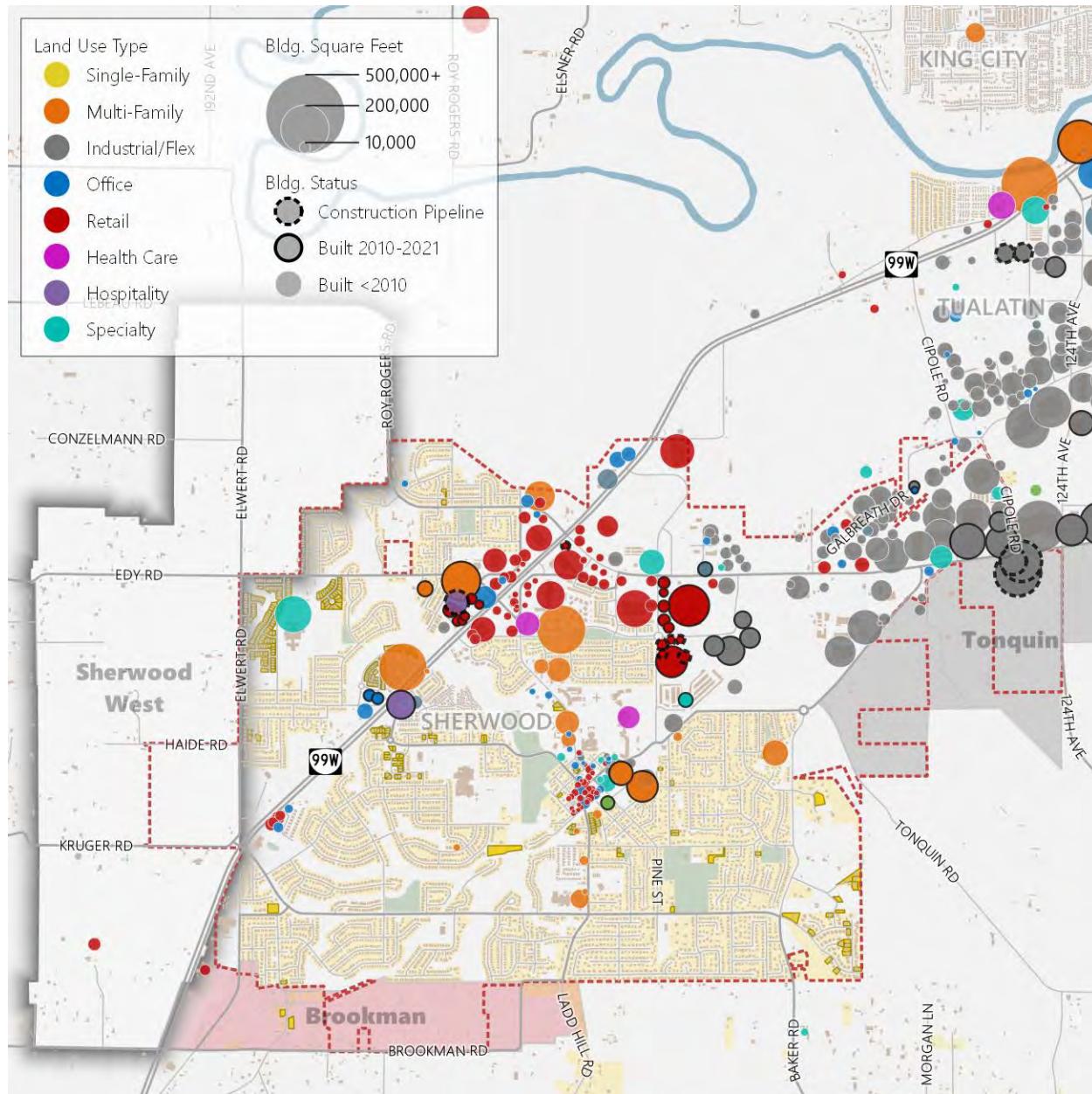
Sherwood Overview by Land Use Sector

Sherwood is experiencing strong growth in all development sectors. The map below provides the location, size, and type of new and existing development in and around the City. Most of the newer (built since 2010—symbolized with the bolded outline in the map) single-family/owner-occupied housing development has occurred on the City periphery where most of the vacant land exists. Industrial has largely clustered in east Sherwood along Tualatin-Sherwood Road. Commercial (retail, office, specialty, other) and multifamily residential development are more centralized, clustering along major arterials (Highway 99W and Tualatin-Sherwood Road) and in Old Town.

Industrial users tend to cluster near other users for a myriad of reasons, and so as long as there is developable land that meets that user's needs, the TEA and the surrounding area are likely to remain the most attractive location for new industrial users. Sherwest West may attract industrial users in select locations, especially as land availability diminishes elsewhere. Office users, while currently one of the most impacted land use sectors by the Covid-19 pandemic, might

consider Sherwood West an attractive location, especially if it develops in a way that offers a variety of amenities, services, and housing options (both in and near the area).

Figure 1. Development Overview by Land Use, Size, and Building Status

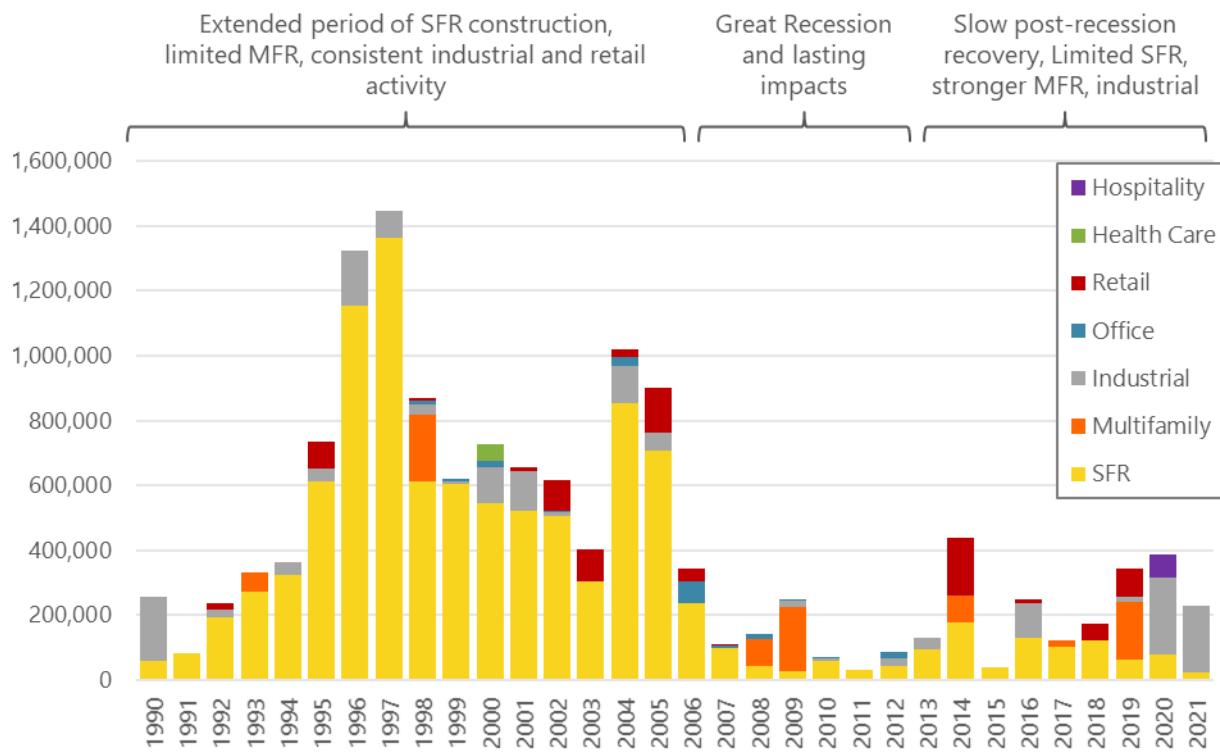


Source: Costar, Metro RLIS (SFR Data), City of Sherwood, LCG

The chart below and the table that follows show total development by year built for the City of Sherwood. There was a significant decline in residential construction activity going into and since the recession of 2007-2008. Multifamily construction has been consistent over the past three decades, averaging almost 26 units or 30,000 square feet per year. Industrial activity has increased again in the past decade following a relative hiatus between 2000 and 2010. Office activity has been very limited, as has healthcare and hospitality, although is likely growth opportunities for Sherwood West that capitalize on several emerging trends, including hub and spoke office development, proximity to Wine Country, proximity to major household growth areas, population growth of all age demographics, and the localization of

healthcare, among other trends that will be further explored in following documents. Retail development activity increased in the 2000s following strong residential growth in the previous decade and has continued into the past decade.

Figure 2. City of Sherwood Square Feet of Development by Year, 1990-2021



Source: Costar, Metro RLIS (SFR Data), LCG

Table 3. City of Sherwood Residential Units and Square Feet of Development by Decade Built

Year Built	SFR Units	Multifamily Units	Industrial	Office	Retail	Health Care	Hospitality
Pre-90s	672	225	177,139	29,319	164,187	0	0
'90 to '00	2,844	256	709,574	38,265	107,812	52,893	0
'00 to '10	1,655	261	332,881	127,036	402,803	0	0
'10 to '20	349	249	626,206	20,000	327,462	0	70,993
Total		1,668,661	185,301	838,077	52,893	70,993	

Source: Costar, Metro RLIS (SFR Data)

Industrial

The Sherwood industrial submarket contains around 1.7 million square feet of industrial space and can be considered a midsized submarket. The industrial sector has generally been shielded from the worst effects of the COVID-19 pandemic, and rapid growth in demand for distribution facilities—largely due to ecommerce—has spurred significant new investment activity. There is potential to capitalize on these opportunities in Sherwood given the proximity to Highway 99W.

Vacancies have increased significantly over the past year to 13.0 percent, up from 5.1 percent at this time last year, which, in turn, was slightly lower than the five-year average of 5.4 percent. However, this appears largely because of the three new buildings in the Cipole Industrial Park (TEA) completed in 2020 that total about 240,000 square feet and are yet to be fully occupied. According to Costar, leasable available industrial space totals 290,000 square feet of a total inventory of 2.2 million. According to the City of Sherwood, approximately 34,000 square feet in one new building is being sold to a manufacturer and an unknown additional amount of square is likely to get sold to an Australian company for their North American headquarters. The higher vacancy rate should not, therefore, be considered an indication of weak demand.

Net absorption came in at 18,000 square feet over the past year, slightly above the five-year average of 14,400 square feet. Rents grew by 6.1 percent over the past 12 months, in line with the five-year average but lower than this time last year.

New development supply pressures on vacancy or rent are generally limited to the Tonquin Employment Area (described below) in the near term, although few other places in Sherwood could accommodate significant new development projects without larger tracts of additional land being planned for employment uses, such as in Sherwood West. As indicated previously, the EOA indicated a surplus of industrial land, but most of it was small, challenging to develop sites.

Leland Consulting Group understands that there is significant interest in Sherwood from industrial users that is likely to continue the considerable construction activity seen in Sherwood over the past three years. Between 2018 and 2020, approximately 250,000 square feet of industrial space was delivered to market, representing a 12.8 percent cumulative expansion of the inventory. As this recent inventory expansion is absorbed by new or expanding users in the area and the available land supply diminishes, there may be a slowdown in industrial construction in the near term (approximately 2-5 years) until additional land is planned for industrial expansion opportunities. As one of only a handful of new growth areas in the metro, Sherwood West may capitalize on this and other several pertinent trends over a longer timeframe, including:

- Increasing automation of the manufacturing industry will decrease company's needs to locate near large population clusters and potentially result in companies seeking land on the urban periphery.
- Rapidly shifting consumer behaviors, such as ecommerce growth, will continue to enhance demand for distribution and land-mile warehousing facilities.
- Electrification and automation of vehicles will continue to require distributors to locate near major transportation routes.

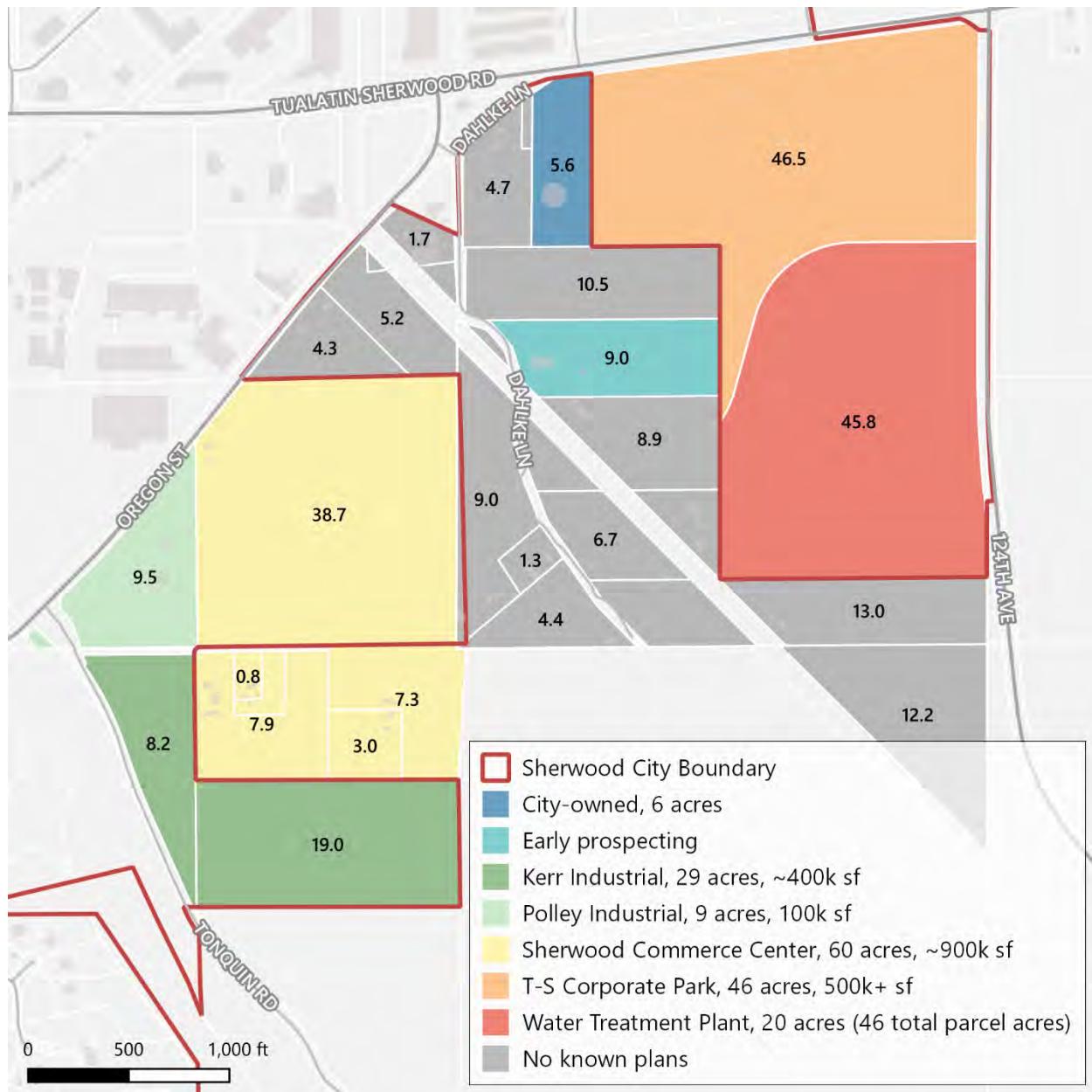
Tonquin Employment Area. The Tonquin Employment Area (TEA) was brought into the region's UGB by Metro in 2004 and the City of Sherwood completed a concept plan for the area in 2010. The TEA vision is of industry supporting high-tech manufacturing and traded sector jobs. Properties within the Tonquin Employment Area will be annexed into the City of Sherwood upon request by the property owners. Upon annexation, the properties will be zoned Employment Industrial (EI).

There has not yet been a completed project within the TEA since the adoption of the concept plan, but the development pipeline indicates that most of the land is already accounted for, with several projects at various planning and development stages.

- Most notably, a large multi-phase project called the T-S Corporate Park, which involves five industrial buildings on 46.53 acres, is underway at 12822 SW Tualatin Sherwood Road. Two buildings totaling about 144,000 square feet are underway and a third 183,000 square foot building is proposed for 2022, per Costar data and the City of Sherwood. Upon completion of all five buildings, T-S Corporate Park is expected to contain approximately 535,000 square feet of space for warehousing and industrial uses. At an estimated employment density of 1,000 square feet per employee, the T-S Corporate Park would employ around 535 people. According to the City of Sherwood, there is strong interest from a variety of companies, including tech, advanced manufacturing, and ecommerce occupiers. It was also indicated that there is more interest than the site can accommodate.
- South of the T-S Corporate Park, the Willamette Water Supply Program will begin construction of a state-of-the-art water treatment plant on two acres of 46 total site acres beginning in late 2021-early 2022. The treatment plant improvements will include the construction of a portion of Orr Drive, an important east-west connection within the TEA.
- Multiple parcels totaling approximately 60 total acres with frontage on SW Oregon Street are controlled by a major investment company. Two-thirds of the site is currently annexed and the remainder is likely to be annexed soon, with plans for a 900,000 square foot industrial park with multitenant buildings known as the Sherwood Commerce Center.
- Two parcels containing 38.7 acres fronting onto SW Tonquin Road were annexed in early 2021. According to the City, the property owner has indicated plans to develop approximately 400,000 square feet of new industrial space on the property.
- A 9.2-acre property with frontage on SW Oregon Street and SW Tonquin Road was annexed in early 2021. There is a pre-application submittal for over 100,000 square feet of new industrial space.
- There was previously interest in developing a 4.6-acre site frontage SW Oregon Street, but the owner has indicated holding off until there is more information about the proposed east-west industrial collector road through the TEA.
- Other properties in the TEA are generally accessible by Dahlke Lane, but development challenges include the quality of the road, the location of the major Bonneville Power Authority and PGE transmission lines, incompatible existing development requiring redevelopment, limited quality access, and various topographical and environmental barriers. It is expected that these properties will develop last in the TEA.
- The proposed 2021 URA will provide funds for infrastructure for the TEA and for various sites/projects along 99W.



Figure 3. TEA Development Project Pipeline



Source: LCG, City of Sherwood

Office

Sherwood's office submarket is locally oriented with roughly 200,000 square feet of office space. The vacancy rate has risen somewhat over the past 12 months as of 2021 Q2, but at 2.3 percent, the rate was well below the 10-year average of 6.1 percent.

Annual net absorption for the past year is negative 2,700 square feet, reflecting an increase in vacancies that were likely induced by the COVID-19 pandemic. Over five years, net annual absorption has averaged 1,100 square feet. Despite the rising vacancies and challenges of the last year, average rents increased by 1.7 percent over the past year—slightly lower than the 3.0 percent average change over the past decade—to a 10-year high of \$24.61 per square foot.

There are no development supply pressures on vacancy or rent in the near term, as there is no new known office construction in the pipeline. This lack of construction extends a prolonged hiatus from new development in the Sherwood area; it has been more than 10 years since an office project was delivered. The Economic Challenges and Constraints memo that follows this document will provide additional details about specific opportunities to include office space as a component of employment-oriented land development.

The pandemic remains a major disrupter to the economy at large and creates uncertainty in the development and investment community. Looking ahead, the effect of the pandemic has the potential to redefine the use of office space, as employers reevaluate the safety and health of workers. As the office sector emerges from the COVID-19 pandemic, there may be pent-up demand for new leasing opportunities, particularly offices in suburban locations that offer more space at more affordable rates than premier office locations like the Portland CBD.

Retail

Retail vacancies in Sherwood, at 2.7 percent, are lower than the five-year average of 5.0 percent, albeit higher than this time last year. The rate is also significantly lower than the region's average. Meanwhile, rents have increased by four percent in the past year, slightly lower than the five-year average of 4.2 percent.

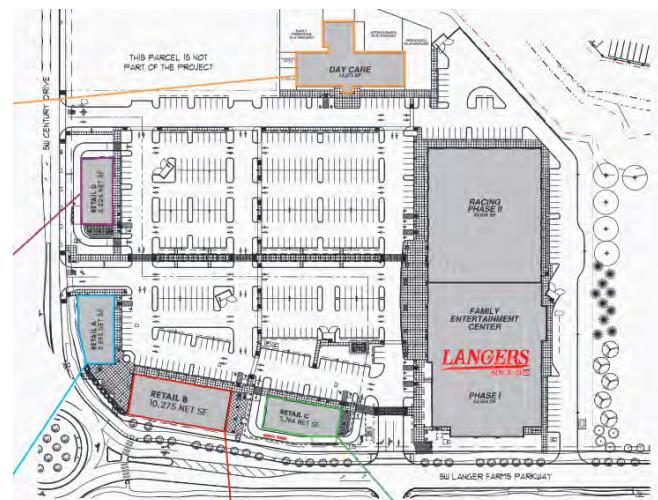
New construction has averaged approximately 50,000 square feet annually over the past five years, although nothing has been built in the past year since the COVID-19 pandemic began. Except for Parkway Village South (described below), there is very little new development in the pipeline and Sherwood does not appear to face a burgeoning wave of development supply pressure. Retail investors are also reasonably active in Sherwood and pricing is above the region's average.

The commercial real estate environment, and particularly the retail sector, remains uncertain due to the pandemic and the increasing demand for ecommerce. Even with vaccines, it is probable that retailers will continue to face turbulence in the coming quarters. Those effects will likely linger for the foreseeable future, impacting demand, rent growth, and the capital markets in the process. However, as household growth occurs in Sherwood and in nearby areas (including the competing UGB expansion areas to Sherwood West that are described later in this memo), there will be increased demand for new retail development. Retail in Sherwood is likely to draw most of its customers from within the City and from areas to the south, rather than from areas to the north and east where there are preexisting retail and commercial clusters. That being said, unique regional drawers or major destinations will likely have a much larger trade area from which to pull customers than convenience-based retail.

Parkway South. There is a substantial new development under construction in Sherwood called Parkway South on the area bounded by SW Langer Farms Parkway and SW Century Drive.

At 132,000 square feet of gross leasable area (GLA), Parkway South is anchored by a 53,000 square foot family entertainment center—the only building currently built. Among the other proposed buildings are a 12,275 square foot daycare facility and a 40,000 square foot indoor racing facility. Approximately 27,000 square feet of in-line tenants on "pad" sites make up the remaining buildings.

The fact that the only new major commercial center planned for this part of the metropolitan region is primarily non-retail is telling and reflects the changing composition of commercial development and a desire for differentiation in an often saturated retail market.



Rental Residential

Sherwood shares a multifamily/apartment submarket with Tualatin and is conveniently located between major employers in the Sunset Corridor and Wilsonville. Vacancies generally trend below the regional Metro area rate, but can be volatile as there are only 3,888 total units (1.9 percent of the regional market), so small changes in new inventory or absorption can make significant impacts. Regardless, occupancy is currently at 95.9 percent—close to the five-year high—indicating strong and consistent demand for new development.

Annual rent growth 6.0 percent in the past year, up from an annual average of 3.3 percent over the past five years. Rent growth in 2019 was triple Portland's overall average, ranking near the top of all apartment submarkets in the region, but slowed in 2020 due to the coronavirus pandemic.

Only four new developments were delivered to the market in the past decade, representing about 320 total units, and no additional projects are in the pipeline. Though few multifamily sales have occurred since 2017, the submarket occasionally sees sizable institutional investment.

Significant growth in the population aged 55 and over has given rise to the growing demand for certain housing types, including apartments, assisted living facilities, and small-format single-family detached and attached residential.

Ownership Residential

Sherwood's owner-occupied housing market is considered competitive, with a sale-to-list price ratio of around 101.3 percent and averaging less than 20 days on the market before going pending.

Sherwood's housing stock is relatively new compared with the rest of the Portland Metro region. Almost half of all Sherwood single-family homes were built in the 1990s, averaging 284 new units built per year, with another third built in the 2000s, averaging 150 new units built per year. Construction slowed since 2010, with new construction averaging 32 units per year, impacted by both the lasting effects of the Great Recession and the diminishing availability of buildable residential land (not including the Brookman area). Upon annexation of additional residential land in the Brookman area, single-family residential construction is expected to pick up again. The city has annexed roughly 65 acres to date and three new subdivisions have been approved with a total of 232 lots. These households will generate demand for both nearby commercial amenities and services and employment opportunities.

Figure 4. Single-family Homes by Year Built



Source: Metro RLIS

In March 2021, Sherwood home prices were down 5.9 percent compared to last year, selling for a median price of \$585,000. On average, homes in Sherwood sell after 16 days on the market compared to 22 days last year. There were 37 homes sold in March this year, up from 22 last year.

Hospitality

While the hotel industry has been among the most significantly impacted real estate sectors by the COVID-19 pandemic, it is now seeing buyers flock to distressed properties. Sales have surged nationwide; a clear signal some commercial real estate investors are ready to act while others may still be waiting for similar action in other sectors such as office or retail.

Sherwood's only hotel—a 73-room, 71,000 square foot Hampton by Hilton—was built recently in 2020 along Highway 99W, reflecting a highly limited market.

The hotel industry appears poised for recovery as people begin to travel once more. However, future disruptions in the near term (0-2 years), such as new waves of coronavirus infections, continuing competition from Airbnb and similar models, too few hotel workers and patrons vaccinated, a glut of supply, and continued reduced business travel may continue to dampen hotel prospects. That being said, there are most likely opportunities that can capitalize on Sherwood's proximity to Wine Country and an increasing number of prominent companies in the area, among other emerging trends. These opportunities will be further explored in later tasks.

Southwest Metro Region Expansion Areas

Sherwood is part of the Metro region. All cities in Metro share one regional UGB. This boundary is the line between urban and rural/resource uses and development. The following map shows the location of Sherwood West relative to the current location of Metro's urban and rural reserves, denoted in blue and green, respectively. Understanding the timing of the development in both of these areas is critical to determining the extent of the demand for various uses in Sherwood West in the near- and mid-term, as well as how much land will be needed to serve longer-term growth.

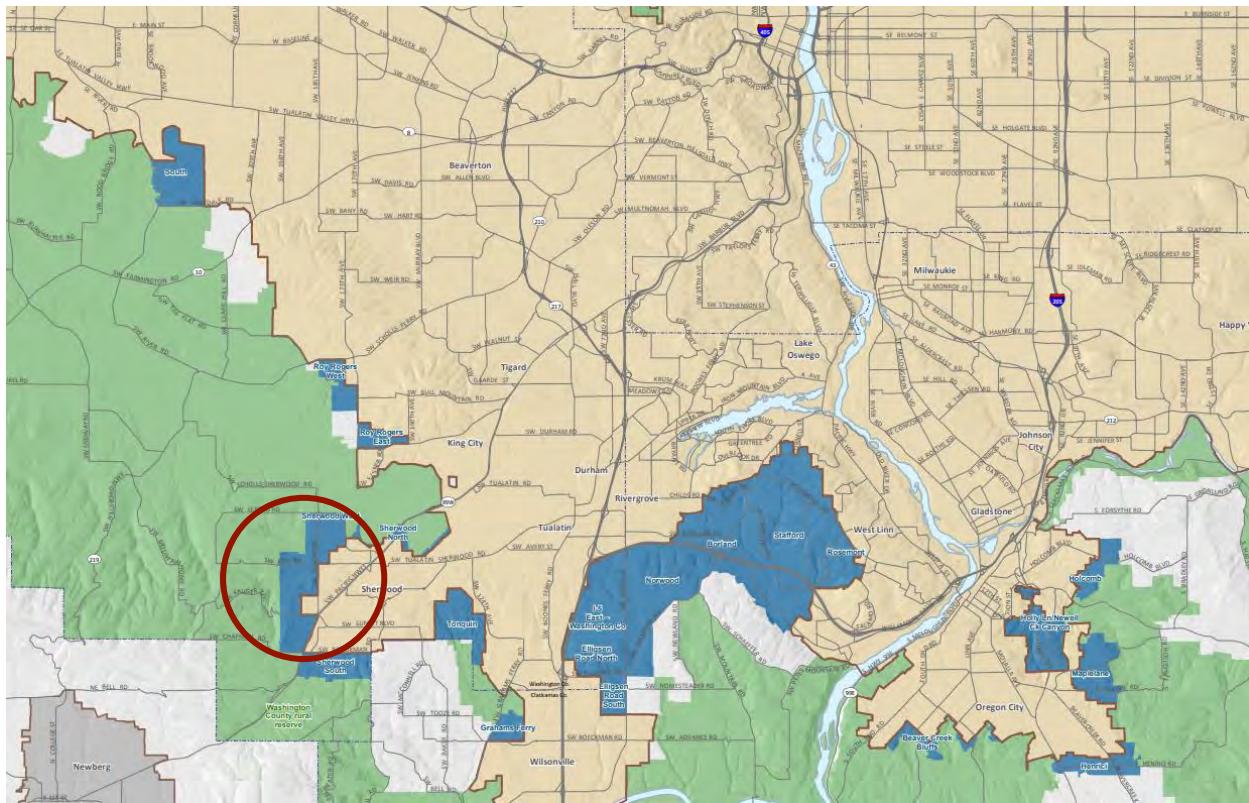
The reserves designated by Metro represent the region's policy regarding land supply needed over the next 50 years. However, the Portland metropolitan region has experienced higher-than-expected economic growth and housing construction, resulting in a quickly diminishing availability of developable land since the designations. A reassessment of land needs, therefore, is likely to be triggered sooner than expected.

In short, it is safe to assume that areas to the west and south will be developed at some point. This analysis, therefore, takes a phased approach to assessing development potential in Sherwood West. In the near term (0-10 years), Sherwood West will continue to be an edge location. As development occurs over the longer-term (20+ years), it will become increasingly central to surrounding neighborhoods. Thus, it is important to identify short-term opportunities based on the current market while maintaining a long-term outlook, particularly if the City's vision for economic development does not align with what the current market allows.

Sherwood West is one of several planned expansions in the southwest metro region. Others include Tigard River Terrace, Beaverton Cooper Mountain, and King City West. How and when these areas develop will directly impact the market and compete with the study area.

Other expansion areas exist along the I-5 and I-205 corridors. These areas are in various stages of planning but are likely to serve a different market area and, therefore, not directly compete with Sherwood West. For major employment uses, there might be some level of competition at the regional level, but Leland Consulting Group anticipates sufficient demand for these uses. A myriad of other challenges also pose barriers to developing these areas, including topography and political hurdles.

Figure 5. Metro Urban and Rural Reserves



Source: Metro

The following table summarizes the scale of planned development in each of these expansion areas.

Table 4. Planned Development Summary

Expansion Area	Commercial / Employment	Residential	Additional Notes
River Terrace 1.0	25,000 to 40,000 sq. ft. (building area)	2,587 units; 75% Single-family, 25% Multifamily (about 1,200 units built to date)	Residential Development is currently underway and is expected to finish in the next several years. Construction of commercial space is expected in late 2021.
Tigard River Terrace 2.0	10 to 30+ gross acres of employment and/or commercial uses	Approximately 3,100 to 4,500 total residential units,	A mix of SFR detached and attached and MFR apartments are expected. Employment uses are desired by the City.
Cooper Mountain (CM), Beaverton	10-acre main street commercial Est. 80,000 to 120,000 sq. ft. (building area)	South CM: 3,430 units Urban Reserve Area: 3,760 units North CM: 300 units	Residential Development currently underway, existing high school, future development at North Cooper Mountain. Limited competition.
URA 6D King City (King City West)	Est. 54,000 to 85,000 sq. ft. (building area)	3,576 units, including a mix of single-family and multi-family homes.	Limited existing household support and physical barriers limit market area, this area is the most removed from centers of population and employment.

Source: LCG

The UGB expansion areas are expected to get built out in the following order.

- River Terrace 1.0
- South Cooper Mountain
- King City West (URA 6D)
- River Terrace 2.0

King City 6D

King City Urban Reserve Area 6D is a 528-acre expansion area to the west of the existing city limits. SW Beef Bend Road and SW Roy Rogers Road border the area on the north and west, respectively. The south boundary is formed primarily by the southern segment of SW Elsner Road and the Tualatin River.

According to the 2018 concept plan, the area could accommodate as many as 3,576 housing units, including 1,222 multifamily units, 560 single-family attached, and 1,794 single-family detached. The 2017 King City Market Study estimated 500 to 950 housing units could be absorbed within the first 10 years of construction.

King City is looking to develop a town center, which is likely to serve these new residents. Development is likely to compete with River Terrace 2.0 or be part of a compatible commercial/employment cluster near Beef Bend Road.

Tigard River Terrace

River Terrace 1.0 is a 500-acre area on Tigard's westernmost edge. It was added to the region's Urban Growth Boundary in 2002 and 2011 to accommodate future housing needs. Approximately 1,200 units are currently built in the area, about three-quarters of which have been built since 2016 (233 were built between 2000 and 2015). Continued build-out of

Tigard River Terrace 1.0 (excluding the River Terrace 2.0 West and South study areas) will result in a total of 2,600 residential units (single-family and multifamily), approximately 25 percent of which will be multifamily.

The River Terrace Town Center is also proposed in the area, a "Main Street" development type that will include 350 residential rental units and 25,000 to 40,000 square feet of neighborhood-serving commercial, likely involving a small format or specialty grocer, medical or professional/financial offices, and food service and drinking establishments. Development is expected to start in late 2021.

River Terrace 2.0 is the next phase of planning in this area. Two urban reserves are totaling over 500 acres to the west and south of the current River Terrace (1.0). River Terrace 2.0 is expected to feature a wider variety of housing options (with average residential densities of 16 to 24 units per acre), recreation, and employment areas. River Terrace 2.0 is expected to add between 3,100 to 4,546 units at full project built out.

Between 10 and 30 or more acres have been identified for commercial and employment uses. It remains too early in the planning process to describe these plans in more detail.

Collectively, the River Terrace areas may include more than 11,000 new residential units and substantial land planned for commercial and employment growth.

Beaverton Cooper Mountain

The Beaverton Cooper Mountain Community Plan is a multi-year effort to plan for the 1,232-acre Cooper Mountain area, which was added to the region's urban growth boundary in 2018. The Cooper Mountain Community Plan will establish a long-term vision for the area's growth and development to support welcoming, walkable neighborhoods that honor the unique landscape and ensure a legacy of natural resource protection and connection. The Cooper Mountain area is located southwest of Beaverton outside the current city limits.

The Cooper Mountain area consists of three areas: a 510-acre area to that north that is inside the UGB but still in unincorporated Washington County; a 544-acre area to the south that was annexed into the city in 2012 (South Cooper Mountain); and a 1,232-acre urban reserve area in-between.

Urban Reserve Area. Current Washington County zoning is primarily Agricultural and Farmland and Rural Residential zones; however, Beaverton will apply its own zoning to the area once properties are brought inside city limits and the area is anticipated to provide at least 3,760 future homes, including a mix of single-family, multi-family, and middle housing types such as townhomes, duplexes, triplexes, and fourplexes. The City anticipates completing the Community Plan in December 2022, after which it will begin accepting owner-initiated applications for annexation and development.

South Cooper Mountain. Due to its proximity to Sherwood and location on Scholls Ferry Road and near Roy Rodgers (providing north-south access to Sherwood), the 554-acre South Cooper Mountain is expected to be the primary competition for new development in Sherwood West out of the three Cooper Mountain areas. The South Cooper Mountain Plan shows that the area could support up to 3,430 housing units and between 47,000 and 142,000 square feet of new commercial space, which would primarily be driven by demand from new residents. South Cooper Mountain is expected to be nearly built out as early as 2024. There is also a new high school that will hold up to 2,200 students and 200 staff.

North Cooper Mountain is slated to support another 300 housing units if new zoning is adopted in the northern portion of the area; utilities are made available; and, properties annex to the City of Beaverton.

Transportation

The regional transportation network serving Sherwood West and surrounding areas is planned for a number of updates and improvements that will be needed to serve future residential and employment growth and changing land use

patterns. Washington County recently completed an Urban Reserves Transportation Study (URTS) project, which is intended to inform concept planning in the urban reserves (including Sherwood West), help ensure that the County meets mobility and capacity standards on area roadways, and provide a roadmap to funding transportation system improvements as the urban reserves develop in the future. Notable projects in the vicinity of Sherwood West include:

- **Roy Rogers Road:** Washington County plans to widen Roy Rogers Road between Scholls Ferry Road and 2,500 feet south of Bull Mountain Road to five lanes with bike lanes and sidewalks. This project is expected to be completed in December 2021.
- **Tualatin Sherwood Road/Roy Rogers Road:** Washington County plans to widen Tualatin-Sherwood Road/Roy Rogers Road, between Borchers Drive and Langer Farms Parkway, to five lanes with bike lanes and sidewalks and additional turn lanes at Highway 99W. The project is expected to begin in Fall 2021.
- **SW Brookman Road:** When the Sherwood West area annexes to the City, SW Brookman Road (SW Chapman Road) will be upgraded to an urban facility with facilities for bicycling and walking, and the City is exploring crossing solutions at Highway 99W.

APPENDIX G

Economic Opportunities Memo

Sherwood West Concept Plan

Economic Opportunities and Challenges

Date June 15, 2021
To Joe Dills, Kyra Haggart
Angelo Planning Group
From Sam Brookham, Chris Zahas
Leland Consulting Group

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Executive summary

Stakeholder Interview Takeaways

- **Employment Land.** There is a limited supply of high-quality buildable employment land in the region and increasing demand, particularly for large sites. Stakeholders believe that demand is strong enough to absorb whatever amount of land the City sets aside for employment in Sherwood West.
- **Development types.** Developers are mostly building multitenant flex space (as part of larger industrial or business parks), warehouses, and distribution facilities (both speculative and build-to-suit). The transportation network is considered prohibitive for the latter two in Sherwood West. Opportunities for build-to-suit single-user buildings may also arise sporadically.
- **Limited Infrastructure Funding Availability.** While this concept plan is expected to address some of the challenges associated with infrastructure phasing and funding in Sherwood West, developers want to see a clear plan for infrastructure improvements before committing to a site.
- **Land needs** range from 40 to 50 acres per “center” or “park” allowing for buildings averaging 50,000 square feet on five to six acres, although a larger-than-average business park or campus-style development may require more than 100 acres. Total demand is likely sufficiently strong to support a number of these developments, creating a healthier jobs/housing/fiscal balance for Sherwood. Sherwood should target two to three areas of Sherwood West with the largest and flattest (less than 3.0 percent slopes) contiguous tracts of land for these developments. Possible locations for this appear limited to the northern section of Sherwood West, particularly in the area bounded by Elwert Road, Roy Rogers Road, Scholls Sherwood Road, and Conzelmann Road, along Highway 99W and potentially near Haide Road and Kruger Road. Most of the inland areas along the western half of Sherwood West are unlikely to be suitable for mixed employment (industrial, flex, office) given the topographical and access constraints.
- **The wine industry** is an important part of the local and regional economy which may dovetail with industrial, retail, and hospitality uses, but it is unlikely to solely support the growth of any of these land use sectors. A diversified economy and additional employment are necessary.

- **Land aggregation** is critical because of the number of different property owners in Sherwood West.
- Developers want **transparency and certainty** for land, zoning, and infrastructure. This is now considered more important than a shorter development timeline.
- **Office prospects** are questionable, and the market may not return to normal for many years. Campus-style development may be possible but there are few local examples and the market is unproven.
- **Zoning flexibility** is critical. It is not recommended the City dictates uses, but simply provides limitations on undesirable uses.

Opportunities for Sherwood West

- **Industrial.** The industrial market is hot and unlikely to cool within the next 10 years. Sherwood is beginning to see interest from existing tech companies in Hillsboro and elsewhere. As the west and southwest parts of the metro region develop, the gap between Sherwood and existing tech and other industry clusters will likely decrease, creating a critical mass of employment with access along the Roy Rogers corridor.
- **Target tenants** are wide-ranging, including service providers, contractors, tech companies, logistics, light manufacturers, designers, healthcare users, etc. Other users in the City's target industry list—including advanced manufacturing, life sciences, R&D, software/media design, professional and business services, food products, outdoor wear design, etc.—are also appropriate.
- **Tech Clusters.** Sherwood is centrally located between existing tech clusters in Wilsonville and the Sunset Corridor. These clusters have historically dominated the tech-oriented employment landscape, but these markets are now understood to be softening, with developers looking for opportunities elsewhere in the Portland metro. The Sherwood area is beginning to draw existing businesses from Hillsboro, as well as serving as an attractive location for new businesses to the metro region.
- **Hotels**—particularly mid-range, independent, and boutique hotels—are in demand. However, Sherwood cannot expect to support new hotel development based entirely on its proximity to wine country as other cities to the south are better positioned for an immersive wine country experience. Instead, new hotels in Sherwood will likely be feasible as a follow-on use once employment growth occurs, and the market is proven.
- Similarly, new **retail development** will come in a later phase after residential and employment growth.
- **Office space** is likely to be part of mixed-use developments, commercial centers, or larger employment centers. Target tenants include tech, medical, and service-oriented office space with some “hub and spoke” or satellite office.
- **Retail.** New growth will drive demand for new space, but the growth of ecommerce and declining retail footprints may dampen the impact. Sherwood should focus on convenience-based retail, such as grocery and health and personal care, as well as neighborhood-serving retail, such as foodservice and drinking places, either as neighborhood-centers or main street corridor approach that diversifies the retail mix and supports the growth independent retailers and restaurateurs.
- **Healthcare.** Because major healthcare facilities depend on large nearby population bases and visibility and access along highways and major transportation corridors, such a facility may be unlikely in the next 10 or 20 years. Attracting such a user would require time, effort, and deliberate planning and policy on the part of the City. Smaller-scale healthcare facilities are likely to be part of centers or larger developments.

Strategies/Recommendations

- **Be Flexible.** Maintain as much flexibility (zoning, land, tools, approach) as possible in planning for employment growth as market cycles and trends over the next 20 years are unclear. This means maintaining large, contiguous sites but not mandating large-lot sites.

- **Plan for Mixed Employment.** Most of the opportunities for long-term job creation will likely require a mixed employment approach—namely industrial, flex, and office. Mixed Employment in centers/parks of 20-100 acres is the strongest market.
- **Plan for Multitenant Space** that can be scaled up or down and is highly divisible (e.g., to 2,500 square feet) allows for business expansion and the flexibility to accommodate various sized flex, office, commercial, or light industrial users.
- **Compile a Toolkit** of incentives and tools that can be packaged together to encourage desired development types.
- **Be Both Proactive and Patient.** Depending on the market cycle and the opportunities at any given time, certain land uses will develop faster than others. This will require a phased development approach in Sherwood West. Industrial and residential uses are likely to dominate in the near term, followed by retail, hospitality, office, and healthcare.
- **Ensure that Buildable Shovel-ready Land is Available for Employment.** The land must be zoned for employment development. The zoning and building codes should require an appropriate level of development quality, but not make unrealistic requirements, for example, around low parking ratios, mixed-use, etc. For certain sites, the City may want to use the State's "Certified Shovel Ready" process to document that environmental, archeological, title, wetland, and topographical issues do not preclude development. Flat sites with slopes of less than 3.0 percent are limited and should be reserved for mixed employment and industrial users.
- **Invest in Talent and Quality of Place.** The underpinnings of traded sector office site selection are simple: Locate where the talent is. Therefore, cities must attract talented people, by providing high-quality cities and neighborhoods where people want to live. The Sherwood West Concept Plan, which integrates residential, employment, and commercial development with parks and open spaces, is an important step; building out the plan is another.
- **Increase Accessibility and Visibility** via the regional transportation network. Large employers have historically needed to bring large numbers of employees to their campuses, and this requires robust auto, transit, bicycle, and pedestrian transportation infrastructure.
- **Consider Land Acquisitions.** Site ownership can put the City in a strong position to recruit employers; it can also be expensive, risky, and politically contentious. If the City is considering land acquisitions, LCG recommends that the City work with a broker with experience executing deals that have resulted in employment land and building development in Washington County, in order to clearly understand costs and benefits.
- **Target 99W and North Sherwood West** for transportation-dependent uses and larger-scale employment development, respectively. There is little frontage on 99W so it should be retained for certain users. Similarly, the largest tract of flat land (100+ acres) in Sherwood West is located to the north. Other areas may be feasible, but developers of industrial and, to a slightly lesser extent, office projects typically require regularly-shaped tracts of flat land with slopes of less than 3.0 percent. A campus-style development may be able to accommodate a greater variety of topographical conditions. Further analysis of the topographical and other physical conditions is necessary to determine the extent of these opportunities.

Introduction

This Economic Opportunities and Challenges memo provides an evaluation of Sherwood West's assets and constraints; summarizes input from interviews with developers, stakeholder, and leading economists; and provides insights on the economic future of Sherwood West as a part of a growing Sherwood. It is intended to highlight opportunities for economic development strategies and non-residential land uses that could produce jobs and tax base as part of the overall mix of land uses in Sherwood West over the next 20 years and beyond. It also explores creative options for long-term job creation that reflect Sherwood West's location at the urban edge and that optimize its ability to evolve as the region matures and economic changes occur.

In preparing the memo, Leland Consulting Group (LCG) conducted interviews with key stakeholders to explore how technology, health care, office, hospitality, retail, and other employment uses might evolve in Sherwood West's unique location. These stakeholders included local and regional industrial, office, mixed-use, retail, and hotel developers, brokers, and specific industry representatives (such as the wine industry). The anecdotal takeaways from these interviews are intermixed within the narrative of this memorandum.

Sherwood should not attempt to compete against other employment centers that may have better locational attributes such as proximity to I-5 or existing clusters of technology employment. Accordingly, we have identified opportunities that play to Sherwood West's unique attributes. These opportunities build upon the area's proximity to the wine country, long-term changes to office dynamics as a result of COVID-19, evolving changes to the retail landscape, and other factors.

The memo includes a shortlist of employment land uses that could realistically be supported in Sherwood West, with projections for development over time.

Constraints and Challenges

Based on key takeaways from feedback received during the stakeholder interviews, most of the opportunities for long-term job creation in Sherwood West will likely require a mixed employment approach—namely industrial, flex, and office. This approach is consistent with both recent development in the Tonquin Employment Area and other examples of peripheral employment development clusters in the region. Of these mixed employment uses, industrial development, which typically includes warehousing, logistics, distribution, and manufacturing, has the narrowest framework of site selection criteria. While demand-related factors are generally expected to largely overcome potential challenges related to site conditions, it is important to highlight these selection criteria as the industrial market may not remain as strong as it currently is over the next 20 years.

Site selection criteria for industrial development typically includes:

- **Access to major transportation routes.** Industrial users typically need access to major transportation routes so that products can be quickly and easily delivered and shipped, and to maximize the employment catchment area. The closest industrial development in the past 20 years has been in Tualatin and Sherwood along I-5 and Highway 99W—both major freight and transportation routes.
- **Separation from residential uses.** Due to the propensity of industrial users to generate noise, pollution, and vehicular traffic, development is not typically located next to residential uses. This sometimes also applies to other uses that attract pedestrian activity, such as main street retail and hospitality.
- **Low-cost land.** Of all land use types, industrial fetches the lowest rents and sale prices. Comparatively, high-density residential and commercial uses fetch the highest rents and sale prices. Typically, the cost of land reflects these trends.
- **Large, uniform sites.** Industrial development is low-density (typically one or two stories) and requires plentiful space for circulation, storage, and parking, particularly for freight operators.

- **Flat sites.** Due to the cost of grading, combined with the low value of industrial development, industrial users require sites with less than 3.0 percent slopes.

With these selection criteria in mind, there are several major constraints or barriers to commercial and employment-focused development in Sherwood West and the immediate surrounding area. We have highlighted these below.

- **Location.** Sherwood West is located in the southwestern corner of the Portland Metro region and lacks easy access to the I-5 corridor. In the near term, this edge location creates a one-sided market area, limiting the employment catchment area. Further, the travel time to or from Portland International Airport¹ is double the average tract in the Portland metro. As we will discuss in the following pages, strong regional demand and a limited supply of employment lands mitigate these challenges in the near term, and long-term residential and job growth is expected to soften these impacts as time goes on.
- **Regional Competition.** As noted in the previous Development Trends and Implications memo, the southwest Portland metro region will see significant growth over the next 20 years, primarily because of the development of Sherwood West and several other nearby UGB expansion areas—including Tigard River Terrace, King City West, and Beaverton Cooper Mountain—as well as local annexation areas like Brookman and Tonquin. Most of these future growth areas are expected to include some level of commercial (and to a lesser extent, employment) space that will compete with new development in Sherwood West. Closer cities within the Portland metropolitan region also have existing industry and business clusters that will continue to grow in the coming years. However, these central-area opportunities are expected to be fully built out or have limited land availability (particularly for larger sites), pushing the focus of substantial new developments to outer locations like Sherwood West.
- **Local Competition.** More locally, there are existing and emerging clusters of development within Sherwood that may be seen by developers and businesses as more attractive for new development. Locally serving retailers, such as restaurateurs, may prefer the established location and charm of Old Town. A hotel developer may have similar sentiments. For larger-scale retail, which is facing an uncertain future due to shifting consumer behaviors and the rise of ecommerce, Sherwood West's southeastern boundary fronting Highway 99W may be a favorable location because of access and visibility, as might the Roy Rogers corridor after its planned expansion. The Tonquin Employment Area (TEA) and the surrounding areas in Tualatin are currently seen as better locations for industrial and office development but vacant land is quickly being developed, which is likely to push the focus further west to places like Sherwood West.
- **Multiple Property Owners.** With 126 properties and 110 property owners, there are few locations that would not require land aggregation and assemblage for a larger (20+ acre) development. Developers tend to prefer large sites with single ownership in order to avoid the significant delays and hurdles associated with assembling enough land from multiple parcels. Further, property owners are rarely on the same page regarding long-term plans and it is difficult to predict if, when, and why private property owners will sell or develop their land. The City may implement a strategic program for property acquisition to meet economic objectives, either in partnership with other public agencies, by soliciting a qualified broker, or by other means.
- **Limited Infrastructure Funding Availability.** While this concept plan is expected to address some of the challenges associated with infrastructure phasing and funding in Sherwood West, developers want to see a clear plan for infrastructure improvements before committing to a site. Infrastructure needs often include enhanced water delivery systems (particularly for tech), enhanced electricity (e.g., green energy), and high speed internet.

¹ Access to other closer municipal airports, such as Hillsboro, also play a role in economic opportunities for Sherwood West, albeit to a lesser extent than Portland Airport. Corporate executives and prospectors often utilize these other airports with private or corporate planes.

- **Topography.** Substantial employment-oriented development, such as a business park, campus, or large-scale industrial or office space, typically requires relatively flat land with slopes under five percent (under three is preferable for industrial). Locations with these topographical conditions are limited in Sherwood West. Sloped sites require grading, which can be prohibitively expensive for developers, particularly if the soil conditions are challenging.²
- **Lack of existing rooftops.** While new residential growth is expected over the next 10+ years, the lower density of households and jobs within a five-mile radius of Sherwood West currently limits demand for new retail space and also limits the employment catchment area for new businesses. The density of rooftops in a given location is a critical site selection criterion for new developments. During the recent round of interviews, one stakeholder shared an example where a developer chose to develop in Salem rather than Woodburn due to this issue. With this being said, the lead time for new development to occur will likely align with this growth, which necessitates proactive planning for new development. Further, Sherwood benefits from its proximity to the Portland metro and is the heart of the triangle formed by Hillsboro, Beaverton, and Wilsonville, with existing undeveloped "gaps" in this area expected to fill in over the next 20 years, increasing the total number of jobs and people.
- **Uncertain/softened Office Market.** The COVID-19 pandemic created much uncertainty regarding the future of office uses. The suburban office market has fared relatively better than the Portland Central Business District (CBD), likely because of the suburb's propensity for "essential" or neighborhood-serving offices like medical, banks, finance and insurance, etc. rather than industries that typically cluster in downtown settings (e.g., professional services).
- **Land Use Application and Permitting.** Some stakeholders interviewed considered Sherwood's application process to be arduous relative to other cities, particularly for industrial development. Suggestions to improve and streamline this process include pushing elements of the initial application to later in the process and being clear about timeframes for various types of permits.

Opportunities

Industrial

The industrial market is considered the hottest of all land use sectors. Ecommerce has surged during the course of the pandemic, with online shopping now considered a norm and capturing more than one-quarter of the total retail market. Further, for every one percent of new retail sales, ecommerce creates demand for 38 million square feet of new warehouse space, and is expected to continue to increase. Other trends benefitting industrial prospects in Sherwood West include the increasing popularity of satellite facilities, which appears to be aligned with residents' desire to work close to their homes. Several other key opportunities related to industrial development in Sherwood West are highlighted below.

Strong Demand. Stakeholders consistently pointed out the increasing difficulties in finding sites in the Portland area, especially large, contiguous, developable sites. As high-quality industrial sites become increasingly scarce in the Portland region, rental rates for industrial space have surged.

Land Needs. In terms of the rate of development, the Tonquin Employment Area (TEA) is considered a relatively accurate depiction of what could be seen in Sherwood West. While Sherwood West is less likely to see as many users that are highly dependent on major transportation routes, the pace of development in the TEA is indicative of the

² Basalt is common in soils throughout the Portland area; Sherwood may experience similar challenges, although that bedrock around Sherwood West is understood to be relatively deep, making grading less of a challenge than in some other parts of the region.

strength of the market, and this is unlikely to subside for at least 10 years. In fact, some developers would not consider a 100-acre designation “long-term planning” and several stakeholders suggested that the 108-acre area in the north of Sherwood West is considered a “drop in the bucket” that would be accounted for within two weeks if it were development-ready today. Additionally, institutional developers are generally purchasing 40- to 50-acre sites in order to phase development over time, with the main focus on five to six-acre developments with around 50,000 square feet of multitenant, mixed employment space. There is also new investment nearby in the Tonquin Employment Area (TEA) for larger buildings (upwards of 200,000 square feet), albeit to a lesser extent than the aforementioned product type, that can be either single user or multitenant. The larger the development, however, the greater the need for flat, unencumbered sites that become increasingly challenging to find.

The City of Sherwood could, therefore, plan for substantial industrial-focused employment growth over the next 20 years. Development types include mixed-use employment with a focus on tech, manufacturing, and warehousing. Despite the regional need for large lot industrial, the City should avoid mandating large lot industrial and instead maintain as much contiguous developable land as possible in order to accommodate phasing. While providing an estimate for the total amount that could be designated for employment lands or the specific product types that should be planned for is challenging, we recommend a flexible approach that can accommodate a range of development programs and types. Larger sites may be developed in full or subdivided by a developer.

Residential Growth. Nearby residential growth will benefit industrial prospects—mainly for smaller multitenant spaces—as people continue to value shorter commutes and quality spaces.

Competition. One of Sherwood’s primary competitors for new industrial-focused employment land development is Wilsonville. The Coffee Creek area is considered a comparable location to Sherwood West. However, Wilsonville’s sites are also considered challenging to develop because there are few sites in excess of 10 acres and there is limited city-provided infrastructure (water, sewer, roads); stakeholders agree that larger sites are needed to achieve an adequate return on investment, especially if infrastructure investments are expected from the developer. Wilsonville is also seen as challenging to work with due to overly restrictive zoning and a challenging permitting process. Of note, the City of Wilsonville has formed an urban renewal district as part of its strategy to support development in the Coffee Creek area.

Low Vacancies. Of the almost 10 million square feet of speculative construction in the metro region that have been delivered over the past 5 years, less than 10 percent is available and the market should be able to absorb most of the 2.1 million speculative square feet being delivered in 2020-2021. Vacancy is expected to increase to 6-8 percent within the next five years as a result of the development pipeline, bringing about more stability to the market. There are roughly four million square feet still in the pipeline, over half of which is planned to be owner-user or build-to-suit properties.

Wine-related Impacts. Outside investment is increasing in Oregon’s wine industry and the Willamette Valley is quickly becoming a hotbed of new activity as investors see profit-making opportunities associated with the lower cost of land (relative to France and California) and grape production, as well as recognizing the need to diversify locations in the face of climate change. The recent acquisition of Ponzi (a Sherwood area business) by the French company Bollinger is one of the first foreign acquisitions in Oregon, but it is expected as the start of an emerging trend rather than an exception. Impacts of the wine industry on hospitality and commercial prospects are explored in later pages.

Developers see opportunities in storage, distribution (including bottling), production, and warehousing. While the former is a low-density employment type, the others pay higher wages and employ a significant number of people. Wine-focused manufacturing also aligns with existing trends in the southwest metro region which has seen food processing become a major employment sector. While industrial stakeholders see opportunities in production, wine industry experts consider it a nonstarter, with the majority of production facilities likely to remain in the immediate vicinity of the growth area. Storage and distribution may benefit from proximity to Highway 99W, but, again, developers

see areas that are more centrally located in wine country—such as McMinnville along Highway 18—as better potential locations in the short-term.

T-S Corporate Park. Cities are increasingly using zoning codes to influence development. For the T-S Corporate Park, the developers knew the zoning before it was annexed, and the plans were reactive to that zoning. The developers looked at the Koch Corporate Park to the east as a comparable example for what they could expect. Despite topographical, soil, and wetland constraints, the project is rapidly proceeding with multitenant space geared to manufacturing, food, and tech (such as bioscience).

Target Industries

During the stakeholder interviews, participants (including those throughout all stages of the development process, from high-level prospecting to tenant recruitment) generally agreed with Sherwood's target industries. These industries include:

- High Technology/Computers & Electronics
- Light Manufacturing/Advanced Manufacturing³
- Cleantech
- Life Sciences/Biosciences
- Research and Development (R&D)
- Software/Media Design
- Professional/Business Services
- Food Products
- Outdoor/Athletic Wear Design
- Healthcare

Other industries mentioned during the interviews included logistics and engineering. Many of the target industries above are highly water-intensive. One major competitive advantage in Oregon's favor is the availability of water. Some of Oregon's competition, including New Mexico and Arizona, are facing significant challenges due to current and expected future droughts.

These industries are primarily traded sector and provide, on average, higher-paying jobs and may be part of a campus-style development or as individual site developments (most likely multitenant mixed employment buildings). It is understood that these development types are seeing increasing levels of interest from various stakeholders. A larger campus or business/tech park will require larger tract of land in excess of 20 acres and perhaps as much as 100 or more acres.

Possible locations for this appear limited to the northern section of Sherwood West, particularly in the area bounded by Elwert Road, Roy Rogers Road, Scholls Sherwood Road, and Conzelmann Road. Other locations may be appropriate as long as land is free of development impediments, such as steep slopes and wetlands. A high-level topographical analysis of the area shows potential locations for other employment areas along Highway 99W and perhaps centrally around Haide Road and Kruger Road. Most of the inland areas along the western half of Sherwood West are unlikely to be suitable for mixed employment (industrial, flex, office) given the topographical and access constraints.

Locational Considerations

Highway Access. Approximately 0.8 miles of Sherwood West's southeastern boundary fronts onto Highway 99W (between Kruger Road and Chapman Road). This access is considered critical for industrial users that require quick and easy access to the transportation network. This location is considered the only place that warehousing and distribution users may locate. The middle section of this stretch of Sherwood West contains topography that is likely prohibitive for new development that requires flat land (especially industrial), and the northern section is made up of multiple property owners and several irregularly-shaped and smaller parcels, creating challenges for land assembly and development. Generally, high-density employment is not considered likely due to the impacts on the transportation network and

³ One stakeholder specifically mentioned interest in aerospace components manufacturing.

probable congestion, although this could be somewhat mitigated with robust residential growth that reduces commute times.

Tech Clusters. Sherwood is centrally located between existing tech clusters in Wilsonville and the Sunset Corridor. These clusters have historically dominated the tech-oriented employment landscape, but the market is now believed to be softening, with developers looking for opportunities elsewhere in the Portland metro where there is access to new talent clusters, new homes (especially for executives), and large tracts of land available to develop (particularly lower-cost land). LCG's stakeholder interviews suggest that the Sherwood area is beginning to draw existing businesses from Hillsboro, as well as serving as an attractive location for new businesses in the metro region.

Access to Talent. Talent is critical to location decisions for employers and is the single most important factor driving urban economic success is the educational attainment of a city's population.⁴ Economic development partners and employers talk about "Talent" in terms of (1) the size of the skilled labor force in the market area, (2) the size or percentage of the population with a college degree, and (3) industry composition.

Approximately 17,000 new households are planned between the three UGB expansion areas along the Roy Rogers corridor (Sherwood West, Tigard River Terrace, and King City West—all within a five-mile radius), potentially adding more than 50,000 people to the area in the next 10 to 20 years. This growth will increase the interest of developers of all land uses in and around the Sherwood area. The importance of Sherwood High School should not be understated here as a local driver of talent creation. The school district is considered a major draw to the area for residents and executives, and programs and partnerships with industry groups or businesses will likely continue to increase opportunities for localized economic development.

Infrastructure

Infrastructure is considered one of—if not the most—important elements for employment-focused development in Sherwood West. Developers desire certainty around roads and utilities, and now consider it a simple "build it and they will come" approach.

Funding Plan. Metro, the regional planning agency, also considers infrastructure essential and recommends that the City develop a clear infrastructure funding and phasing plan as part of the Sherwood West Concept Plan. If the City can prove a certain return on investment, this plan can help justify the additional investment, financing, and funding from an economic development perspective. This does not necessarily equal an expectation of the City to build all infrastructure, but developers are increasingly doing risk assessments relative to delivery, so a clear plan for getting the shovel in the ground is important—more important than being promised a quicker overall timeline.

Shovel-ready Sites. Having shovel-ready sites available is likely to offset any of the area's potential disadvantages, to a certain extent. However, we recognize that there is a risk involved in speculative infrastructure investment, especially if the requirements for new development differ from user to user. The tech industry, for example, is understood to be asking for enhanced water delivery systems, enhanced electricity (e.g., green energy), and high-speed internet. In this case, Sherwood's municipally-owned broadband is a major advantage. It is recommended that the City of Sherwood develop a defined implementation plan with readily available funding.

Office

Office prospects are questionable, and the market may not return to normal for many years. Campus-style development may be possible but there are few local examples, and the market is unproven.

⁴ <https://cityobservatory.org/talent-and-prosperity/>

Based on LCG's experience and other sources, employers base their decisions on where to locate office space based on the following primary criteria:

- **Attracting and retaining talent.** This is the most often cited requirement for location decisions. Businesses want to be in locations where they can draw on a large pool of highly-educated, innovative, creative, and motivated individuals. While the population size and educational attainment near Sherwood West are reasonably strong, other competitive areas still have a talent advantage, as shown in the table in the Locational Considerations section.
- **Development Clusters.** Being located in proximity to customers, collaborators, suppliers, and even competitors is critical to the success of office developments. Hence the clustering of Athletic and Outdoor businesses in the Portland metro region, and in proximity to Nike.
- **Accessibility and visibility.** Employers' workforce, customers, suppliers, and others must be able to easily get to and from the office space. Visibility is important since an attractive office space can act as a marketing tool for the company's brand.
- **Quality of place.** Since talent is the most important consideration, and highly skilled people are attracted to places with a high quality of life, quality of place is important to employers.
- **Real estate costs.** After labor costs, real estate costs like rent and other fees increase the costs of operation. Higher costs often mean tighter budgets and slower growth trajectories.
- **Regulation and tax structure.**⁵ Depending on a business' perspective, it may consider the regulatory or fiscal environment as supportive or contrary to its operations. Regulations can include environmental requirements, zoning, and other elements that may restrict certain uses, development types, or businesses. Taxes, such as property and income tax, can also impact a business' ability to attract workers, but taxes play a lesser role than others mentioned here.

Regional Overview

While office prospects remain murky, it is expected to return to full strength within the next five years as economic conditions improve. The Portland CBD accounts for the vast majority of the metro's office inventory, which is unlikely to change despite trends that support a greater dispersion of the office inventory.

Total vacancy in Downtown Portland has been increasing each quarter since 2019 to its current vacancy of 16 to 18 percent and is expected to continue to increase as pipeline development comes online and if leases expire and are not renewed. A vacancy rate near or upwards of 20 percent is considered a major problem from which it is challenging to recover. Almost one million square feet of new, mostly unleased, office product was delivered to the market in 2020, and another 500,000 square feet is still in the pipeline.

After many years of office space consolidation, office users may start to value more space (spurred on by health concerns brought on by the COVID-19 pandemic), although any impacts from space expansions are likely to be dampened by the increasing normalization of the work-from-home environment.

Suburban Office

The suburban office market has generally maintained a steadier course with a vacancy rate currently around 10 percent, albeit with a substantially smaller inventory. The suburbs can provide employment opportunities closer to people's homes and often levy fewer taxes that can be seen as attractive for residents.

⁵ Based on LCG experience and *Seven reasons why location is important* <https://www.us.jll.com/en/views/seven-reasons-location-important>

Most office developments that are part of larger planned centers as single, isolated buildings typically struggle to penetrate the market. An example of this is the nearby Pacific Financial Center in Tualatin. Despite a location on Highway 99W, the building has struggled to attract tenants and is only recently achieving a vacancy of 75 percent since its construction in 2008, with asking rents of \$28 full-service advertised for currently available space. Pacific Financial Center is an ode to an outdated development model and demonstrates the need to cohesively plan for a critical mass of employment and commercial activity.

For the purpose of long-term planning of Sherwood West, the City can assume that office space will be a relatively minor part of the development program, either as mixed-employment, campus, and/or mixed-use developments. The most likely development type is surface parked projects no more than 20,000 square feet, with some smaller office space as part of mixed-use developments. Target tenants include tech, medical, and service-oriented office space with some "hub and spoke" or satellite office. With tech, it is most important for there to be a critical mass.

As with industrial, a flexible approach that accommodates these and other development types—as desired by council—is recommended. While office prospects remain dictated by the availability of flat land, it is typically a higher value development type that commands higher prices and rents than industrial, and it can therefore get built in areas with slightly more challenging site conditions (sometimes with slopes between five and 10 percent).

Office as Part of Mixed-Use Developments

Several trends in consumer behavior provide additional cause for optimism for commercial and employment uses in Sherwood West.

Remote Working Opportunities. One of the trends from the COVID-19 pandemic that is likely to continue is the rise of flexible employment and remote work. As many as 20 to 30 percent of office workers plan on not returning to the office full time. With the projected growth of anywhere from 20,000 to 30,000 new residents aged between 25 and 64 over the next 20 years within five miles of Sherwood West (above an existing baseline of 36,400), this growth may result in as many as 20,000 people working remotely. This may provide opportunities for smaller office suites (less than 1,000 square feet) and coworking spaces that could be part of a mixed-use environment.

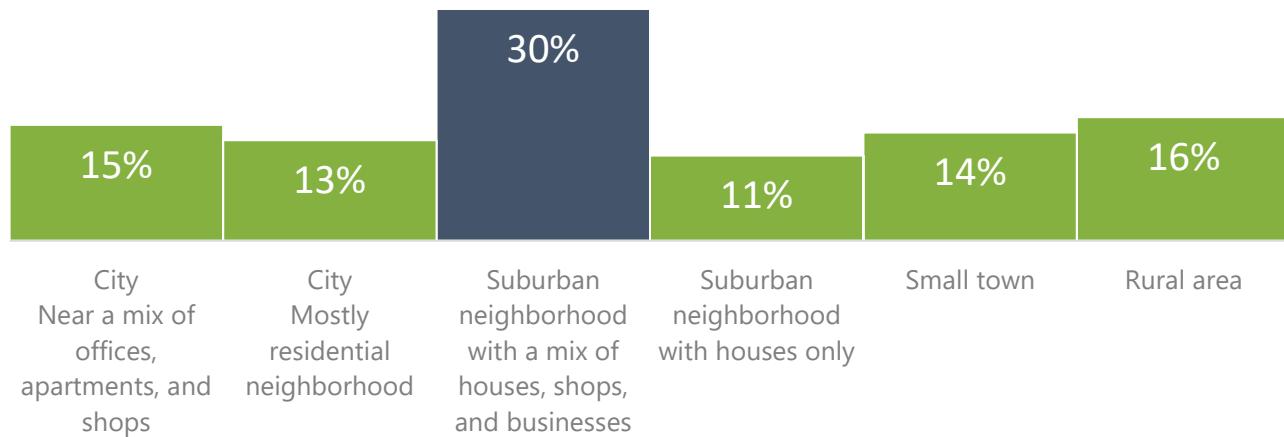
20-minute Neighborhood. One notable shift in consumer behavior is the growing demand for the **20-minute neighborhood**—the concept where one can take care of everything within a 20-minute walk. These areas have walkable access to a mix of employment and commercial services, including amenities, multimodal access, adequate sidewalks, and good street connectivity.

While it is challenging for most areas in suburban or edge locations to attract a critical mass of commercial amenities and services and employment opportunities to achieve the 20-minute neighborhood, there has long been a growing demand for suburban neighborhoods that include these elements, as shown below. Sherwood West can capitalize on these shifting preferences.

Orenco Station is a good example of this: the Hillsboro suburb is a grocery-anchored mixed-use center with retail and office uses surrounded by a variety of housing types, including single-family homes, townhouses, and apartments. Another good example is the City of Lake Oswego, which has succeeded in creating an amenity-rich environment for its office workers, resulting in an attractive, mixed-use location that drives rent premiums and supports higher density development.

These areas are attractive to younger knowledge workers who might be interested in some type of incubation space for new company creation. The new high school will help the potential growth of knowledge-related employment by anchoring and nurturing community bonds.

"Where Would You Most Like to Live" Survey Results



Mixed-use development has historically been limited to downtown environments, only occurring in some suburbs in hotter markets. However, it is now expected that mixed-use has a future in the suburbs, especially if it can be developed horizontally (versus vertically) and accommodated on larger sites to mitigate the higher cost of construction associated with typical vertical mixed-use development. Horizontal mixed-use typically occurs organically and, in turn, creates the market conditions to support more density.

Sherwood should pursue horizontal, rather than vertical, mixed-use development, at least in the near term. The major differences include parking (surface versus structured), construction type (wood versus concrete podium), the use of elevators, additional circulation and interior spaces, fire and safety elements, and the level of fees associated with the development.

Vertical mixed use also requires much higher rents, primarily because of the more expensive construction costs. These rents do not exist in the Sherwood area today. As such, pursuing the latter without allowing for the former may delay new development in Sherwood West.



Hospitality

New hotel development has been clustered in downtown Portland and Hillsboro, with a few isolated projects elsewhere along major arterials. There has been relatively limited hotel development in the southwest metro region, except for Sherwood's new Hampton Inn.

Some of the key inputs to hotel developers' site selection decisions are the amount of nearby employment (which drives business travel), convention center space, major tourist destinations/quality of place, and visibility from major highways/transportation corridors. There is also "background demand" that is linked to the size of the surrounding population. Hotel development, to an even greater degree than commercial development, tends to be a "following use." In other words, hospitality follows other types of development, particularly office space. Office space is a significant generator of hotel demand and makes it easier to justify the market and attract developers.

Sherwood West is likely to have competitive advantages in terms of major employment clusters, tourism draws, and transportation corridors compared to other locations. LCG considers the probability of attracting a new hotel in the area as high, particularly for a mid-range hotel. However, the City should not expect lodging development to be completed early in the lifespan of Sherwood West.

Challenges. Specific challenges related to the hotel industry for Sherwood West are listed below.

- Lack of major office employers and two of the major employers include healthcare and the school district, which doesn't reflect an adequately diversified employment base to drive hotel demand.
- Existing land availability in the heart of wine country for wine-oriented hotels in other cities such as Dundee means that Sherwood is unlikely to be competitive based on the wine industry alone.
- Hotels are generally "follow-on" investments because they are expensive to build; developers, therefore, need a proven demand before committing to development.
- Hotels require adequate "activation energy"; there is currently a lack of restaurants and other amenities in and around Sherwood West.
- Lack of local comparable examples; hotel developers need to prove that hotels can get to 70 percent occupancy in order to confidently develop. However, if the Hampton Inn negatively performs, it is not necessarily an indication of prospects as branded hotels can be a negative for certain audiences.

Opportunities. Most of these challenges can be addressed by focusing on employment growth and a greater array of commercial amenities and services. The pandemic has also increased consumer's desires for "drive-to" areas, so cities like Sherwood that are less isolated may become more resilient to future market disruptions.

Feedback from the stakeholder interviews indicated a range of hotel options for Sherwood, including mid-range and upper-range or boutique hotels. The Allison Inn and Spa in Newberg was discussed as a luxury option (\$500+ a night) but is not expected to be currently feasible in Sherwood until a critical mass of high-wage employment occurs to complement Sherwood's presence as a gateway to Wine Country. An upper range or boutique option (\$300-400 a night) such as McMinnville's Atticus Hotel faces similar challenges in the near term and may be best suited to Old Town Sherwood over the longer term. The recently completed 73-room Hampton Inn in Sherwood is considered a budget-friendly option (less than \$150 a night).

Primary demand is for at least one mid-range hotel in the \$150 to \$250 a night range that fills an existing gap in the market.

Location. The most likely location for a hotel would be near a mix of uses or town center feature, or near open spaces. It is possible that lodging could be located along one of the arterials and look to build on travel to and from the wine country to the southwest, but there are most likely superior wine country lodging locations. In fact, a location on 99W would help with visibility, but the need for visible, highway-adjacent locations is declining as consumers increasingly use technology to seek lodging options and book ahead of time. A more physically attractive location will maximize Sherwood West's unique assets such as its views and open spaces. Proximity to future employment is also recommended to target business travelers and a broad spectrum of customers that may desire a different product from branded I-5 corridor hotels.

Wine tourism. While Sherwood is well positioned between the Portland metro and wine country, the City should not base its future on the wine industry. Other cities that are more centrally located in Wine Country are likely to continue expanding and experience the bulk of tourism activity, particularly for out-of-state visitors (even though Sherwood's location as a gateway to wine country is a major advantage). Local support is also strong, and new residential growth coupled with an increase in inter and intra-state tourism (particularly from TX, NY, FL, etc.) will drive demand for new facilities (e.g., satellite tasting rooms).

An Oregon Winery Visitor Profile Study Report for 2019 by Travel Oregon profiles visitors to the State's wine regions. In the Sherwood region, the average visitor is a 51-year-old woman earning \$113,000 per year. These visitors average \$600 in spending over the course of two days and stay an average of 1.5 nights. Compared to the Napa region, the lack of available lodging and other services and amenities is apparent, with Napa visitors staying an average of two nights with greater expenditures.

This data is consistent with information garnered during stakeholder interviews, which indicated potential opportunities for high-end and boutique hotels and white tablecloth restaurants in Sherwood. These uses would help elevate Sherwood's position as a high-end tourism destination for domestic and international visitors.

Retail/Commercial

As described previously, the retail real estate sector continues to struggle as a result of the ongoing pandemic and the growth of ecommerce. There is now significantly less new retail development being built per new resident than ever before. Big box retail prospects are also the lowest they have ever been among the development community. With that said, Sherwood's retail market is considered vibrant and healthy.

Sherwood's retail inventory is largely traditional brick-and-mortar, i.e., surface parked commercial centers or standalone buildings along transportation routes. The three types of centers include:

- **Community centers.** Often referred to as a strip mall, community centers range from 125,000 square feet to 400,000 square feet. These properties usually have a grocery store and can also have a discounter and large specialty shops mixed with convenience retailers, such as drugstores.
- **Neighborhood Centers.** A smaller version of community centers. These are typically referred to as grocery-anchored properties, along with other convenience retailers. They run up to 125,000 square feet.
- **Convenience Centers.** These are very small properties that are less than 30,000 square feet and filled with, well, convenience-based retailers, such as dry cleaners, nail salons, drug stores, and other types of shops where customers are looking for a quick purchase or service.

Spending Gap Analysis. A retail gap or leakage analysis helps identify strengths and opportunities in the retail market. Supply is determined by estimating the sales by retail establishments in the region to all consumers, regardless of where they live; sales to businesses are excluded. Demand is determined by estimating the expected amount spent by consumers that live in the region at all retail establishments, regardless of their location. The difference between supply (retail potential) and demand (retail sales) represents the retail gap. If the demand is greater than supply, a leakage occurs. Retail leakage refers to the amount of money that residents are spending on retail goods and services at stores located outside the community. If supply is greater than demand, a surplus occurs and indicates that retailers are selling more than is demanded within the region. This information is critical to economic developers and regional planners because it can be used to recruit appropriate retailers to the community. It is also useful to retailers already located in a community because it can guide on tapping new markets with expanded or improved product offerings.

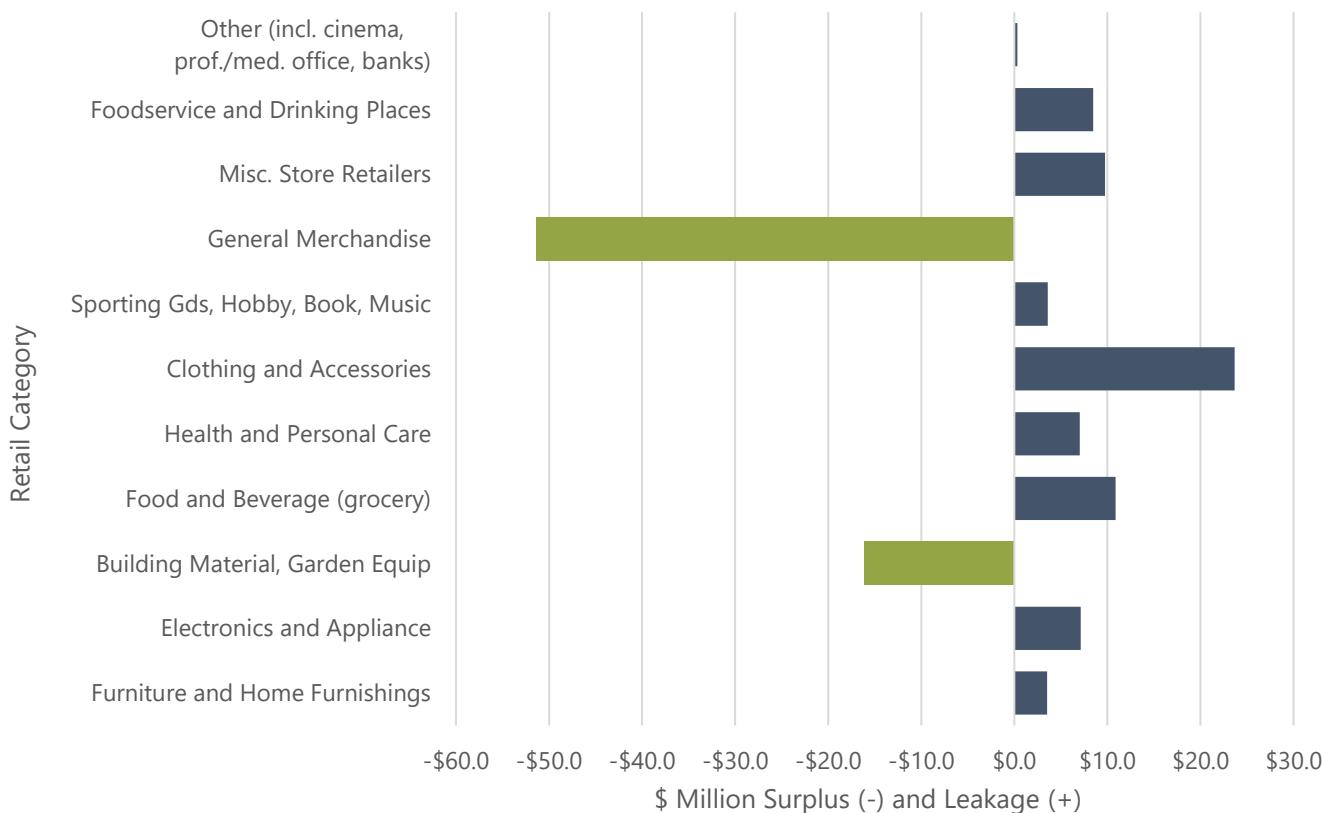
As the following chart shows, there is leakage in most retail categories. However, total retail demand is estimated at \$402 million and total retail sales at \$395 million, meaning there is little difference in total. Further, a huge surplus for General Merchandise (such as Target, Walmart, etc.) may account for much of the leakage in specific retail categories

like Clothing and Accessories and Miscellaneous Store Retailers. Also likely is that the Sherwood area, as the gateway to the Portland metro, is capturing spending from smaller cities in the Willamette Valley that do not have as many retail offerings. As Sherwood increases its retail offerings and the commercial landscape becomes increasingly vibrant and diverse, the retail gravity will likely draw from an increasingly large trade area to the south. If planned properly, a cluster of unique, destination-style retail offerings would likely capitalize on these opportunities.

Looking ahead, residential and employment growth will certainly drive demand for additional retail space, but the growth of ecommerce and declining retail footprints may dampen the impact. Traditional "big box" retail is also unlikely as the market is relatively saturated with this product type. Instead, Sherwood should expect to focus on convenience-based retail, such as grocery and health and personal care, as well as neighborhood-serving retail, such as foodservice and drinking places. These categories are also less prone to market disrupters. Enough leakage exists in these categories to immediately support at least one moderately-sized cluster of stores.

There is a growing desire for placemaking, entertainment, and culinary experiences. According to stakeholders, Sherwood is missing specialty markets and independent, farm to fork, and white tablecloth restaurants. Restaurants are important placemaking elements that support business retention and expansion and other economic objectives. There is a belief that opportunities exist to market Sherwood West to certain restauranteurs that may want to relocate from the central city. Similarly, individual wine-related tasting rooms or a regional wine bar may be able to capitalize on the burgeoning wine industry. While Old Town is the more likely environment for these uses, existing available spaces are limited; a nodal development cluster or main street development in Sherwood West may attract developers and tenants that recognize the market opportunity for these uses.

Current Spending Surplus (-) and Leakage(+) by Retail Category, Primary Trade Area (10-minute drive time)



Source: ESRI, LCG

Healthcare

Today's healthcare facilities are dispersed throughout the region and have spread out to serve the needs of the metro's growing population. Key healthcare demand drivers are the size of the population in the market area and the size of key populations such as seniors. Small- and medium-size healthcare facilities (particularly clinics, primary care offices, and dental offices) can easily fit into smaller commercial centers. Major healthcare facilities (e.g., hospitals and large medical office buildings) tend to locate along highways and major transportation corridors. Healthcare is an industry that has the potential to drive demand for other commercial uses and amenities, including retail, office, lodging, and, to a lesser extent, light industrial and manufacturing.

One of the hottest trends shaping healthcare real estate is the shift to delivering medical care in outpatient settings. Ultimately, this trend is being driven by three factors: an emphasis on driving down costs, the rise of the healthcare consumer, and an aging population.

This is consistent with the findings from LCG's interview with a major healthcare provider. Key findings are as follow.

- Site criteria for new healthcare facilities include drive times, ease of access, visibility, proximity to other services, and distance from competitors. A location along 99W appears the only adequate location that fits this criteria.
- With the shift to outpatient facilities, healthcare providers are unlikely to build additional in-patient facilities in Sherwood.
- Providers consider a 10-minute drive time the market area for primary care and 20-minute drive time the market area for specialty services. Existing facilities in Newberg and Beaverton are within a 20-minute drive time of Sherwood and may not compete for additional specialty services in the near future. Demand for primary care services, however, is likely to increase as the population and number of jobs increases in the immediate Sherwood area.
- Providers are increasingly partnering with developers to build facilities as part of larger mixed-use and wellness-oriented projects.
- Smaller clinics sized around 1,500 square feet may be part of mixed-use developments or in retail settings.

Sherwood West may benefit in the future from several emerging trends, including a growing acceptance and use of telehealth (driven by the COVID-19 pandemic), technological advances, and a growing desire for more convenient and accessible outpatient services. These trends are more likely to lend themselves to smaller healthcare facilities.

LCG's assessment is that it is likely that some small- or medium-size healthcare facilities will locate within one or more of the Sherwood West commercial areas. Assisted living facilities can be located within residential parts of Sherwood West.

Because major healthcare facilities depend on large nearby population bases, higher visibility, and access to highways and major transportation corridors, as well as the shift away from inpatient facilities, such a facility is unlikely to develop in Sherwood West, at least in the next 20 years. Attracting such a user would require time, effort, and deliberate planning and policy on the part of the City.

Strategies for Employment Growth

LCG recommends the following approaches and strategies for employment attraction:

- *Be Flexible.* Maintain as much flexibility (zoning, land, tools, approach) as possible in planning for employment growth as market cycles and trends over the next 20 years are unclear. This means maintaining large, contiguous sites but not mandating large-lot sites.
- *Plan for Mixed Employment.* Most of the opportunities for long-term job creation will likely require a mixed employment approach—namely industrial, flex, and office. Mixed Employment in centers/parks of 20-100 acres is the strongest market.

- *Plan for Multitenant Space* that can be scaled up or down and is highly divisible (e.g., to 2,500 square feet) allows for business expansion and the flexibility to accommodate various sized flex, office, commercial, or light industrial users.
- *Compile a Toolkit* of incentives and tools that can be packaged together to encourage desired development types.
- *Be both proactive and patient.* The City will need to be both *proactive*—in maintaining relationships with major employers, brokers, economic development professionals at different levels of government, and others in the employment development community and understanding their needs—and also *patient*. This means a recognition that the City will probably forgo the opportunity to see the land developed sooner with residential.
- *Ensure that buildable shovel-ready land is available for employment.* The land must be zoned for employment development. The zoning and building codes should require an appropriate level of development quality, but not make unrealistic requirements, for example, around low parking ratios, mixed-use, etc. For certain sites, the City may want to use the State's "Certified Shovel Ready" process to document that environmental, archeological, title, wetland, and topographical issues do not preclude development.
- *Invest in talent and quality of place.* The underpinnings of traded sector office site selection are simple: Locate where the talent is. Therefore, cities must attract talented people, by providing high-quality cities and neighborhoods where people want to live. The Sherwood West Concept Plan, which integrates residential, employment, and commercial development with parks and open spaces, is an important step; building out the plan is another. More broadly, the City should work to ensure that its workforce is well educated and trained to fill jobs within the City and regional industry clusters. It should also focus on supporting the development of a diverse array of suitable housing types, promoting placemaking as a core economic development strategy that prioritizes amenities, services, connection to Old Town, and open space. Doing so will likely draw a greater connection between Sherwood's existing high quality of life and well-skilled/educated workforce to encourage talent retention/tech business incubation and grow the community tech "ecosystem" etc. in Sherwood West.
- *Increase accessibility and visibility via the regional transportation network.* Large employers have historically needed to bring large numbers of employees to their campuses, and this requires robust auto, transit, bicycle, and pedestrian transportation infrastructure. In the near term, most employees are most likely to commute to work in cars they own; over the long term, automated vehicles, ride-sharing, and non-auto modes may increase. In any case, this will require the City to work closely with other cities, Washington County, and Metro.
- *Consider land acquisitions.* Site ownership can put the City in a strong position to recruit employers; it can also be expensive, risky, and politically contentious. If the City is considering land acquisitions, LCG recommends that the City work with a broker with experience executing deals that have resulted in employment land and building development in Washington County, in order to clearly understand costs and benefits.

Tools

The market is currently favorable for new employment-oriented development, yet tools and incentives may be necessary if the City desires a certain type of use the market doesn't support or it wishes to accelerate the timing of new development. The City may achieve this using an array of tools, including:

- Enterprise zones
- Zoning
- Incentive programs (tax abatements, development assistance)
- Fee waivers
- Marketing⁶, developer outreach/solicitation

⁶ An element of marketing may be necessary. The City's municipally-owned broadband service is a unique differentiator in the region and should be promoted.

- Public-private partnerships
- Strategic public partnerships (e.g., with GPI)
- Local improvement districts
- Urban renewal areas

Phasing

Developers are already interested in Sherwood West, particularly developers of industrial and mixed-employment uses. Despite the 20-year planning horizon of this Concept Plan, the timeline for bringing land into the UGB is potentially much quicker. The next legislative ask is 2024 and it is recommended the City move quickly to ensure development can occur within the next 10 years.

Industrial development has historically been about cost and infrastructure; now, it is about speed to market and feasibility. Most major industrial developers are likely operating within a five to 10-year timeline. It is also important to note that infrastructure provisions—or at least a clear implementation plan—available land to develop (without development encumbrances or multiple property owners), and adequate zoning are all critical elements for attracting employment-focused development.

Zoning

Zoning is one of the most critical pieces to get right. Flexibility is critical and the balance should be just prescriptive enough without dictating the uses in order to encourage desired development types while accommodating future growth and emerging trends like robotics and changing delivery systems. Restrictions should be limited to uses that have very low employment densities, such as storage. The zoning in the Tonquin Employment Area is considered a good example of employment-focused zoning.

Parking and environmental standards are two of the more challenging elements of the development code. It is important to keep these standards up to date with industry best practices and user needs and not have overly cumbersome standards.

APPENDIX H

Transportation Issues Memo



TRANSPORTATION ISSUES MEMO

DATE: April 29, 2021

TO: Joe Dills and Kyra Haggart | Angelo Planning Group

FROM: Carl Springer | DKS Associates

SUBJECT: Sherwood West Concept Plan Re-Look, Transportation Issues Project #21057-000

PURPOSE

The Sherwood West Concept Plan Re-Look will update the land uses and community plan envisioned in the Sherwood West Preliminary Concept Plan, which will influence the transportation systems that serve it. This memorandum highlights key transportation considerations, including what has changed since Preliminary Concept Plan was completed in 2016 to inform strategic transportation system choices for Sherwood West.

The purpose of this memorandum is to summarize the key transportation issues and projects that will be addressed through this Concept Plan update. It is recognized that transportation system planning works best when it responds to the existing and future needs of its users, which are represented by how land use plans are organized. The transportation plan must also respect the environmental and topographical constraints that are present within Sherwood West.

LAND USE ISSUES

This update is expected to take a new approach in the land use plan which has a direct impact on transportation systems. Studies completed since 2015 indicate greater community needs for employment and mixed-use commercial areas to help Sherwood better balance the mix of jobs and housing that are accessible to the community. This kind of change will affect the travel patterns during commute hours and have some influence on the kinds of services and public amenities that are suitable to support this area. Also, recent state land use regulations have modified single-family zoning requirements to encourage a mix of housing types within each new neighborhood (HB 2001). This is expected to yield higher residential densities than was previously reflected in the preliminary concept plan.

In addition, the new Sherwood High School campus will be reflected in this plan, which was not a part of the prior work. The transportation demands of a high school campus represent a significant change, in terms of the intensity of travel in this area; the reliance on safe and comfortable

walking and bicycling systems in Sherwood West; and, the ability to provide north-south connectivity on the west side of SW Elwert Road. Several major new street improvement projects have already been constructed to support the new school. However, in developing the rest of the concept plan's transportation system, these unique school-related travel needs will be considered to ensure a consistent and connected service to all neighborhoods that are expected to utilize this campus.

Outside of the City of Sherwood, new growth along the Roy Rogers Road corridor now has better plans or updated information that was not available five years ago. Growth in these areas will influence regional travel conditions, which could include local routes within Sherwood West like SW Elwert Road. These new external growth areas include Cooper Mountain in Beaverton, expansions to River Terrace in Tigard, and Kingston Terrace, the new western expansion of King City extending to Roy Rogers Road. Taken together, these nearby growth areas will add thousands of additional families that will rely on the same regional transportation system that serves the Sherwood West community, and they need to be considered in assessing the travel conditions for the Sherwood West Concept Plan.

TRANSPORTATION SYSTEM ISSUES AND PROJECTS

This section provides a review of pending regional transportation system improvement projects and also highlights several previous street elements within the plan boundary that will be revisited through this process.

ROY ROGERS ROAD

Washington County plans to expand SW Roy Rogers Road to a five-lane arterial (two travel lanes in either direction plus a center turn lane) south into Sherwood through to Highway 99W. The final southerly extent of this improvement will be from Chicken Creek to Borchers Drive. The estimated \$14 million project is funded by the County's MSTIP program, and it is planned for completion by Spring 2024. This regional corridor connects SW Scholls Ferry Road to Highway 99W and connects between job centers in Hillsboro, Beaverton and housing areas in Sherwood, Wilsonville, and western Clackamas County. Horizon year (2040) travel forecasts are roughly 40,000 vehicles on an average weekday, which is similar to levels observed today on Highway 99W between Tigard and Tualatin. This high level of travel demands may influence the type and location of potential development along the SW Roy Rogers Road corridor, specifically making it more attractive for retail and mixed-use development.

BROOKMAN ROAD

The SW Brookman Road extension ultimately will define a new southern edge of Sherwood. When properties in the Brookman Addition area annex to the City, SW Brookman Road will be upgraded to a full urban arterial facility and its current intersection with Highway 99W will be upgraded to comply with Washington County and ODOT standards for driving, bicycling, and walking. The recent update to the Brookman Addition Concept Plan recommended an interim 3-lane arterial cross-section on Brookman Road until such a time as a 5-lane section is required. The scope and character of the 99W crossing is still under discussion, and the City has stated a desire to explore

an overcrossing roadway rather than at-grade intersection to provide a more convenient and safer route east-west. The SW Brookman Road extension west of Highway 99W (via SW Chapman Road) will also serve as the southern edge of the greater Sherwood West planning area and provides important connections to planned north-south routes that lead up to SW Krueger Road. Ultimately, the timing of the Brookman Road upgrade is tied to land use actions to bring this area into the City of Sherwood. At this time, the County has not programmed funding for these improvements.

HIGHWAY 99W

This state facility is a primary north-south regional highway serving Sherwood. The high speeds, crossing width, and limited crossing opportunities make it a significant barrier for intra-city travel within Sherwood, especially for walking and bicycling travelers. At the time the new high school campus was considered by the City in 2017, a potential solution was identified that would provide a new highway overcrossing for walking and bicycling near the southern end of the campus. Initial feasibility studies have been done to provide a non-motor vehicle crossing just north of SW Sunset Boulevard that extends over Highway 99W to the far side of SW Elwert Road. This connection should be considered as part of the Sherwood West planning process.

ELWERT ROAD

SW Elwert Road is a direct north-south route between SW Scholls-Sherwood Road and SW Krueger Road. It spans a significant portion of the Sherwood West Planning area and is a common alternative route to Highway 99W for local and diverted regional travel. It will be important to strike a balance between local connectivity and regional travel needs when developing the ultimate design of this facility as it is upgraded to urban standards. Several aspects of this route that should be considered include:

- **Intersection with SW Scholls-Sherwood Road** – This intersection will likely need upgraded traffic controls and a more defined intersection area as the adjoining farmlands are developed.
- **Intersection with Elwert Road at Edy Road** – This intersection is adjacent to Chicken Creek and significant environmentally constrained lands. The prior plan recommended a double roundabout solution to minimize environmental impacts and to discourage attractiveness of regional through traffic.
- **Intersection with Elwert Road at Kruger Road** – This intersection was recently improved to a larger roundabout and road re-alignments as part of the high school campus project to address chronic congestion and safety concerns. As the remaining lands to the south are planned for development, the adequacy of this improvement will be re-evaluated.
- **Parallel routes to Elwert Road** – As the preliminary concept plan is revised, the consultant team will seek out opportunities for parallel routes further to the west that can provide local travelers with more north-south options, particularly for access to the high school campus area.

MULTIMODAL TRAVEL OPTIONS

A key component of the transportation network for Sherwood West will be to incorporate safe and convenient walking and bicycling facilities into the higher classification street facilities. All of the local arterial and collector

class streets will have these elements added to the cross-sections for planned improvements. In addition, the natural areas and varied terrain offer opportunities for a separate trail system to promote non-motorized travel away from the roadway network. Transit does not currently serve the immediate Sherwood West area. The closest TriMet service is Route 94 which connects to Portland along Highway 99W. The nearest stop is over a mile away. The concept plan should explore how to make the area "transit-ready" with transit-supportive land use and sufficient connectivity of the street system. In addition, consideration should be given to micromobility solutions like scooters and bike-sharing to help address first/last mile challenges.

APPENDIX I

Plan Concepts

- **Livable and Connected Streets**
- **Elwert Road Design Concept**
- **Active Transportation**
- **Great Neighborhoods**
- **Mixed Employment Areas**
- **Chicken Creek Greenway**

These Plan Concepts were developed early in the development of the Sherwood West Concept Plan. Ideas from these Plan Concepts were refined and revised for the final Concept Plan.

DRAFT PLAN CONCEPTS

LIVABLE & CONNECTED STREETS



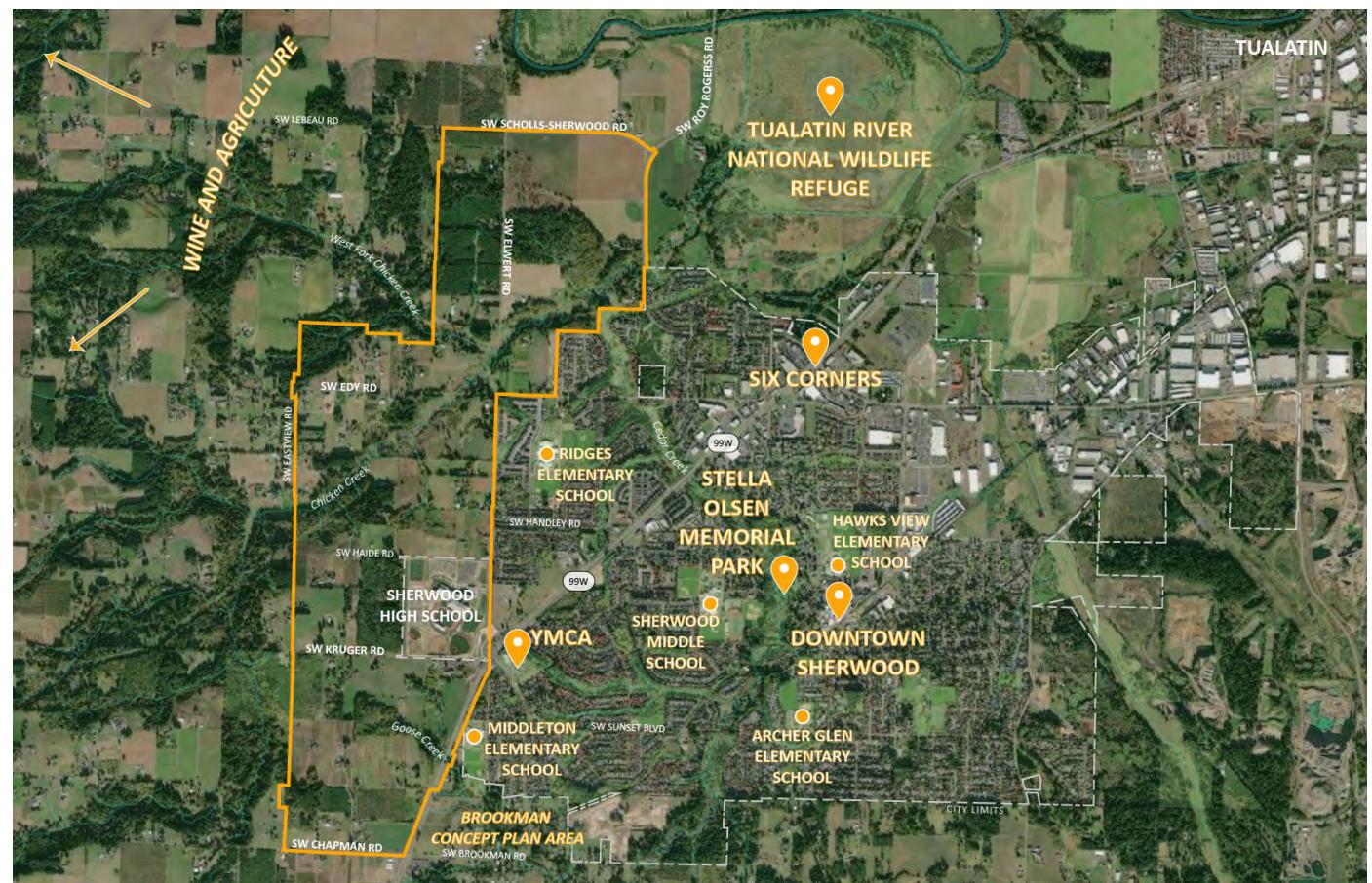
The Sherwood West area is adjacent to and a part of Sherwood's network of streets that carry both local and regional traffic. As the City of Sherwood grows, a well-designed and connected network of streets in Sherwood West should focus on safety, knitting the existing and new growth together, creating livable and walkable neighborhoods, and mitigating impacts of regional through-traffic.

PRINCIPLES

- Design for safety
- Integrate with existing Sherwood
- Connect all areas of Sherwood West
- Streets are places for people of all ages and abilities
- Provide for all modes of travel

INTEGRATED STREET NETWORK

This map shows important local and regional destinations. It will be important to ensure that the future street network in Sherwood West is integrated with existing Sherwood, providing connections to these destinations.



A FRAMEWORK OF LIVABLE AND CONNECTED STREETS: OPTION 1

This diagram shows a draft framework of streets for Sherwood West. This option implements the realignment of SW Elwert Rd and SW Edy Rd that was studied in the Preliminary Concept Plan. Street locations and alignments are conceptual and approximate. Additional local streets will be built between the framework streets, depending on land uses.

North of Chicken Creek, the street framework is designed to serve Mixed Employment land uses. There are continuous parallel routes to SW Elwert so that local trips can move freely and turning movements on SW Elwert Road are minimized.

The Elwert-Edy Road intersection is realigned as described in the Preliminary Concept Plan.

A neighborhood street connects from SW Handley to SW Haide and south to SW Chapman Road. This street connects multiple neighborhoods and the central and southern employment areas.

A north-south “hilltop” route provides additional north-south access and a second continuous north-south route for emergency access and other services.

All intersection types are to be determined through further study and coordination. The City is evaluating strategies and road alignments to minimize regional traffic through Sherwood neighborhoods. All improvements at Chicken Creek subject to potential State/Federal permitting.



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SHERWOOD WEST CONCEPT PLAN | LIVABLE & CONNECTED STREETS

A FRAMEWORK OF LIVABLE AND CONNECTED STREETS: OPTION 2

This diagram shows a second option for the street framework in Sherwood West. In this option, the existing alignment of SW Elwert Rd and SW Edy Rd is retained, with the intersection rebuilt. Option 2 would require raising the intersection and road approaches approximately 10 to 20 feet in elevation in order to correct for topography, floodplain issues, and the existing unsafe sight-distance visibility. Street locations and alignments are conceptual and approximate. Additional local streets will be built between the framework streets, depending on land uses.

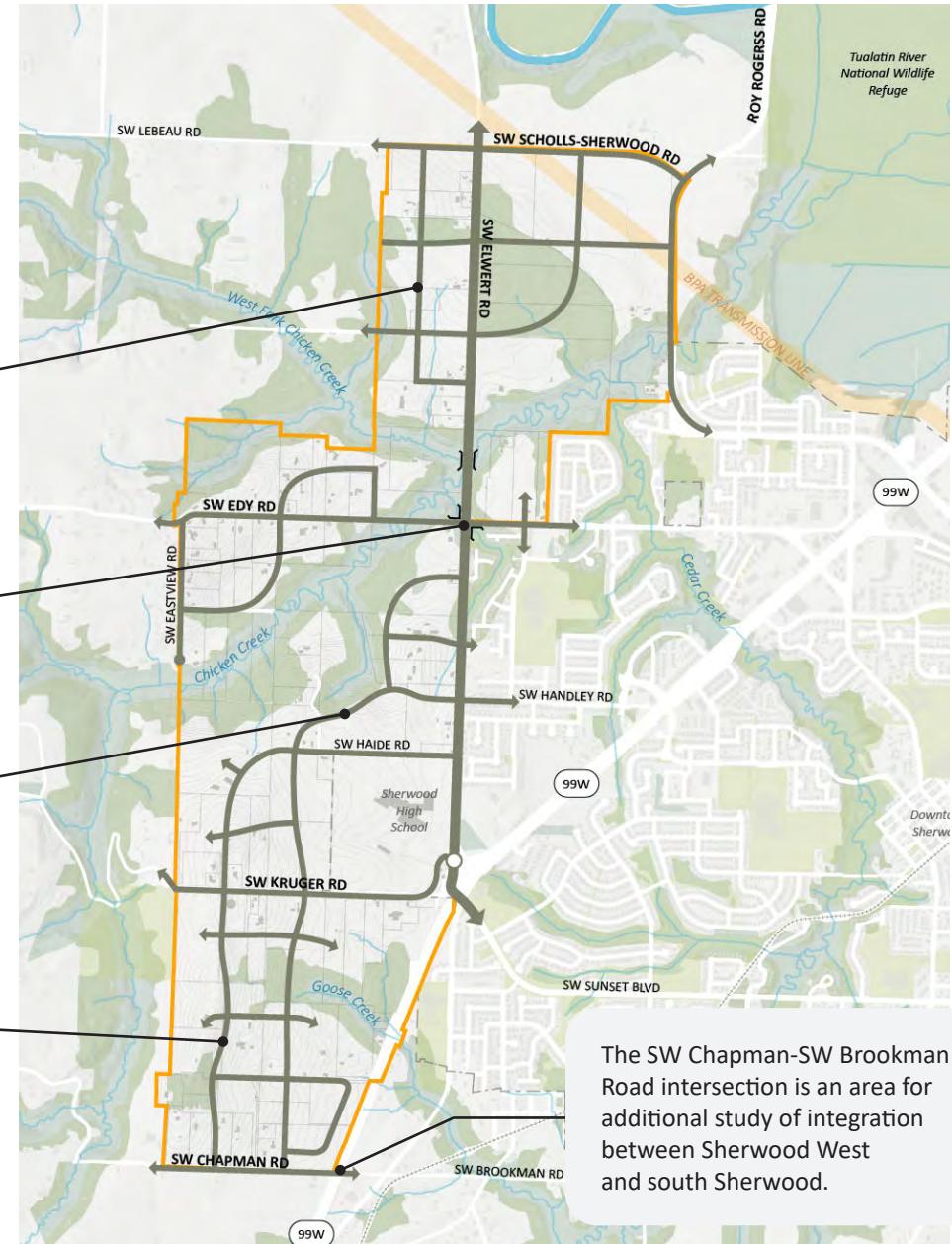
North of Chicken Creek, the street framework is designed to serve Mixed Employment land uses. There are continuous parallel routes to SW Elwert Road so that local trips can move freely and turning movements on SW Elwert Road are minimized.

The existing Elwert-Edy Road intersection is retained and significantly rebuilt.

A neighborhood street connects from SW Handley to SW Haide and south to SW Chapman Road. This street connects multiple neighborhoods and the central and southern employment areas.

A north-south “hilltop” route provides additional north-south access and a second continuous north-south route for emergency access and other services.

All intersection types are to be determined through further study and coordination. The City is evaluating strategies and road alignments to minimize regional traffic through Sherwood neighborhoods. All improvements at Chicken Creek subject to potential State/Federal permitting.



DRAFT PLAN CONCEPTS

SW ELWERT ROAD DESIGN CONCEPT



SW Elwert Road is an important opportunity for Sherwood West. A County-designated arterial street (south of SW Edy Road), it carries about 9,000 average daily trips today and is forecast to carry 14,000 average daily trips in 2035. How can it be designed to be a livable and positive addition to the growth of Sherwood West and the adjacent neighborhoods on its east side? This document provides ideas to achieve that goal.

ELWERT ROAD TODAY



Distinctive landscape character



Opportunity to improve east-west integration, add sidewalks and bike lanes



Southern Gateway to Sherwood West, High School provides likely destination for future transit

PRINCIPLES

- Connect west and east
- Tame the traffic
- Promote safe and comfortable walking and biking
- Create a green, landscaped corridor
- Provide for future transit
- Plan for safety

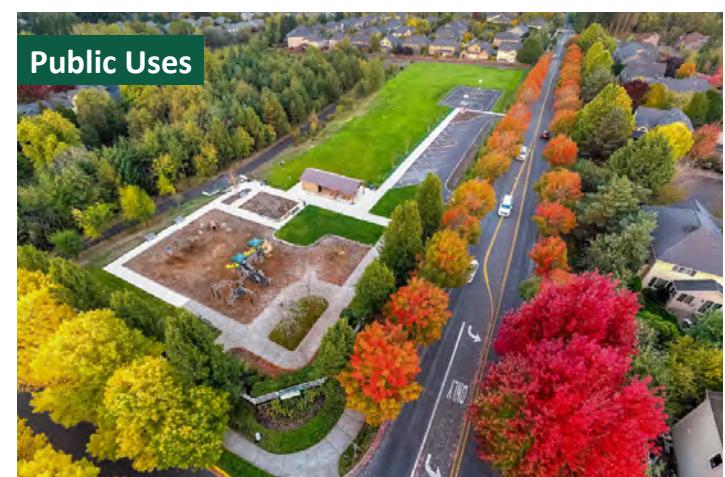
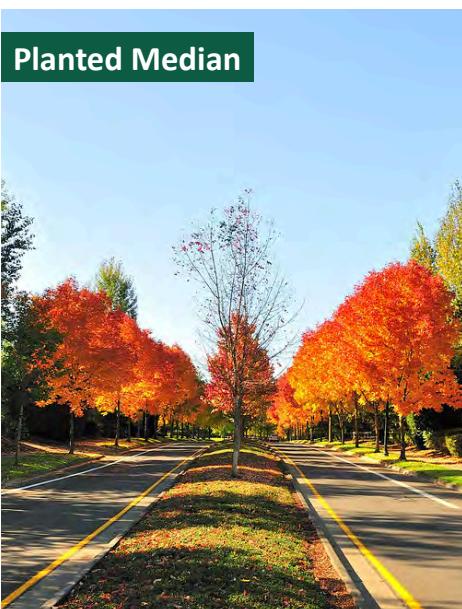


SW Edy & SW Elwert intersection
(Significant improvements are needed)



Potential Chicken Creek crossing viewed from SW Elwert

DESIGN IDEAS: LEARNING FROM SW SUNSET BOULEVARD



DESIGN IDEAS: A DISTINCTIVE, CONTEXT-SENSITIVE SW ELWERT ROAD



Employment Area Parkway

- Distinct street tree character
- Sherwood 'visual corridor' design
- Fewer curb cuts, continuous white fence
- Truck-turning considerations
- Large parcels with space for pathways linked to trails

Residential Boulevard

- Consistent street tree canopy, median
- Consistent white fence
- Safe crosswalks
- Protected bike lanes
- Access paths to residential areas
- Adjacent homes with side 'frontage'

Green Crossings

- Street tree choices informed by natural area proximity
- Narrower ROW to reduce footprint in ecologically-sensitive areas
- Trails and wildlife passage underneath
- Bridges as public view points, with art, educational signage

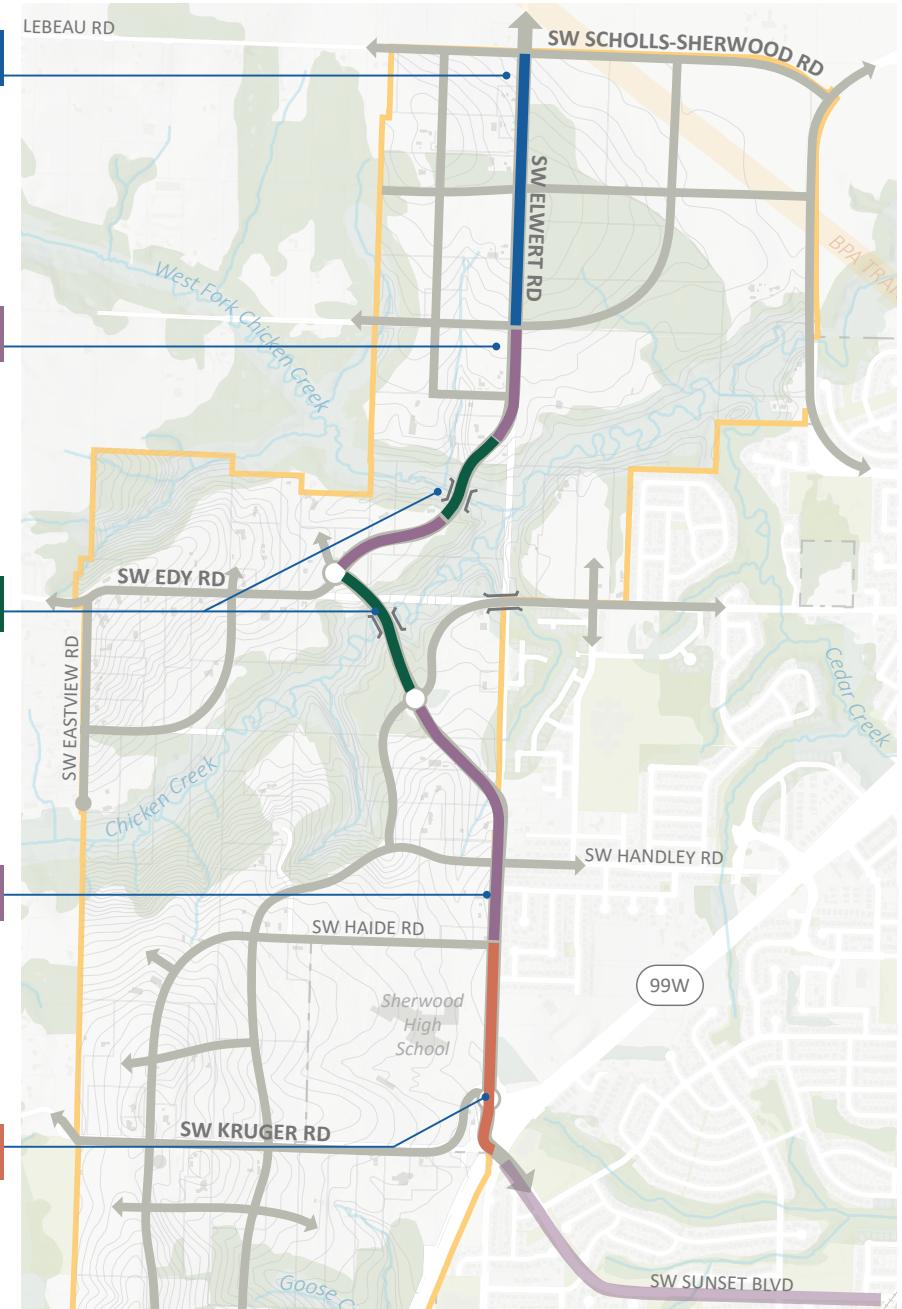
Residential Boulevard

See above, and...

- Between Haide and Handley, consider existing neighborhoods to east in design and ROW availability
- Continue multi-use path from High School
- Consider matching white fence on Sunset

High School Edge/Gateway

- Recently-rebuilt
- Generous multi-use path on west edge should extend north



DRAFT PLAN CONCEPTS

ACTIVE TRANSPORTATION



Trails, cycling routes, transit, "micromobility", and other ways of getting around without a car can be designed into Sherwood West. These active transportation facilities will help to meet the Sherwood 2040 Comprehensive Plan goal of **coordinated and connected infrastructure**:

"In 2040, the city's transportation system is efficient, safe and provides transportation options. The town has an active and connected transportation network where residents enjoy walking and bicycle paths between neighborhoods, parks, schools, the Tualatin National Wildlife Refuge and Old Town."

Sherwood West's streets will be an important part of providing active transportation options, along with off-street trails and the location of parks, schools, and community gathering spaces.

WHAT COULD ACTIVE TRANSPORTATION LOOK LIKE IN SHERWOOD WEST?

Within the Sherwood West area, trails that connect between local parks, green spaces, schools, neighborhoods and employment areas will help to encourage walking, rolling, and biking. There is an opportunity to pre-plan key connections between new growth in Sherwood West and existing areas of Sherwood. There is also an opportunity to ensure future transit can be as successful as possible.

Chicken Creek is an important natural feature in Sherwood West, and offers the opportunity to develop a greenway trail along the edge of multiple neighborhoods and employment areas. The Chicken Creek Greenway could serve as the backbone for a robust trail network that connects Sherwood West to surrounding destinations such as Old Town (via the Cedar Creek trail), Sherwood High School, and the Tualatin River National Wildlife Refuge.



INTERCONNECTING FUTURE TRAILS - INITIAL CONCEPTS

This map shows initial ideas for trails in Sherwood West, ranging from larger regional trails to smaller community trails. Future trails in the Sherwood West area should prioritize connections to existing and planned trail networks. The land uses shown on the map are from the Preliminary Concept Plan – they will be revised and updated as part of this concept plan process. The local trails noted on this map are conceptual ideas for community feedback. A local trail network will be prepared in concert with the land use plan, following these concepts.

Parks, schools, employment areas, and other local destinations should be well connected by trails or wide sidewalks and bike lanes through neighborhoods in order to create a healthy and walkable environment for all ages.

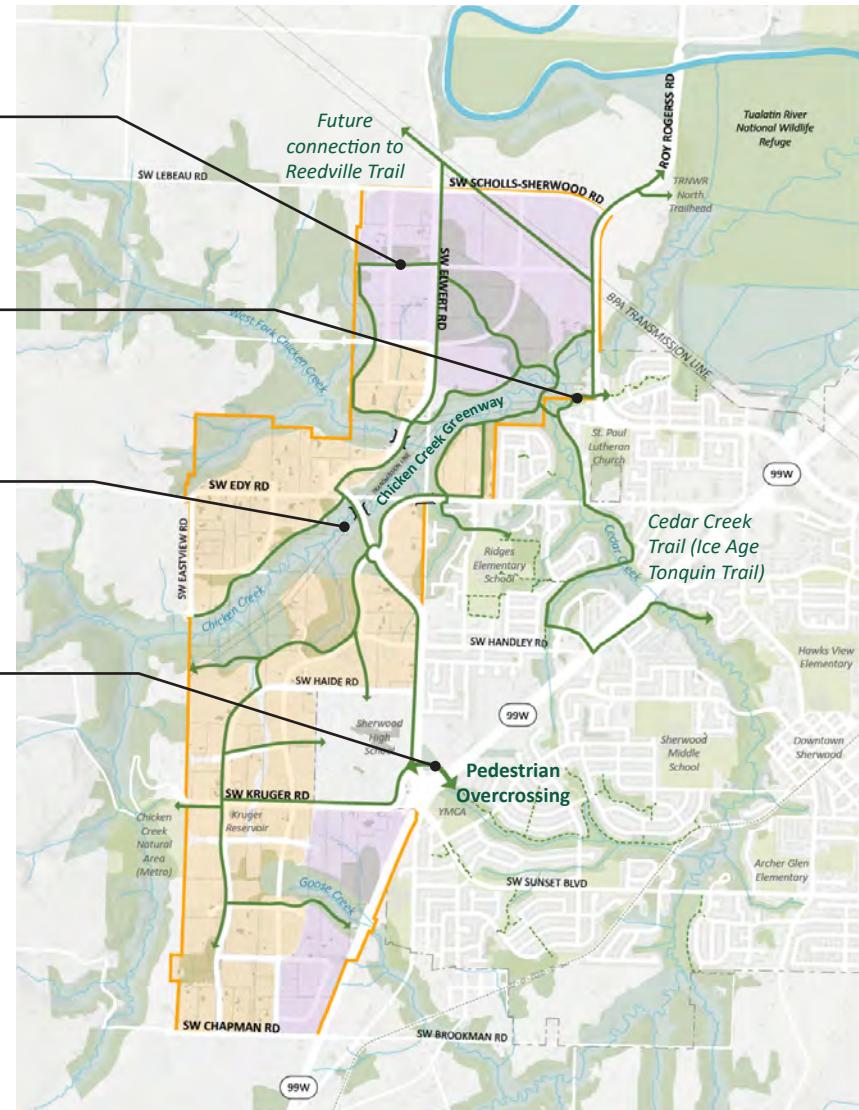
Key connections to existing or planned trails should be prioritized, such as future connections to the Reedville Trail, the Tualatin River National Wildlife Refuge trails, Ice Age Tonquin Trail/Cedar Creek Trail, and the future Highway 99 pedestrian overcrossing.

A new Chicken Creek Greenway could take advantage of the existing natural creek corridor to connect to the Cedar Creek Trail and other regional trail networks.

A new Highway 99 pedestrian overcrossing is planned in the vicinity of the new Sherwood High School. The new overcrossing will address the major barrier that the highway presents for pedestrians today. It would also help connect the high school, the YMCA, and the greater Sherwood West area with existing trails and destinations on the east side of the highway.



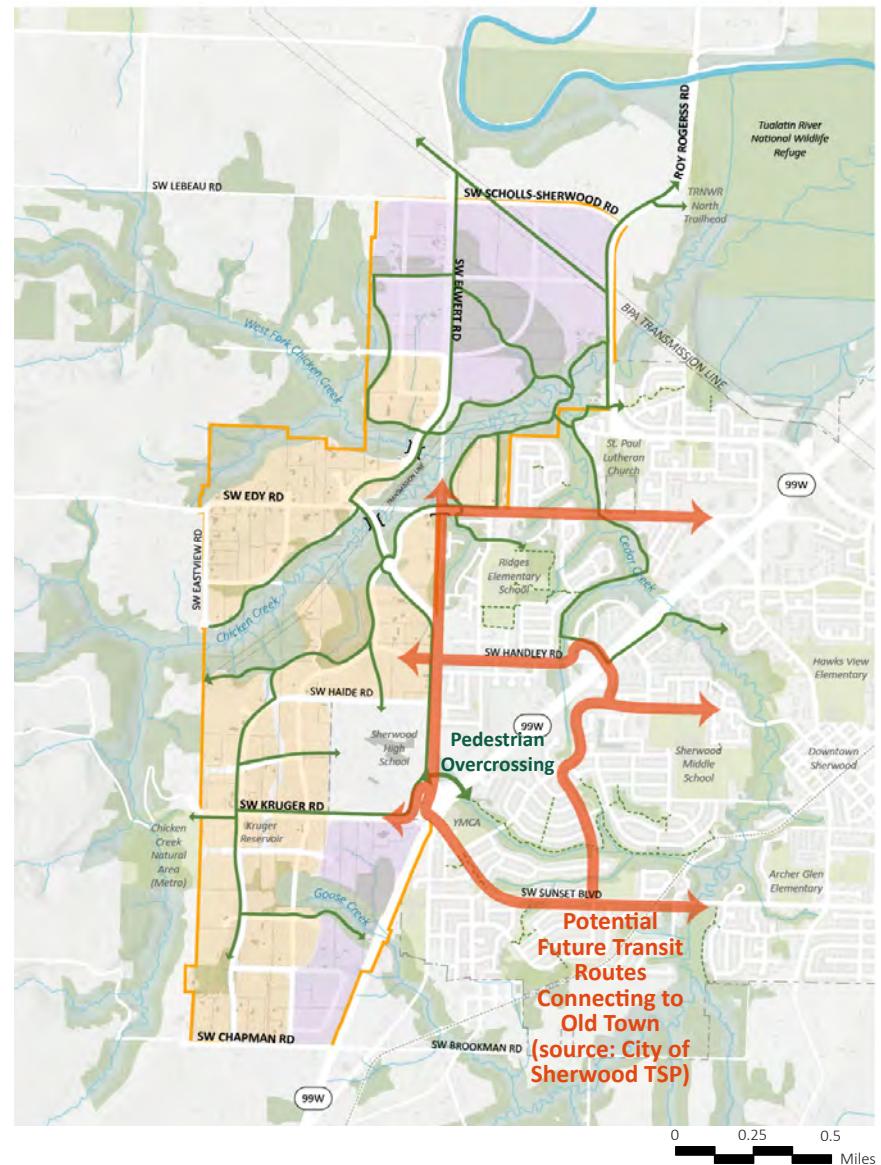
Local trails can connect to schools, parks, employment areas and other destinations, with viewpoints along the way.



FUTURE TRANSIT, MICROMOBILITY, AND THE “FIRST AND LAST MILE”

Trimet does not currently provide transit service to the Sherwood West area, but it is directly adjacent to Trimet's current service boundary. The closest bus stops are about a mile away in Old Town (served by lines 93 and 94). Sherwood West's opportunity is to be “transit-ready” by planning land uses, key streets, and trails to accommodate and support future transit service. The diagram at right shows potential future transit routes in orange as conceptually noted in the City of Sherwood Transportation System Plan (TSP).

In addition, the inclusion of “micromobility” services, like bike-sharing and scooters, can help people to get around more easily without a car. Micromobility stations could be included at schools, employment and commercial areas, and near existing transit stops to help fill gaps in transit access (the “first and last mile” of a trip) and to provide options for getting to and from school, work, and leisure activities.



DRAFT PLAN CONCEPTS

GREAT NEIGHBORHOODS



What will make great neighborhoods in Sherwood West? The vision statement provides guidance in its citation of “families... well-connected streets... walkable... variety of well-designed housing... natural extension of Sherwood’s neighborhoods... natural landscape... network of natural areas, parks, and trails.” This document provides ideas for how those visions can be turned into reality. It focuses on neighborhood form and key issues for the Concept Plan. Using this guidance, the next step will be to identify land use alternatives.

PRINCIPLES

- Plan for walkability
- Provide a variety of housing opportunities
- Integrate new and existing neighborhoods
- Plan parks and schools as destinations
- Provide adequate parking
- Connect greenspaces into a network
- Integrate nature into neighborhoods



WALKABLE NEIGHBORHOODS: SHAPED BY THE LAND

This diagram is a study of “walkable” areas within Sherwood West. The colored areas show a combination of factors that influence walkability: $\frac{1}{4}$ to $\frac{1}{2}$ mile of distance (a 5-10 minute walk); natural features such as Chicken Creek; slopes; and existing development. These subareas within are useful for identifying areas of cohesive character and where various land uses might be located and connected. The edges of some areas are clear and very intuitive. The edges of other areas are approximate.

West Elwert: Potential addition to the northern Mixed Employment area

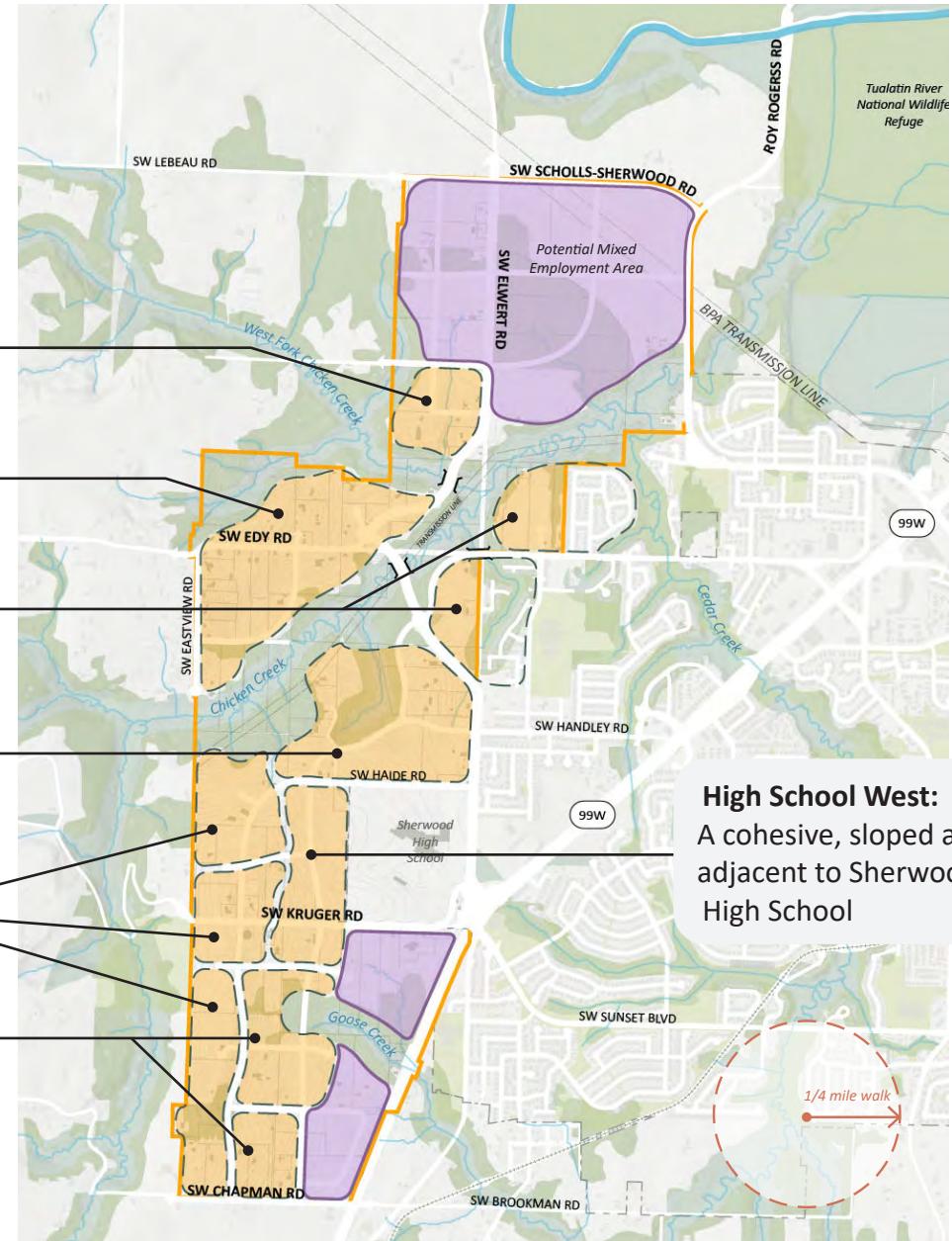
West Edy: A cohesive area from Chicken Creek to the Eastview Road ridgeline

Edy South and East: Close proximity to existing neighborhoods and Ridges Elementary School

Haide North: A fairly large “flat” area with an easy walk from center to edge and some slopes toward Chicken Creek

Hilltop and Ridgeline: Sherwood West’s view properties; includes areas facing west

Goose Creek and East Slope: Hillside areas that face east and close to Mixed Employment areas



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0 0.25 0.5 Miles



CONNECTED PARKS, SCHOOLS, AND GREENSPACES

This diagram is a study of how neighborhood and community parks might be part of a network of connected greenspaces and community connections. The number and locations of potential parks is preliminary and intended to show ideas, not recommendations.

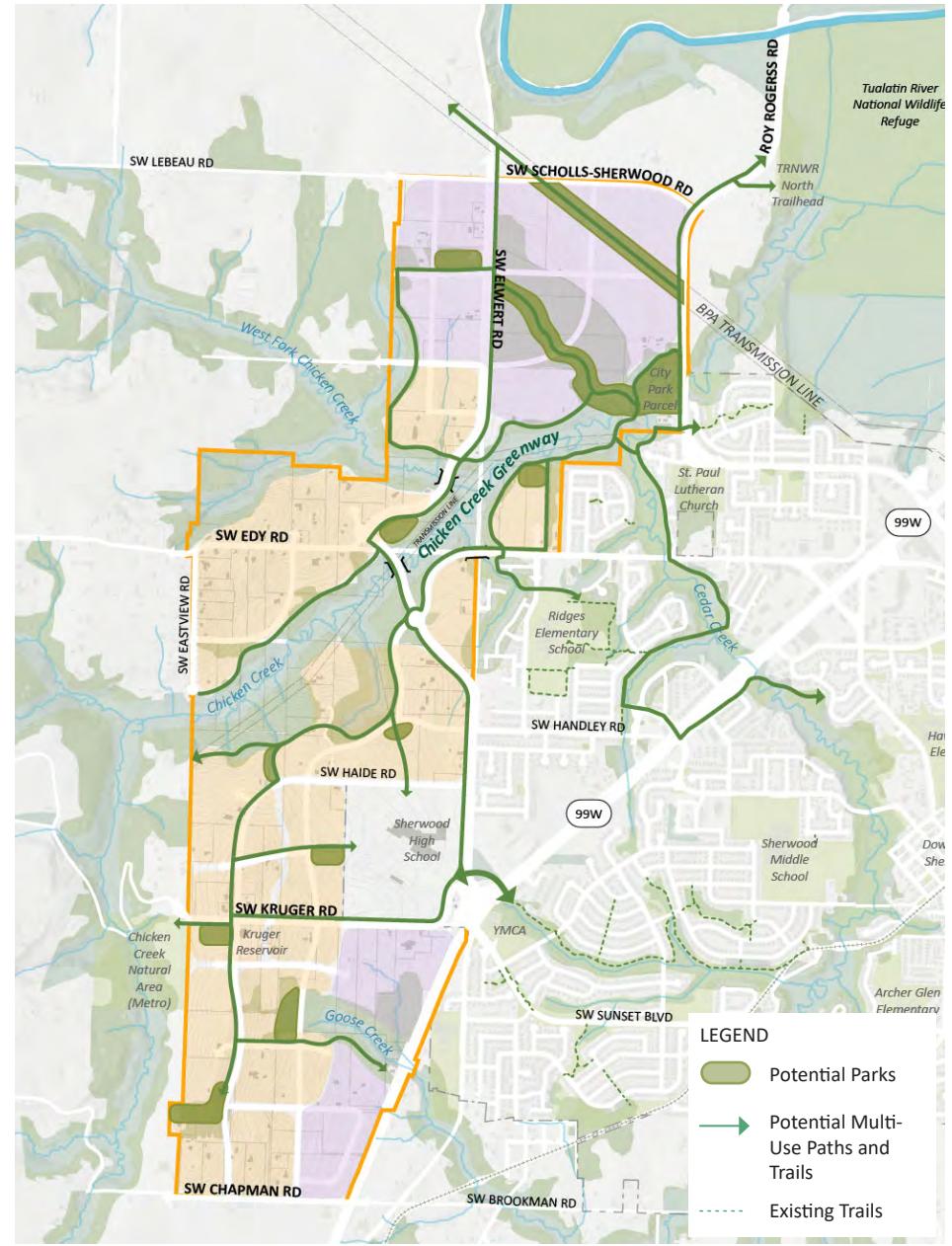


Community Parks provide opportunities for active recreation and organized play in a location that can accommodate increased traffic and demand, while also serving as a neighborhood park for nearby residents.

Minimum size: 10 acres

Neighborhood Parks provide close-to-home recreation opportunities for nearby residents, who typically live within walking and bicycling distance (.5 miles) of the park in a residential setting.

Minimum size: 1.5 acres



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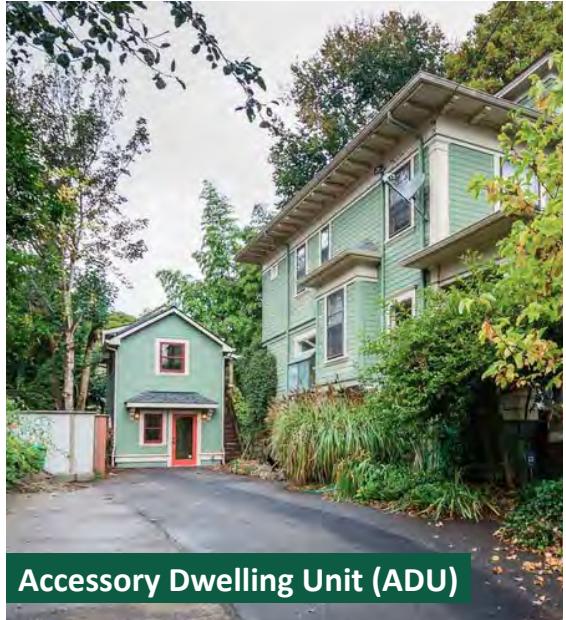
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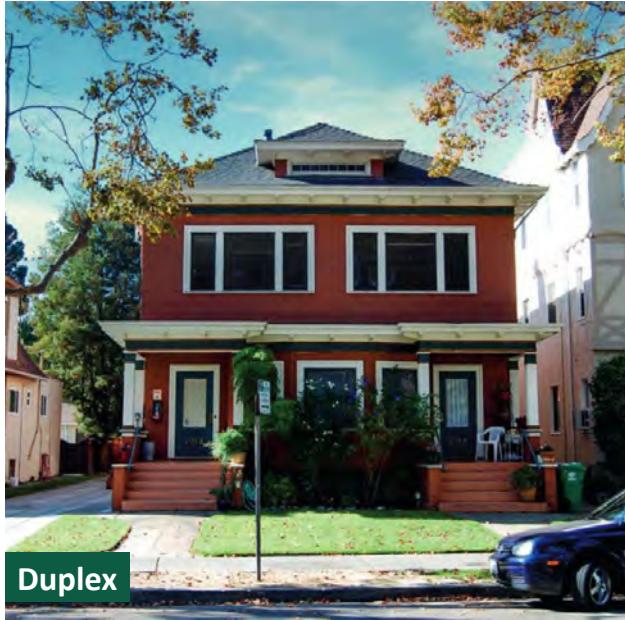
SHERWOOD WEST CONCEPT PLAN | GREAT NEIGHBORHOODS

HOUSING TYPES

Sherwood West's zoning will allow for a wide range of housing types, guided by Sherwood's design guidelines and standards. Here are some examples of the potential housing types.



Accessory Dwelling Unit (ADU)



Duplex



Townhouse



Standard Single-Family Detached



Cottage Cluster

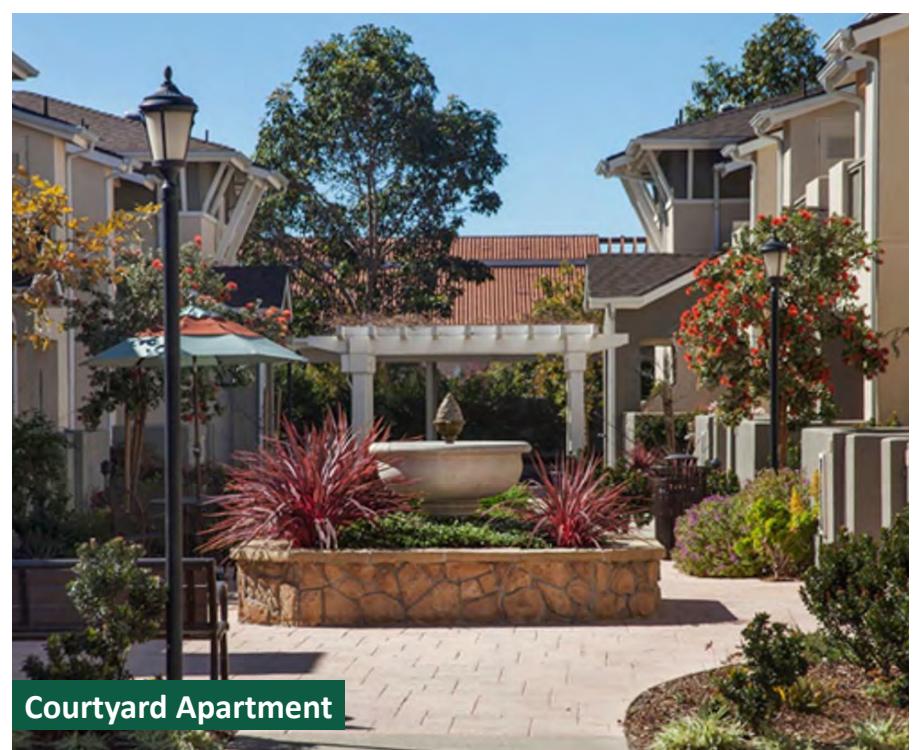
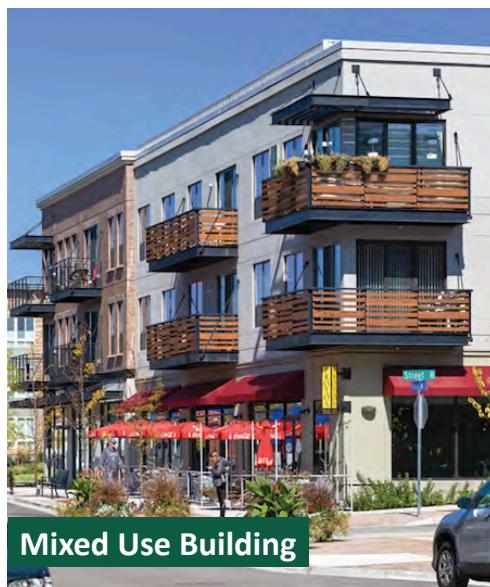
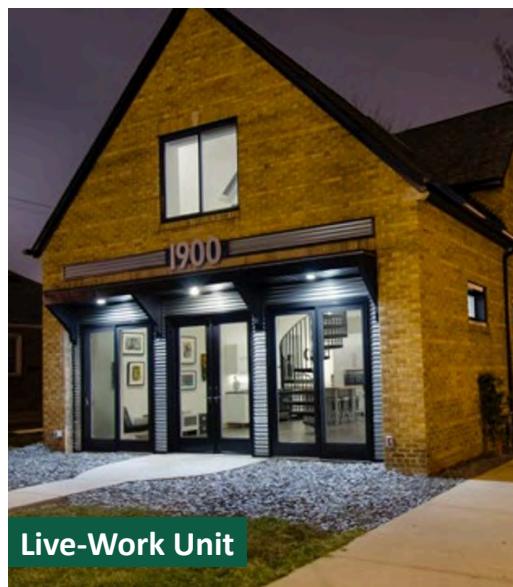


Small Single-Family Detached



Triplex





DRAFT PLAN CONCEPTS

MIXED EMPLOYMENT AREAS



Sherwood wants and needs more jobs. 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; help diversify and balance the City's tax base; and build a self-sustaining and vibrant local economy.

A thriving and diversified economy is one of the six core areas of the Sherwood 2040 Comprehensive Plan. Over the past few years, the City has engaged hundreds of community members in conversations about what makes Sherwood special, and what Sherwood will look like in the future. Their voices helped to craft the following vision statement:

"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 expand the tax base to protect and maintain Sherwood's quality of life. Sherwood provides great destinations and experiences for both residents and visitors."

WHAT IS MIXED EMPLOYMENT?

Mixed Employment is where there is a mix of office, light industrial, and flex space¹ uses in the same development or area of the city. This type of development typically requires large sites (at least 40-50 acres), flat topography, and larger ownerships.



¹ Flex space is generally defined as a building that provides for a combination of uses, typically including a mix of warehouse, light industrial, office, and/or retail space.

MIXED EMPLOYMENT: A RECIPE FOR SUCCESS

As part of the Sherwood West Concept Plan process, the project team studied regional development trends; evaluated Sherwood West's unique assets and constraints; and provided insights on the economic future of Sherwood West as a part of a growing Sherwood. The following components will be essential to the success of mixed employment in Sherwood West:

A MIX OF EMPLOYMENT USES

Candidate industries and employment uses for Sherwood West include:

- Multi-tenant flex space as part of a larger industrial or business park
- Tech clusters and tech parks
- Office space for tech, medical, and service-oriented industries
- Major healthcare facilities
- Wine-related uses such as storage, distribution, production, and warehousing
- Light industrial or light manufacturing



SITING REQUIREMENTS

There is a limited regional supply of high-quality buildable employment land. Ideal sites for this type of development will be:

- At least 40-50 acres for employment-park-style development; larger campus-style developments may require more than 100 acres
- Contiguous flat areas with less than 3-5% slopes
- Single ownerships are preferred to avoid delays associated with assembling land with multiple property owners

TRANSPORTATION ACCESS

Transportation considerations for Sherwood West include:

- Many employment uses—including warehousing, distribution, and major healthcare facilities—will require quick and easy access to Highway 99W
- Retail and commercial will require locations with higher visibility from major transportation routes
- Large employers tend to require robust auto, transit, bicycle, and pedestrian transportation infrastructure for their employees



MIXED EMPLOYMENT IN SHERWOOD WEST: AREAS FOR FUTURE STUDY

These following generalized areas have characteristics that meet the basic requirements for successful mixed use development. They are intended for future study and refinement as part of the concept planning process.

Approximate Acres: 285

Characteristics: large area, mostly flat, large parcels, good transportation access to Roy Rogers

Opportunities: large employment or business park; multi-tenant flex space; tech park

Approximate Acres: 6

Characteristics: high visibility along Highway 99, mostly flat, proximity to High School and existing

Opportunities: mixed-use node with retail

Approximate Acres: 55

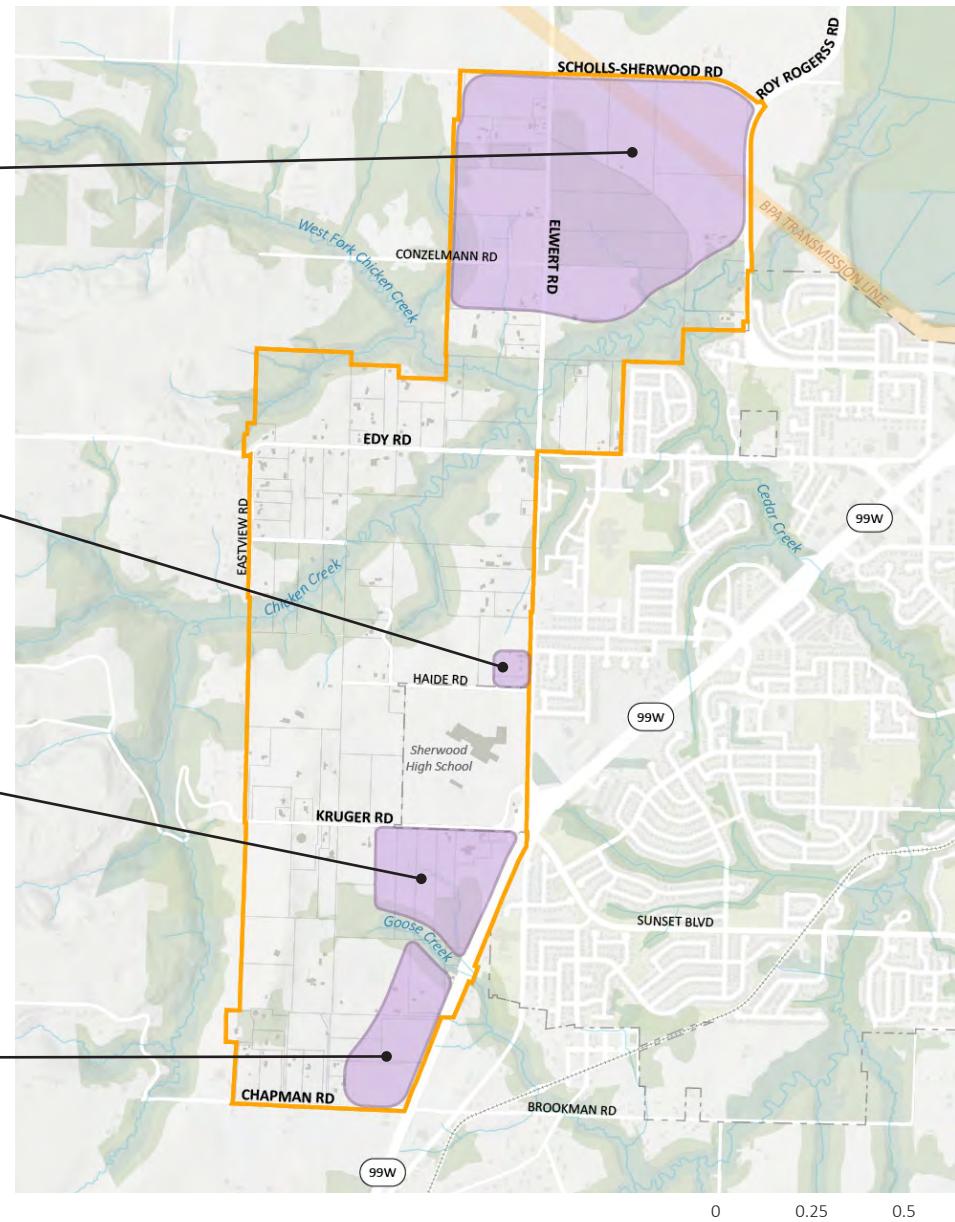
Characteristics: high visibility, good transportation access to Highway 99 at Kruger, some slopes and natural resource areas

Opportunities: multi-tenant flex space; healthcare or clinic; some retail or commercial; light industrial or manufacturing

Approximate Acres: 43

Characteristics: high visibility, good transportation access to Highway 99 at Chapman, mostly flat

Opportunities: multi-tenant flex space; possible warehousing or distribution, particularly for wine-related uses



DRAFT PLAN CONCEPTS

CHICKEN CREEK GREENWAY



A vital component of Sherwood's livability is its access to nature and open spaces. Sherwood's landscape is defined by the creek corridors that flow through the city and drain to the Tualatin River at the Tualatin River National Wildlife Refuge.

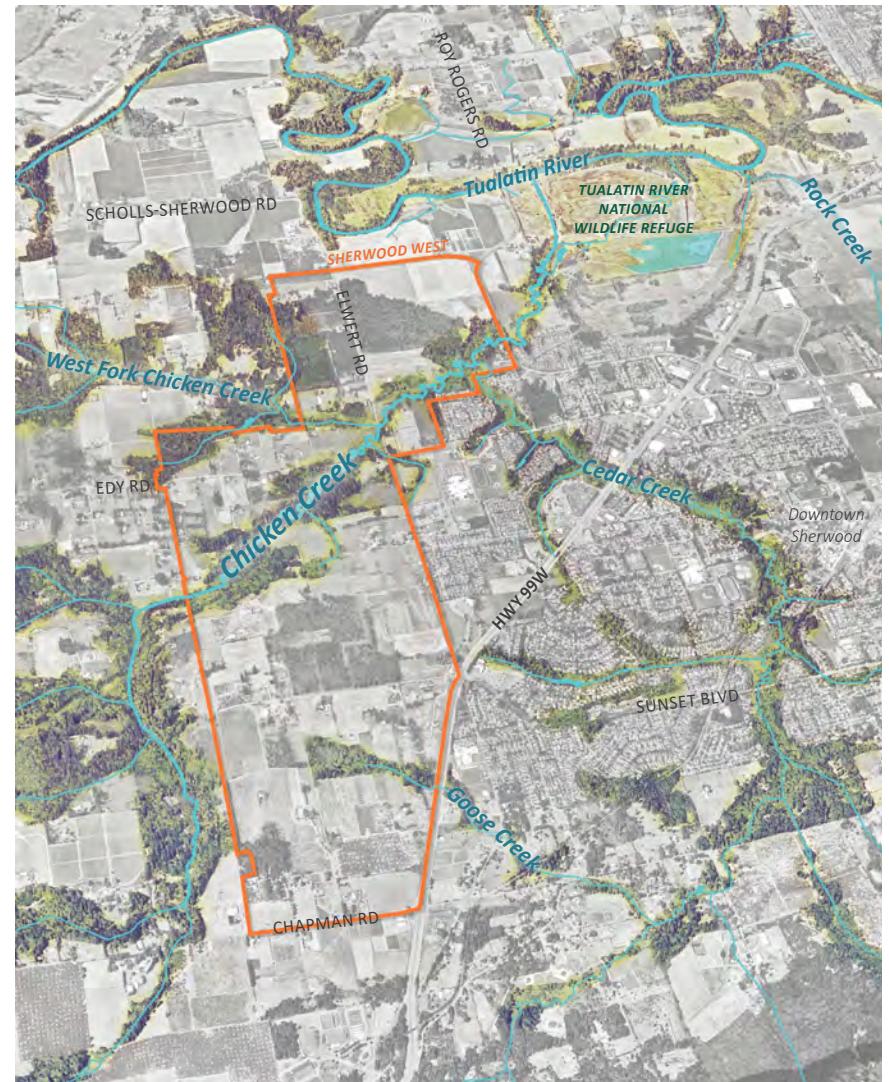
In Sherwood West, Chicken Creek forms a natural greenway through the area, flowing southwest to northeast and eventually draining into the Tualatin River. The Cedar Creek greenway, which passes through Sherwood just west of downtown, feeds into Chicken

Creek in the northeast part of the study area. Several smaller channels—Goose Creek and West Fork Chicken Creek—also feed into Chicken Creek in the southeast and central portions of Sherwood West, respectively.

The Sherwood West Concept Plan offers an opportunity to preserve and enhance these natural corridors, provide wildlife crossings, incorporate stormwater management practices, and provide access to nature through a network of connected walking trails.



Fanno Creek / Photo Credit: Tree for All

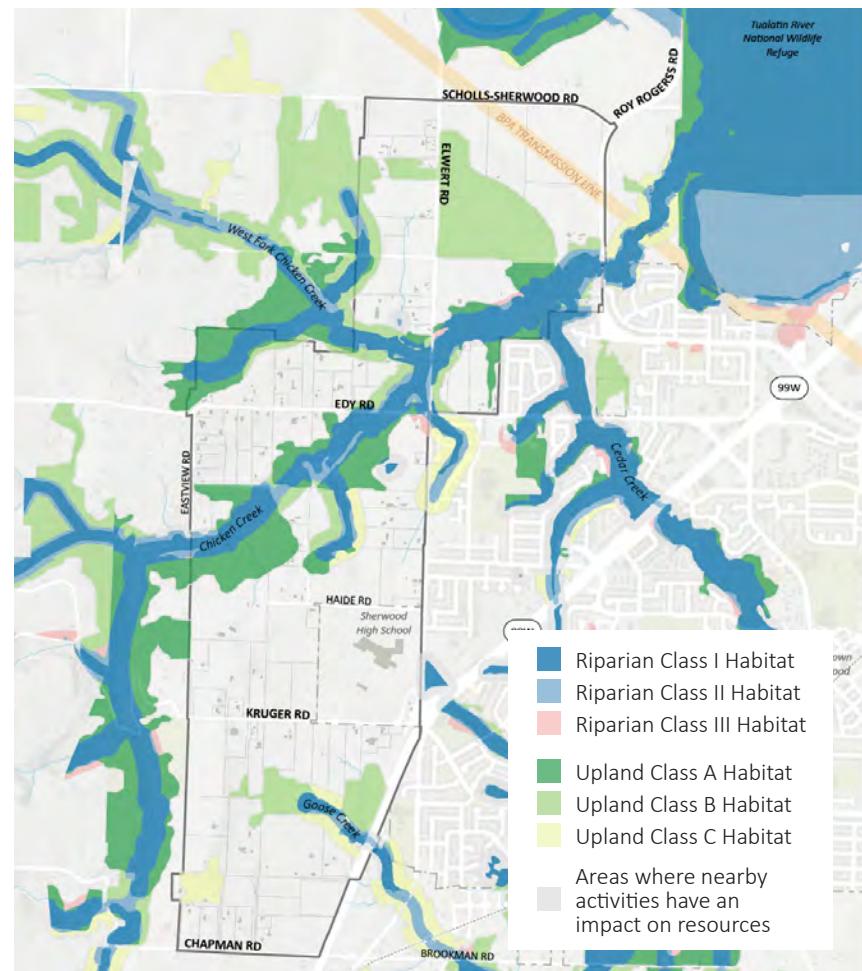
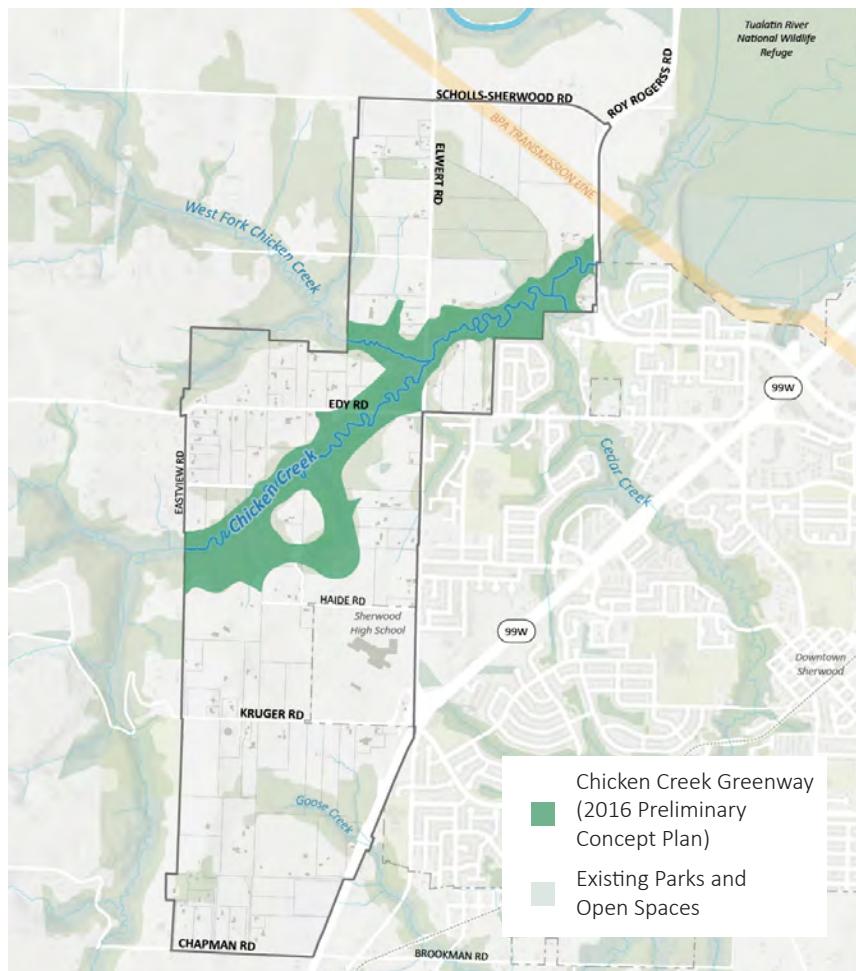


CHICKEN CREEK GREENWAY

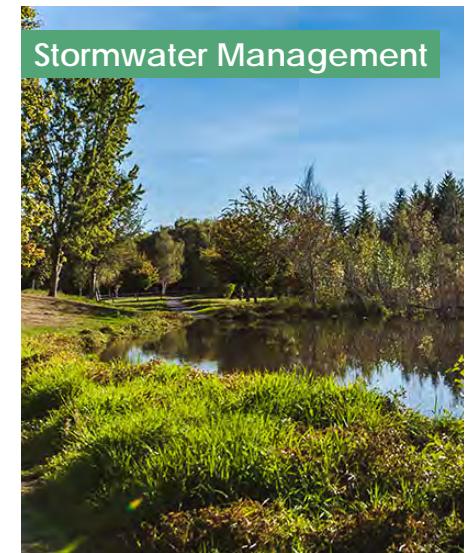
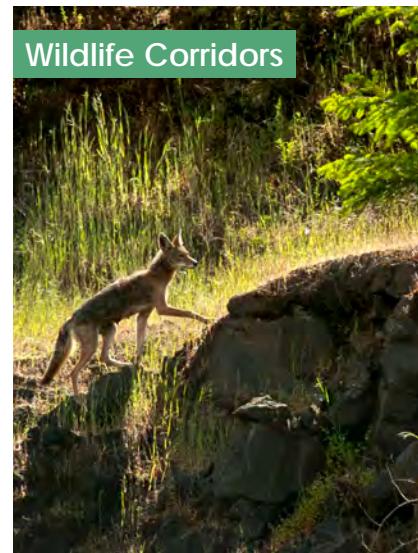
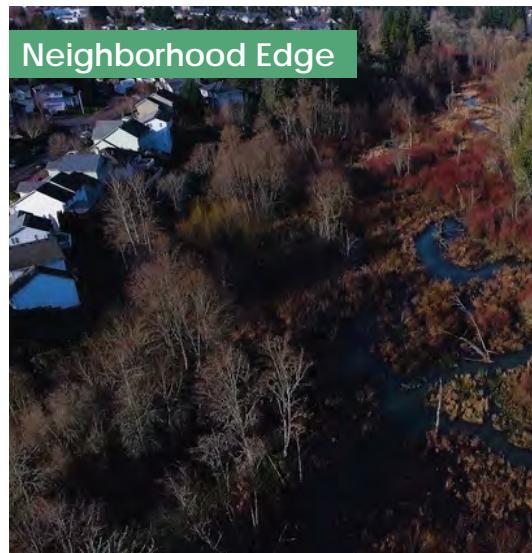
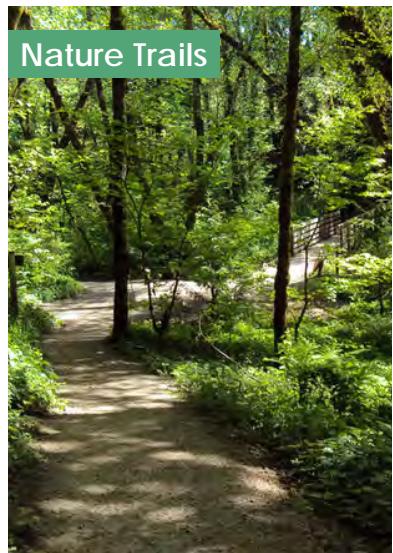
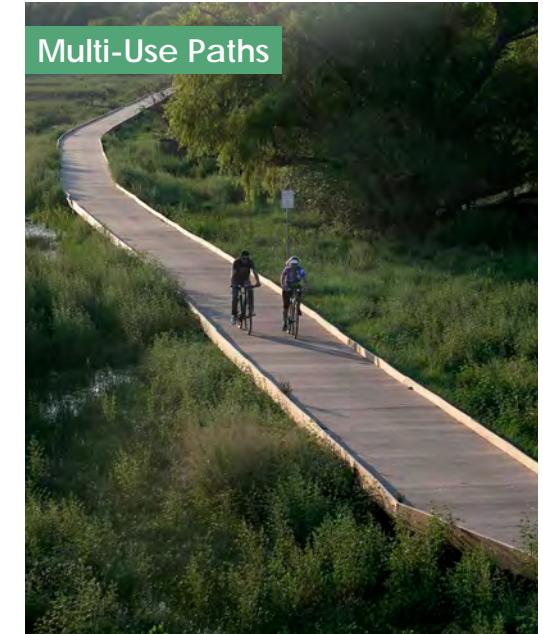
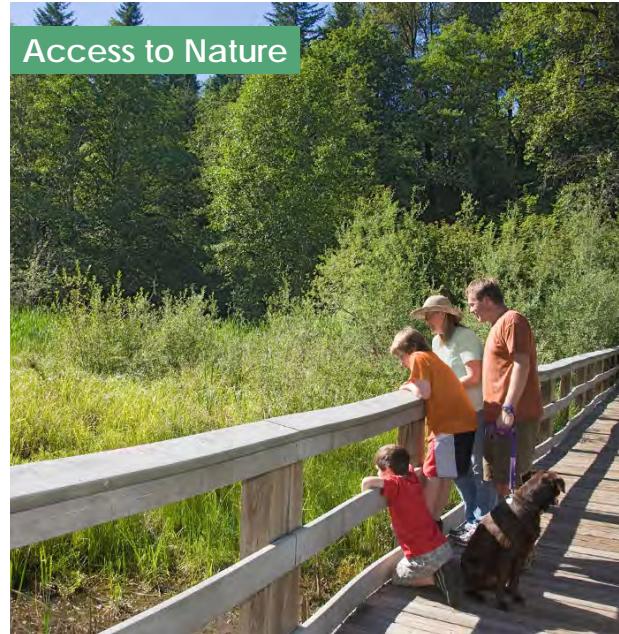
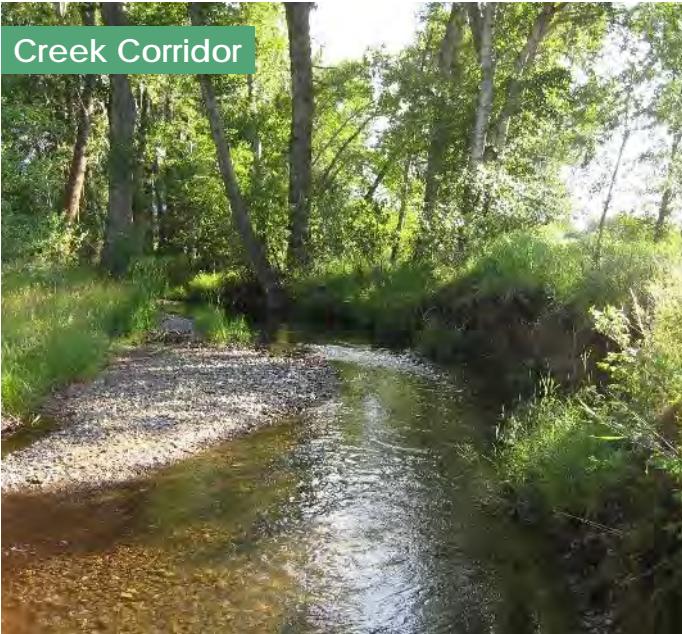
The 2016 Preliminary Concept Plan identified the Chicken Creek corridor as a key green space element of the plan. This concept planning process offers the opportunity to refine the 2016 vision for this area as the **Chicken Creek Greenway**. A greenway is a collection of natural areas, parks, and trails connected by a linear

green corridor, often surrounding a creek. The Chicken Creek Greenway will incorporate the creek corridor as well as the surrounding riparian and upland habitat areas shown below. The Chicken Creek Greenway would be one part of Sherwood West's greenspaces. Other examples of greenspaces include: tree and tree

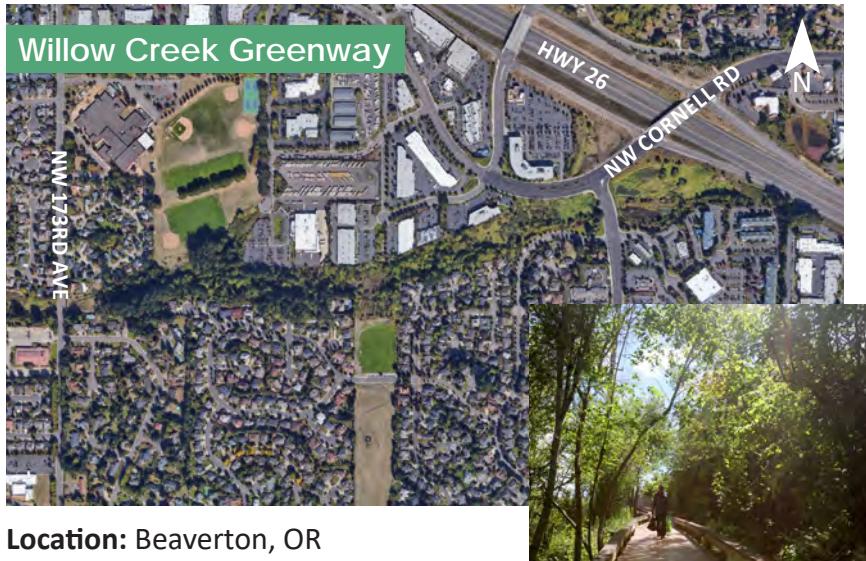
canopy protected by Sherwood's code; West Fork Chicken Creek, Goose Creek, Cedar Creek, and their habitat areas; stormwater facilities; neighborhood parks, community parks, and school fields; and trail corridors. Neighborhood and community parks are addressed as part of the Great Neighborhoods plan concept.



ELEMENTS OF A GREENWAY



GREENWAY PRECEDENTS



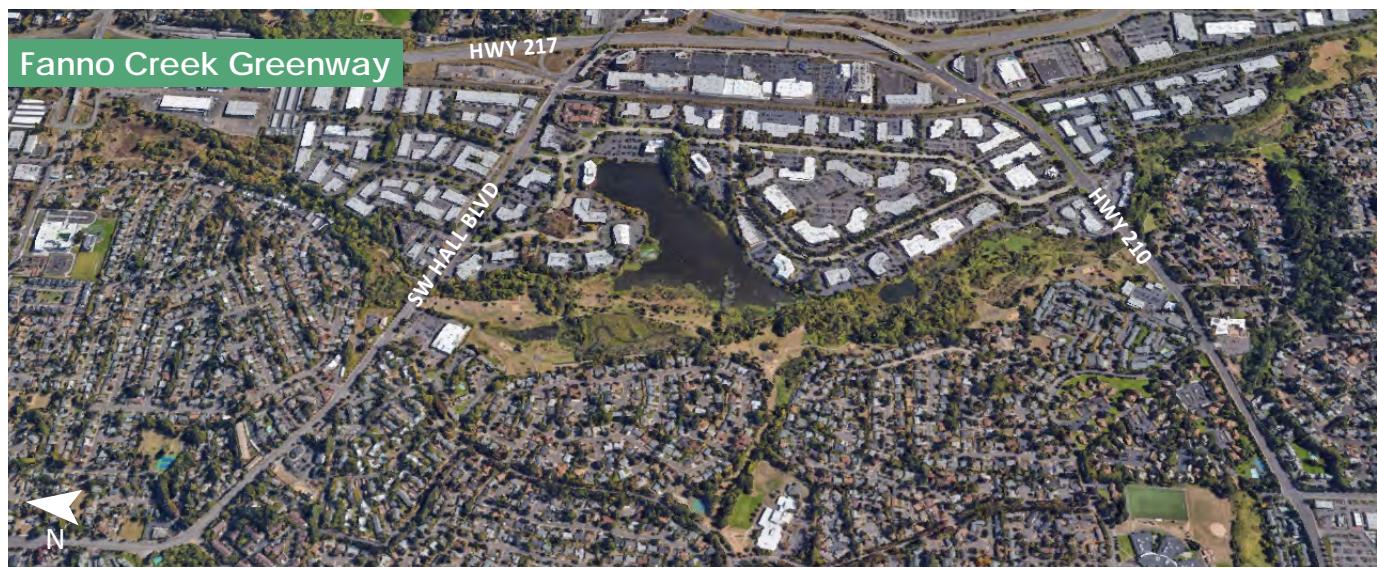
Location: Beaverton, OR

Amenities: paved trails, creek boardwalk, habitat restoration site, Moshofsky Woods Natural Area, regional trail connections



Location: Bethany, Washington County, OR

Amenities: paved trail, creek boardwalk, regional trail connections, wildlife habitat and viewing opportunities



Location: Beaverton, OR

Amenities: paved trails, benches, parking, wetlands, wildlife habitat and viewing opportunities, regional trail connections



APPENDIX J

Alternatives Evaluation Memo



ALTERNATIVES EVALUATION

TO: Sherwood West Community Advisory Committee and Technical Advisory Committee
FROM: Sherwood West Concept Plan Project Team
DATE: November 10, 2022

Introduction

This memorandum compares the three Concept Plan alternatives using the project goals and evaluation criteria. It is one part of five evaluation methods for the Concept Plan alternatives:

- Alternatives evaluation (this memo)
- Community feedback from Open House #2
- Community feedback from the online Open House #2
- Developer feedback from the Employment Opportunities tour and meeting
- Traffic impact analysis

Vision Statement

Sherwood West is a walkable community with a balanced mix of employment, residential, commercial, and greenspace land uses—it is a place where families can safely live, work, shop, and play. Sherwood West is home to a variety of businesses that offer stable, high-paying jobs and those employment opportunities have helped satisfy the City's need for an expanded tax base to protect and maintain Sherwood's great quality of life. Sherwood West is attractive to employers and residents because of its well-planned infrastructure, well-connected streets, walkable neighborhoods, and variety of well-designed housing choices. The area feels like a natural extension of Sherwood's existing neighborhoods, and it is integrated with other nearby urbanizing areas and regional destinations such as the Tualatin River National Wildlife Refuge. Sherwood West's natural landscape is anchored by the Chicken Creek Greenway, which protects the creek corridor and connects the area's neighborhoods through a network of natural areas, parks, and trails.

Concept Plan Alternatives (next pages)

CONCEPT PLAN ALTERNATIVE 1 THEMES

NORTH

- + Strongest employment focus
- + Mix of housing north of Chicken Creek
- + Edy Rd park

FAR WEST

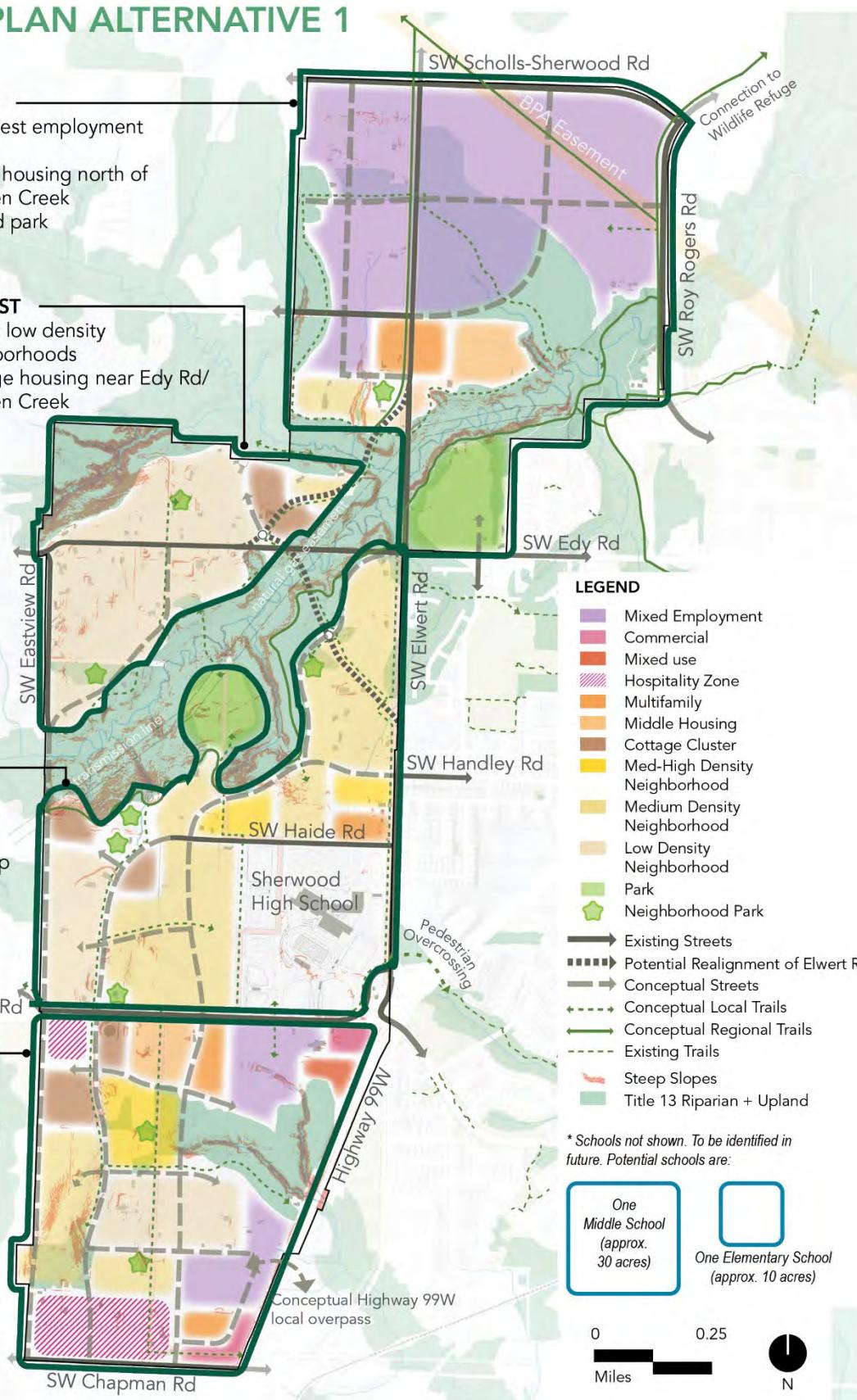
- + Mostly low density neighborhoods
- + Cottage housing near Edy Rd/ Chicken Creek

WEST

- + Mostly medium density neighborhood
- + Low density hilltop
- + Pockets of higher density housing
- + Chicken Creek community park

SOUTHWEST

- + Commercial, mixed-use and employment near Hwy 99
- + Mix of housing moving west
- + Low density hilltop
- + Hospitality north of Chapman Rd and at western end of Kruger Rd



CONCEPT PLAN ALTERNATIVE 2 THEMES

NORTH

- + Employment focus to north
- + Mix of housing types
- + Mid-size park on Elwert Rd
- + Small commercial nodes on Elwert Rd and Scholls-Sherwood at Roy Rogers Rd

FAR WEST

- + Low density along Eastview Road
- + Medium density in lower areas
- + Mid-size park on Edy Rd

WEST

- + Lower density hilltop
- + Cottage and medium density housing along Elwert Rd
- + Chicken Creek community park
- + Mixed-use and middle housing west of high school

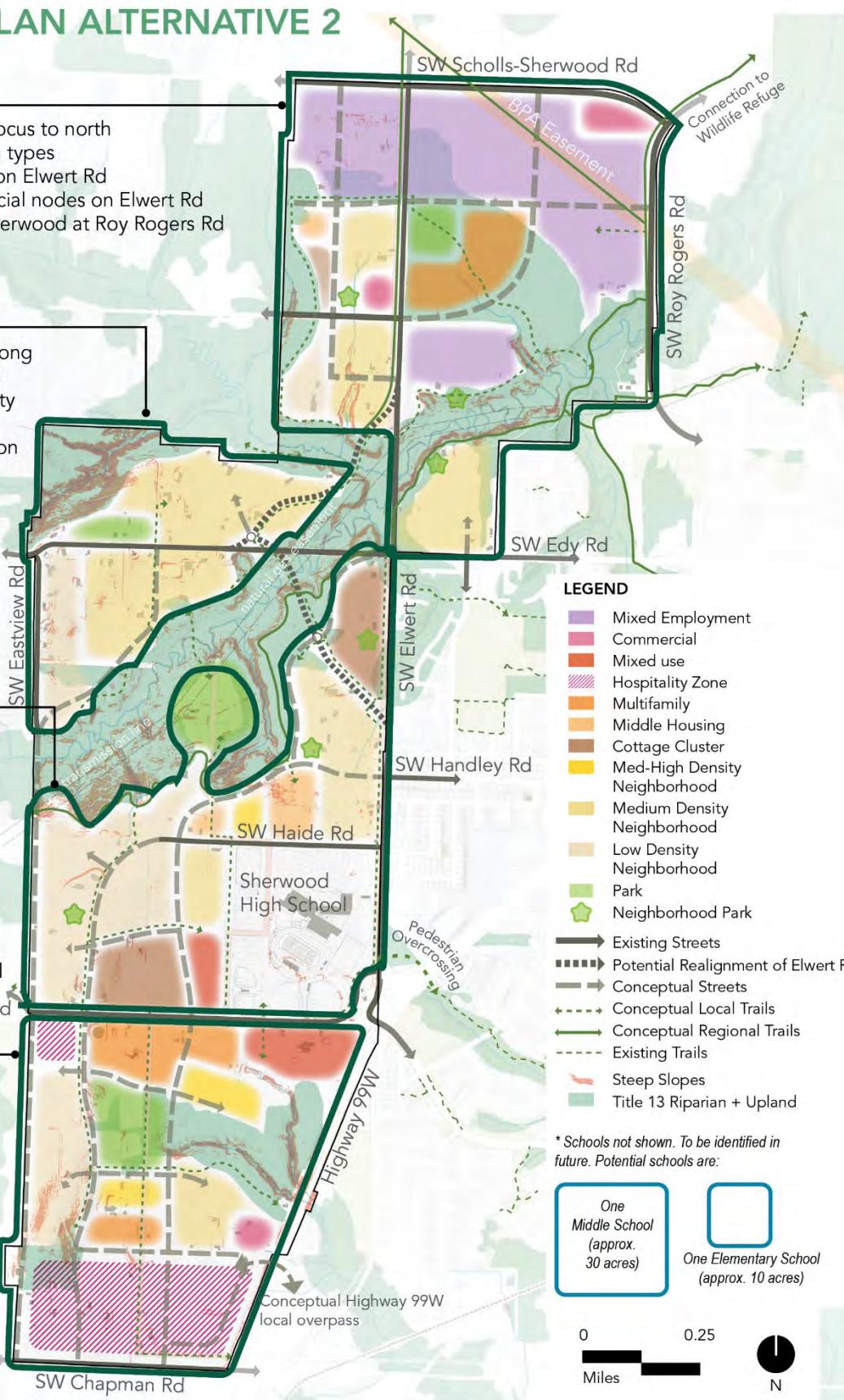
SW Kruger Rd

SOUTHWEST

- + Mixed-use and multifamily south of Kruger Rd
- + Community park west of Goose Creek
- + Hospitality "Gateway to Wine Country" north of Chapman Rd and at western end of Kruger Rd

SW Chapman Rd

SHERWOOD WEST CONCEPT PLAN



* Schools not shown. To be identified in future. Potential schools are:

One Middle School
(approx. 30 acres)

One Elementary School
(approx. 10 acres)

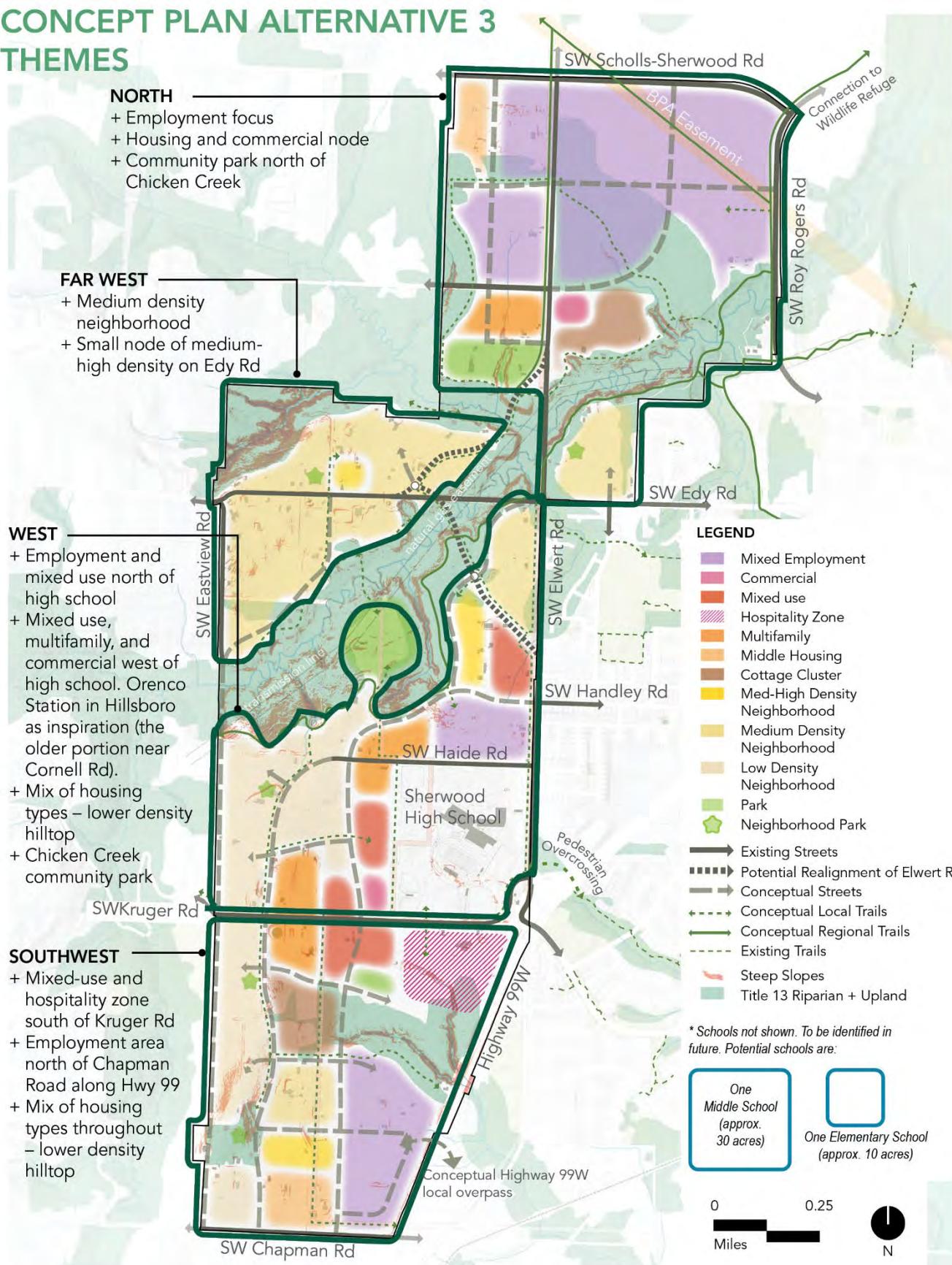
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SHERWOOD WEST CONCEPT PLAN

CONCEPT PLAN ALTERNATIVE 3 THEMES



Land Use Metrics

HOUSING ESTIMATES

The tables below present estimated housing units and densities based on the three land use alternatives. The acreages for each residential zone are based on acreage calculations from the maps. The assumptions regarding residential densities are consistent with previous housing metrics reviewed with the TAC/CAC, and are based on existing zone densities in the Sherwood Development Code. The tables present a range of potential housing unit outcomes, depending on how much middle housing is developed in the Neighborhood Zones (0-50%). [NOTE: The “average density with open space” calculations assume an open space set-aside of 15%, integrated into development.]

Alternative 1

	Density Range (Net)	Total Acres (Net)	% of Residential Acres	Total Housing Units (with % of Middle Housing in Neighborhood Zones)			
				0% MH	10% MH	20% MH	50% MH
Multi-Family	16.8 to 24	24	7%	585	585	585	585
Middle Housing Zone	5.5 to 11	22	6%	245	245	245	245
Cottage Zone	12.8 to 16	26	7%	421	421	421	421
Med/High Density Nbhd	5.5 to 11	31	9%	338	380	423	552
Medium-Density Nbhd	5.6 to 8	134	38%	1,068	1,295	1,522	2,203
Low-Density Nbhd	3.5 to 5	115	33%	574	804	1,033	1,722
TOTAL		352	100%	3,231	3,730	4,230	5,728
<i>Total Average Density</i>				9.2	10.6	12.0	16.3
<i>Total Average Density with Open Space</i>				7.8	9.0	10.2	13.8

Alternative 2

	Density Range (Net)	Total Acres (Net)	% of Residential Acres	Total Housing Units (with % of Middle Housing in Neighborhood Zones)			
				0% MH	10% MH	20% MH	50% MH
Multi-Family	16.8 to 24	44	13%	1,066	1,066	1,066	1,066
Middle Housing Zone	5.5 to 11	10	3%	113	113	113	113
Cottage Zone	12.8 to 16	33	10%	524	524	524	524
Med/High Density Nbhd	5.5 to 11	19	6%	214	241	268	350
Medium-Density Nbhd	5.6 to 8	107	32%	857	1,039	1,221	1,767
Low-Density Nbhd	3.5 to 5	123	36%	615	861	1,107	1,845
TOTAL		337	100%	3,390	3,845	4,300	5,666
<i>Total Average Density</i>				10.1	11.4	12.8	16.8
<i>Total Average Density with Open Space</i>				8.5	9.7	10.8	14.3

Alternative 3

	Density Range (Net)	Total Acres (Net)	% of Residential Acres	Total Housing Units (with % of Middle Housing in Neighborhood Zones)			
				0% MH	10% MH	20% MH	50% MH
Multi-Family	16.8 to 24	32	10%	776	776	776	776
Middle Housing Zone	5.5 to 11	20	6%	217	217	217	217
Cottage Zone	12.8 to 16	32	10%	505	505	505	505
Med/High Density Nbhd	5.5 to 11	21	6%	235	241	268	350
Medium-Density Nbhd	5.6 to 8	114	35%	913	1,039	1,221	1,767
Low-Density Nbhd	3.5 to 5	110	33%	550	861	1,107	1,845
TOTAL		329	100%	3,196	3,639	4,095	5,461
<i>Total Average Density</i>				9.7	11.1	12.4	16.6
<i>Total Average Density with Open Space</i>				8.3	9.4	10.6	14.1

EMPLOYMENT ESTIMATES

The tables below present estimated employment potential in Sherwood West, and associated jobs-to-housing ratios, based on the three land use alternatives. As in previous employment metrics calculations, the jobs-per-acre estimates are sourced from the Metro 2014 Urban Growth Report and from the scenario planning software Urban Footprint. The jobs-housing ratios are based on three potential housing scenarios, depending on how much middle housing is developed in the Neighborhood Zones (0%, 10% or 50%).

Alternative 1

	Total Acres (Net)	Jobs / Net Acre (est.)	Total Jobs	Percent of Jobs	% of Employment Acres
Mixed Employment	165	18	3,037	71%	66%
Commercial	10	36	366	9%	4%
Mixed Use	4	25	111	3%	2%
Hospitality	31	15	469	11%	12%
Schools	40	8	314	7%	16%
TOTAL	251		4,297	100%	100%

Alternative 1

	Middle Housing Scenario		
	0% MH	10% MH	50% MH
Total housing units	3,231	3,730	5,728
Total jobs	4,297	4,297	4,297
Jobs-Housing Ratio	1.3	1.2	0.8

Alternative 2

	Total Acres (Net)	Jobs / Net Acre (est.)	Total Jobs	Percent of Jobs	% of Employment Acres
Mixed Employment	111	18	2,050	45%	43%
Commercial	19	36	672	15%	7%
Mixed Use	25	25	638	14%	10%
Hospitality	63	15	938	20%	24%
Schools	39	8	306	7%	15%
TOTAL	257		4,602	100%	100%

Alternative 2

	Middle Housing Scenario		
	0% MH	10% MH	50% MH
Total housing units	3,390	3,845	5,666
Total jobs	4,602	4,602	4,602
Jobs-Housing Ratio	1.4	1.2	0.8

Alternative 3

	Total Acres (Net)	Jobs / Net Acre (est.)	Total Jobs	Percent of Jobs	% of Employment Acres
Mixed Employment	183	18	3,364	67%	65%
Commercial	8	36	278	6%	3%
Mixed Use	29	25	729	15%	10%
Hospitality	22	15	334	7%	8%
Schools	40	8	311	6%	14%
TOTAL	281		5,017	100%	100%

Alternative 3

	Middle Housing Scenario		
	0% MH	10% MH	50% MH
Total housing units	3,516	3,639	6,301
Total jobs	5,017	5,017	5,017
Jobs-Housing Ratio	1.4	1.4	0.8

Qualitative Evaluation

The tables on the next pages provide a qualitative evaluation of the three land use alternatives, using the evaluation criteria identified earlier in the concept planning process. The tables indicate the extent to which each alternative meets each criterion. The evaluation also assigns scores for each criterion using the rating system described below.

Score	Description
●	The alternative clearly supports the project objectives and/or is the best performing alternative if all alternatives support the objectives
○	The alternative partially supports the project objectives and/or is the second-best choice if all alternatives support the objectives
○	The alternative does not support the project objectives or is the third-best choice if all alternatives support the objectives (i.e., it provides only a baseline level of performance)
N/A	The objective has no effect or does not apply

Goals, Criteria, and Evaluation

GOAL 1	EVALUATION CRITERIA
<p><i>The area is designed as a natural extension of Sherwood and is integrated into the existing pattern of growth in order to preserve the community's heritage and small-town feel.</i></p>	<ul style="list-style-type: none"><i>There is a balanced mix of office, industrial, commercial, and residential land uses and open spaces</i><i>A variety of housing options accommodates a diverse range of family structures, income levels, and lifestyles</i><i>Neighborhood retail nodes provide residents with walkable access to goods and services</i><i>Housing density and implementation is pragmatic</i><i>View corridors and separation from other cities contribute to Sherwood's unique identity</i>
All Alternatives	<ul style="list-style-type: none">All alternatives provide a variety of housing options.All alternatives have significant new emphasis on jobs and a mixed use area near Kruger Road.All alternatives provide about 70% of net residential acres in the lowest density categories (MDR and LDR) and the same approximate number of units, about 2000, in those zones (10% of which is assumed as middle housing).Housing in the Middle Housing Zone is relatively low at 3-6 percent of residential land and 3-7 percent of total units.View corridors and separation from Newberg and King City are the same for all alternatives.
Alternative 1 Score ●	<ul style="list-style-type: none">Mix of land uses – Alternative 1 has relatively large areas of the same or similar land use, except in the Southwest district.Alternative 1 has the lowest number of Multi-family units at 585.Alternative 1 has the highest number of Med/High Neighborhood Zone units at 380.Two retail nodes: Kruger Road and Chapman (none north of Kruger).Average density is 10.6 du/acre (9.0 with open space), assuming 10% middle housing in single dwelling zones.

GOAL 1	EVALUATION CRITERIA
Alternative 2 Score 	<ul style="list-style-type: none">• Mix of land uses – Alternative 2 has a greater mix of land uses is introduced into the North and West districts as compared to Alternative 1.• Alternative 2 has the highest number of Multi-family units at 1066.• Alternative 2 has the lowest number of Middle Housing Zone units at 113.• Alternative 2 has the highest number of Cottage Zone units at 524.• Three retail nodes: in the North, West, South districts.• Average density is 11.4 du/ac (9.7 with open space), assuming 10% middle housing in single dwelling zones.
Alternative 3 Score 	<ul style="list-style-type: none">• Mix of land uses – Alternative 3 has a relatively high degree of mix, especially in the West district and Kruger Road area.• The mixed use and employment north of the High School is different from Alternatives 1 and 2, which have residential uses in that area.• Alternative 3 is in the middle of the range for Multi-family units at 776.• Alternative 3 has relatively high amount of Cottage Zone units at 505.• Three retail nodes: North, West (Handley Road), West/Southwest (Kruger Road).• Average density is 11.3 du/ac (9.4 with open space), assuming 10% middle housing in single dwelling zones.

Summary

The main difference for this criterion is the mix and variety of land use across the alternatives. Alternative 1 is the most similar to existing Sherwood due to prevalence of residential uses and slightly lower density. Alternative 2 can be seen as a plan for an evolving Sherwood, where residential land use is dominant, more housing choices are introduced over the next 10-40 years, and neighborhood character is guided by design regulations. Alternative 3 has the most marked differences from existing Sherwood. The percentage of Multi-family housing is also a key variable, ranging from 585 units (Alt 1) to 776 units (Alt 2) to 1066 units (Alt 3).

The full circle score for Alternative 1 is based on it being most similar to existing Sherwood, per the goal. Alternatives 2 and 3 provide more housing types and choice.

GOAL 2	EVALUATION CRITERIA
<i>The area attracts a variety of businesses and employment opportunities, which help satisfy the City's need for an expanded tax base.</i>	<ul style="list-style-type: none"><i>Infrastructure is well-planned to make Sherwood West attractive to developers and large employers</i><i>There are large low-impact employment areas available for the growth of technology parks and other higher-wage jobs</i><i>There are opportunities to leverage the area's unique location for destination retail, hospitality, and visitor-related uses</i>
All Alternatives	<ul style="list-style-type: none">Infrastructure planning is similar for all three alternatives.Per the City's initial analysis, the West subdistrict is the most readily served with infrastructure. However, the City could prioritize infrastructure funding to serve other land sooner. Further analysis is required.All alternatives would add significant amounts of new employment lands to the City of Sherwood, including larger sites for technology parks in the North district.All alternatives include land designated for a new Hospitality Zone, with the intent to leverage the area's unique location for destination retail, hospitality and visitor-related uses.
Alternative 1 Score ●	<ul style="list-style-type: none">Alternative 1 has the second highest amount of Mixed Employment land, 163 acres, focused in the North District.Commercial, Mixed-Use, and Hospitality lands total 86 acres.The Hospitality Zone lands are in upland properties with scenic views along Chapman Road and the west end of Kruger Road.
Alternative 2 Score ●	<ul style="list-style-type: none">Alternative 2 has significantly less Mixed Employment land, 111 acres, focused in the northern area of the North district.Commercial, Mixed-Use, and Hospitality lands total 146 acres – highest of the alternatives.The Hospitality Zone lands along Chapman Road have visibility from Hwy 99 and continue west to upper, scenic view properties.

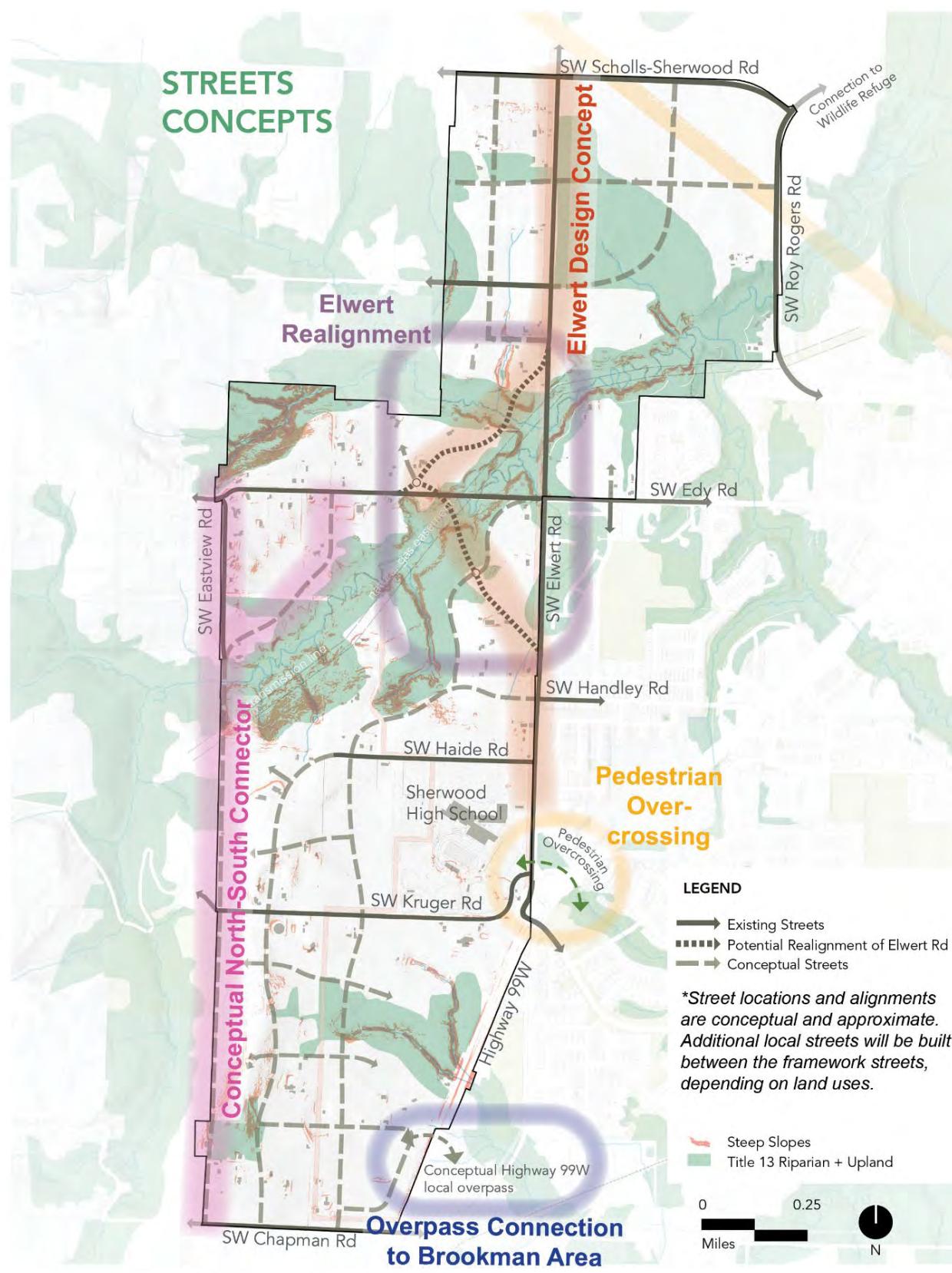
GOAL 2	EVALUATION CRITERIA
Alternative 3 Score ●	<ul style="list-style-type: none">Alternative 3 has the largest amount of Mixed Employment land, 183 acres, focused in the North district and Southwest district along Hwy 99.Commercial, Mixed-Use, and Hospitality lands total 98 acres – slightly higher than Alternative 1. Employment uses are located on the west and north side of the High School, which is unique to this alternative.The Hospitality Zone is focused at the Kruger/Hwy 99 node and there are no Hospitality Zone lands at Chapman Road as there are with the other alternatives.

All three alternatives support the Goal 2 and would significantly increase the employment land supply in Sherwood. At 250-280 total acres, employment lands comprise about 40% of the net buildable land supply in Sherwood West. The alternatives have different locational emphasis for different employment sectors.

Alternatives 1 and 3 emphasize use of the North district for Mixed Employment. All alternatives include mixed use and other commercial opportunities along Kruger Road, with Alternative 3 extending that concept around the High School. A focus on Hospitality land along Chapman Road is in Alternatives 1 and 2. The equal scoring above is based on excellent fulfillment of the goal by all alternatives - the alternatives simply achieve that outcome in different ways. The differences between the alternatives are related more to land use compatibility, how much Mixed-Use and Commercial lands could be supported, and preferences for the location of the Hospitality Zone.

GOAL 3	EVALUATION CRITERIA
<i>Transportation facilities serve to connect, rather than divide, neighborhoods.</i>	<ul style="list-style-type: none"><i>A network of streets provides north-south connections to and through the area</i><i>The Concept Plan helps realize the opportunity for a Highway 99 pedestrian crossing</i><i>Streets are designed to balance accommodating vehicle traffic and parking while also being welcoming places for people</i>

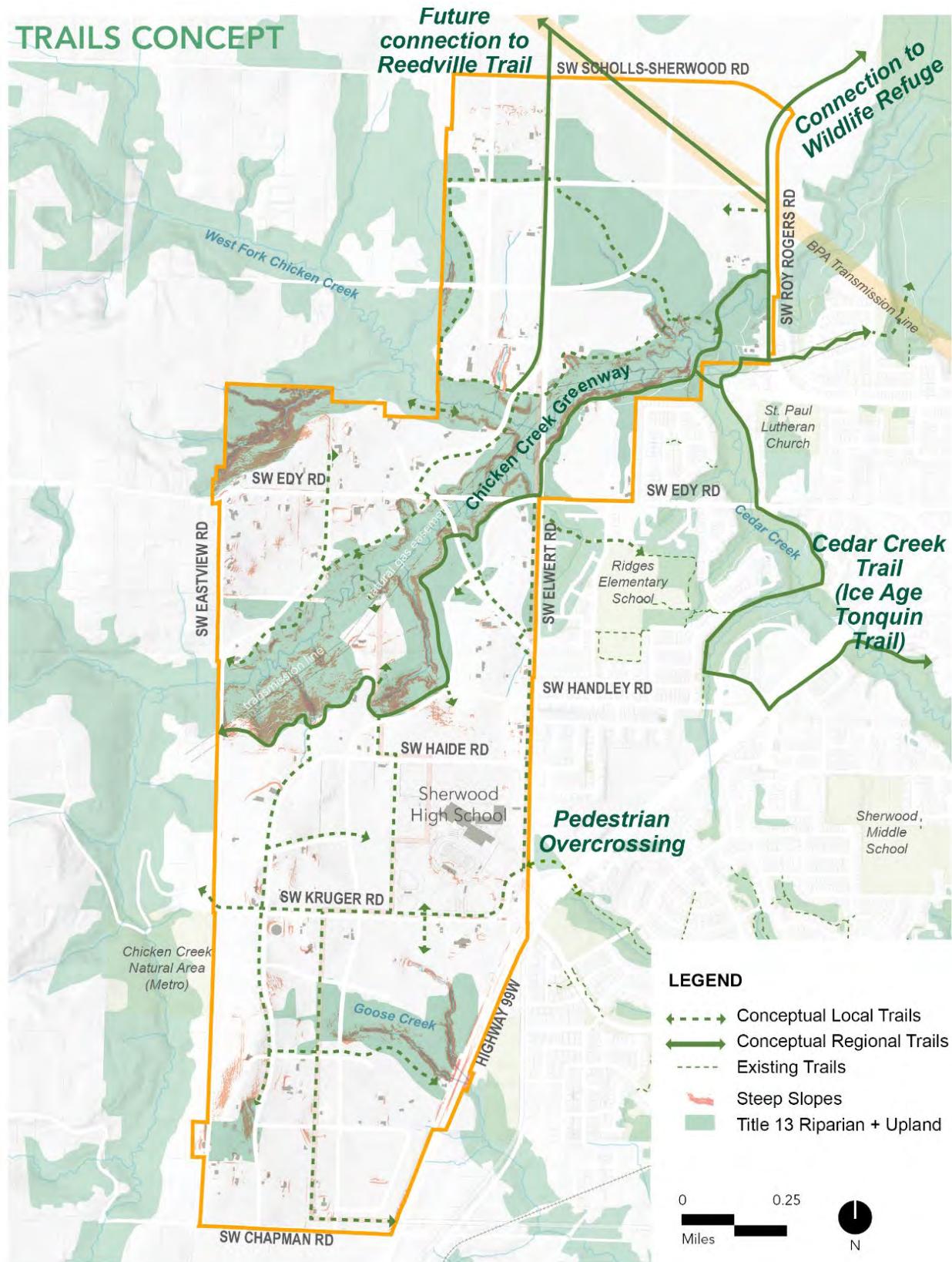
GOAL 3	EVALUATION CRITERIA
	<ul style="list-style-type: none">• <i>Streets are designed with consideration for safety and emergency response vehicles</i>• <i>Sherwood is “transit-ready” for future transit service</i>
All Alternatives	<p><i>Note: A traffic impact analysis is being prepared and will provide information needed for assessment of this goal. Initial results from the analysis will be presented at the TAC and CAC meetings.</i></p> <ul style="list-style-type: none">• The same street network is common to all alternatives (see map on next page).• All alternatives support the future opportunity for a Highway 99 pedestrian crossing.• The alternatives all emphasize the same priority for safety, managing traffic, and making streets places for people.• Transit routing is an unknown at this point. From a land use perspective, Alternative 3 may be the most transit supportive due to the land use patterns in the West district.
Summary	This evaluation is unscored because the transportation recommendations are the same for all alternatives and a traffic impact analysis is underway.



GOAL 4	EVALUATION CRITERIA
<p>Residents have access to a variety of parks and natural areas, anchored by the Chicken Creek Greenway.</p>	<ul style="list-style-type: none">• <i>The Chicken Creek corridor is protected</i>• <i>Creek connections to the Tualatin River National Wildlife Refuge are preserved and, where possible, enhanced</i>• <i>Residents have access to nature through a network of multi-use and soft-surface trails</i>• <i>Parks and natural areas serve as places where families and community members can gather together</i>• <i>Existing mature trees and areas of dense tree canopy are preserved where feasible</i>
<p>All Alternatives</p>	<ul style="list-style-type: none">• Protection of the creek corridor and riparian/upland habitat areas is built into all three land use alternatives. The Chicken Creek Greenway is one of the key plan concepts for Sherwood West and will provide access to nature and trail connections for future residents and visitors.• The proposed realignment of Elwert and Edy Roads will reduce the impact of infrastructure improvements (road widening) on sensitive creek confluences. The realigned roadway will cross two Chicken Creek tributary streams at the narrowest points in order to reduce or eliminate wetland mitigation issues. The realignment also eliminates the excessive fills within the SW Elwert/SW Edy Road intersection and follows the existing terrain. This will require construction of structural bridging and acquisition of right-of-way.• The trails concept is the same for all three alternatives (see page 18). This includes a regional trail connection to the Tualatin River National Wildlife Refuge. It also includes a conceptual network of local trails, multi-use paths, sidewalks, and bike lanes through neighborhoods to connect residents with parks, schools, employment areas, and other local destinations.• All three alternatives include two community parks (10-20 acres each) as well as neighborhood parks (2-5 acres) integrated throughout Sherwood West neighborhoods. Future parks will be consistent with policies and guidelines in the recently-updated Sherwood Parks & Recreation Master Plan. Natural areas and open space dedicated through development will provide additional green space.• Existing mature trees and tree canopies will be preserved through Metro Title 13 habitat protections and through application of the Sherwood Development Code's tree preservation standards.

GOAL 4	EVALUATION CRITERIA
Alternative 1 Score 	<ul style="list-style-type: none">Alternative 1 has an estimated 43 total acres of parks (community and neighborhood parks).
Alternative 2 Score 	<ul style="list-style-type: none">Alternative 2 has the most park acreage, with an estimated 55 total acres.
Alternative 3 Score 	<ul style="list-style-type: none">Alternative 3 has the least park acreage, with an estimated 37 total acres.
Summary	<p>All three alternatives provide strong support for these evaluation criteria by emphasizing preservation of natural areas and access to parks and nature. The three alternatives each locate one community park in the area south of Chicken Creek, surrounded by resource land. The main distinguishing features between the alternatives are the locations of the second community park and total park acreage. Alternative 2 was given the highest score because it provides the most park acreage—thereby providing the greatest access to recreation, nature, and community gathering space for residents.</p>

GOAL 5	EVALUATION CRITERIA
<p><i>The area is served by a robust network of active transportation options that are integrated into Sherwood's existing network.</i></p>	<ul style="list-style-type: none">• Residents can easily walk or bike to access local destinations such as schools, parks, employment areas, and shopping centers• Active transportation facilities connect to existing Sherwood neighborhoods and nearby regional destinations• Students have safe options to walk or bike to school
<p>All Alternatives</p> <p>●</p>	<ul style="list-style-type: none">• The trails concept is the same for all three alternatives (see next page). This includes a conceptual network of local trails, multi-use paths, sidewalks, and bike lanes through neighborhoods to connect residents with parks, schools, employment areas, and other local destinations. Trails connecting to local destinations will help to encourage walking, rolling, and biking.• The trails concept includes key connections between new growth in Sherwood West and existing areas of Sherwood—such as such as future connections to the Reedville Trail, the Tualatin River National Wildlife Refuge trails, Ice Age Tonquin Trail/Cedar Creek Trail, and the future Highway 99 pedestrian overcrossing.• School locations are not identified in the alternatives maps. However, safe routes to school will be an important consideration in the siting of future schools in Sherwood West, and in planning trail and sidewalk connections between neighborhoods and schools.
<p>Alternative 1 Score</p>	<ul style="list-style-type: none">• N/A
<p>Alternative 2 Score</p>	<ul style="list-style-type: none">• N/A
<p>Alternative 3 Score</p>	<ul style="list-style-type: none">• N/A
<p>Summary</p>	All alternatives support these criteria equally, as described above.



GOAL 6	EVALUATION CRITERIA
<i>Growth and development are well-planned and implementation of the area is pragmatic.</i>	<ul style="list-style-type: none"><i>The extension of public facilities and services are phased and coordinated with development</i><i>Land uses serve Sherwood's needs and are complementary to other expansion areas along the western Urban Growth Boundary</i>
All Alternatives	<ul style="list-style-type: none">Extension of public facilities is a critical issue for Sherwood West regardless of the land use alternative.Infrastructure phasing and funding will be further explored after a preferred land use alternative is selected.Considering the capability of extending existing public facilities and constructing needed new infrastructure to serve the Sherwood West area, areas north and south of the high school and close to SW Elwert Road, are the most logical areas for development to occur first.The City may consider new annexation policies based on a phasing plan for development within Sherwood West. The annexation policies could consider priority areas to provide an orderly and efficient transition from rural to urban land uses to ensure public infrastructure needs are met to provide homes and jobs in Sherwood West. These ideas will be further fleshed out in the infrastructure phasing/funding task.
Alternative 1 Score ●	<ul style="list-style-type: none">Alternative 1's land uses generally serve Sherwood's needs by providing a mix of housing, employment, and commercial uses.The Hospitality Zone concept is a new idea for Sherwood and would provide intentional locations for uses such as hotels/motels, restaurants, wineries, and similar uses. Because it is untested, it is unknown how effective it will be in serving Sherwood's needs. Alternative 1 has a moderate amount of Hospitality zoning (roughly 31 acres) located on Chapman Rd and at the west end of Kruger Rd.Land uses in the Southwest district closest to the Brookman expansion area include a mix of commercial, mixed employment, and multi-family zoning. This complements the planned commercial, office and light industrial zoning for the western portion of the Brookman area.

GOAL 6	EVALUATION CRITERIA
Alternative 2 Score ●	<ul style="list-style-type: none">Alternative 2's land uses also serve Sherwood's needs by providing a mix of housing, employment, and commercial uses.Alternative 2 has the greatest amount of Hospitality zoning (roughly 63 acres), occupying about a third of the Southwest district.Land uses in the Southwest district closest to the Brookman area include commercial and hospitality uses. These uses are relatively compatible with the planned zoning for the western portion of the Brookman area.
Alternative 3 Score ●	<ul style="list-style-type: none">Alternative 3's land uses also serve Sherwood's needs by providing a mix of housing, employment, and commercial uses.Alternative 3 has the most modest amount of Hospitality zoning (roughly 63 acres), located at the intersection of Highway 99 and Kruger Rd.The eastern portion of the Southwest district closest to the Brookman area is exclusively designated as mixed employment. This use may be the most complementary to the planned zoning for the western portion of the Brookman area.
Summary	All three alternatives will extend public facilities as part of development and will be phased primarily based on different areas' proximity to existing facilities. All three alternatives include land uses that serve Sherwood's needs. However, the Hospitality Zone is the newest concept, and its practicality is not yet known. Therefore, alternatives that de-emphasize hospitality zoning (Alternatives 1 and 3) may be more pragmatic for implementation, consistent with the goal. The conclusion is very subjective – the City should continue to study the Hospitality Zone concept and include it in its economic development efforts.

APPENDIX K

Developer Tour Summary

Sherwood West Re-Look

Developer Tour Notes

Date October 26, 2022
To Erika Palmer, City of Sherwood
From Chris Zahas, Leland Consulting Group
CC Joe Dills, MIG

On October 24, 2022, the City of Sherwood hosted a driving tour of the Sherwood West Concept Plan area with invited guests from the development and brokerage community. The purpose was to gather insights about the area and the draft plan concepts from development practitioners and to provide implementation advice as the plan moves toward completion. The tour route included a loop through the main existing arterials in the study area with stops to discuss key opportunity areas such as the planned industrial zone at the north end and the mixed-use commercial area near the high school. Following the tour, the group met at Sherwood City Hall to debrief and discuss implications.

The tour included the following participants:

- Erika Palmer, Planning Manager, City of Sherwood
- Bruce Coleman, Economic Development Manager, City of Sherwood
- Joy Chang, Planner, City of Sherwood
- Chris Zahas, Managing Principal, Leland Consulting Group
- Stu Peterson, Broker, Macadam Forbes
- Eric Sporre, Vice President, PacTrust
- Kirk Olsen, Principal, Trammell Crow
- Matt Grady, Vice President, Gramor Development

Following is a summary of the key comments heard during the tour, organized into general themes.

Zoning and Land Use

- Sherwood's E-I zone is a good one. It's flexible and doesn't restrict by tenant use unlike some zones in neighboring cities. Avoid the types of use restrictions found in Tualatin's Basalt Creek industrial zone.
- Office development is unlikely in Sherwood West.
- The region is virtually out of industrial land today. New inventory is needed as soon as possible to accommodate job growth.
- Industrial development at the north end of Sherwood West could be developed as soon as the land is brought into the UGB and utilities are available.
- Likely industrial uses would be multi-tenant buildings in the 50,000-70,000 square foot range. Given the distance to I-5, it is not likely that large distribution facilities would consider this area, but there are plenty of smaller miscellaneous industrial users who would be attracted to it.
- Some support retail would make sense in this area, but zoning requirements that the retail be in direct support of the industrial use can be a challenge to work with. Typically, a developer would need a minimum of 35,000 square feet of retail to make a center viable.
- The hospitality zone needs a destination use to make it viable if it's not visible from or directly located in 99W.
- A wine-themed destination would best be built off of an existing working winery, although offsite tasting rooms are becoming popular.

- Sloped sites or sites at a higher grade than the adjacent street lend themselves better to housing than retail uses.
- Structured parking is necessary to get true commercial density and can be viable with parking rates at \$2 per hour.

Infrastructure

- Roads with utilities are critical to setting the stage for private development. Consider it backbone infrastructure that is a prerequisite to getting development underway.
- Get a wetlands inventory done soon so that potential issues are known early on.
- The high school is not yet on sewer, but when it is installed in 2025, that part of the study area will open up for development.

Implementation and Funding

- It is a challenge for developers to front load all infrastructure when they do not always get credit for it and/or they may not get reimbursed by future developers before they expire.
- A detailed infrastructure funding strategy is needed.
- Urban renewal can be a very good tool for funding infrastructure.
- Sherwood has a good brand image, and employers are attracted to the small-town image, good schools, and quality of life.
- Locating a public facility like city offices or a police or fire station in the study area could jumpstart development.

APPENDIX L

Transportation Impact Analysis



TRANSPORTATION IMPACT ANALYSIS MEMO

DATE: January 5, 2023

TO: Joe Dills, Kate Rogers | MIG
Erika Palmer, Joy Chang | City of Sherwood

FROM: Carl Springer, Amanda Deering, Alex Haag | DKS Associates

SUBJECT: Sherwood West Concept Plan Traffic Impact Analysis

Project #21057-000

INTRODUCTION

The Sherwood West Re-Look project will prepare a concept plan for the 1,291-acre Sherwood West area by updating the Sherwood West Preliminary Concept Plan. The Preliminary Plan, which was approved by the Sherwood City Council in 2016, was developed as a long-range planning tool to help guide future community discussions and decisions about the City's long-term growth. The purpose of the Sherwood West Re-Look project is to take another look at the Sherwood West area to address new land use and growth patterns, new transportation plans, new State rules related to housing, and new opportunities for employment and economic growth.

This memorandum summarizes the preliminary findings regarding the transportation impacts of the Sherwood West Concept Plan (Concept Plan) project and transportation network upgrades contemplated for the Plan Area. This memorandum includes:

- Estimated trip generation of the three land use alternatives
- Discussion of potential transportation network changes being contemplated in the Concept Plan, including the realignment of Elwert Road and evaluation of a parallel north-south connector route from Chapman Road to Edy Road.

Note: the north-south connector is not a site-specific proposal. It is a connectivity concept for further study. The memorandum is an initial evaluation of a conceptual connection between Chapman Road and Edy Road.

- Discussion of expected traffic growth in Plan Area
- Initial system performance review on major roadways and at two key study intersections

STUDY AREA AND LAND USE ALTERNATIVES

The Concept Plan Area, illustrated in **Figure 1**, is bounded by Scholls-Sherwood Road to the north, Roy Rogers Road and OR 99W to the east, Chapman Road to the south, and Eastview Road to the west.

Three land use alternatives for the Concept Plan Area are being developed as part of the Concept Plan Re-Look (**Appendix A**). Land use Alternative 1 has the highest proportion of medium/high-density neighborhood land use of the three alternatives and less cottage zoning and multifamily than the other alternatives. Alternative 2 has the highest proportion of multifamily land use and less middle housing zone than the other two alternatives. In terms of employment acres, Alternative 1 has fewer mixed-use acres than the other two alternatives. In comparison, Alternative 2 has fewer mixed-employment acres but more commercial and hospitality land-use acres than the other two alternatives.

A breakdown of the total jobs and housing units for the three alternatives is summarized in **Table 1**. While the alternatives vary regarding the proportion and location of housing types, all three offer a comparable number of total housing units. For total jobs, Alternative 3 provides the highest number of total jobs, and Alternative 2 provides the least.

TABLE 1: HOUSING METRICS AND JOBS SUMMARY

CATEGORY	CONCEPT PLAN ALTERNATIVES		
	ALT 1	ALT 2	ALT 3
TOTAL HOUSING UNITS	3,730	3,845	3,635
TOTAL JOBS	5,245	4,600	5,020

Note: values rounded to the nearest multiple of 5

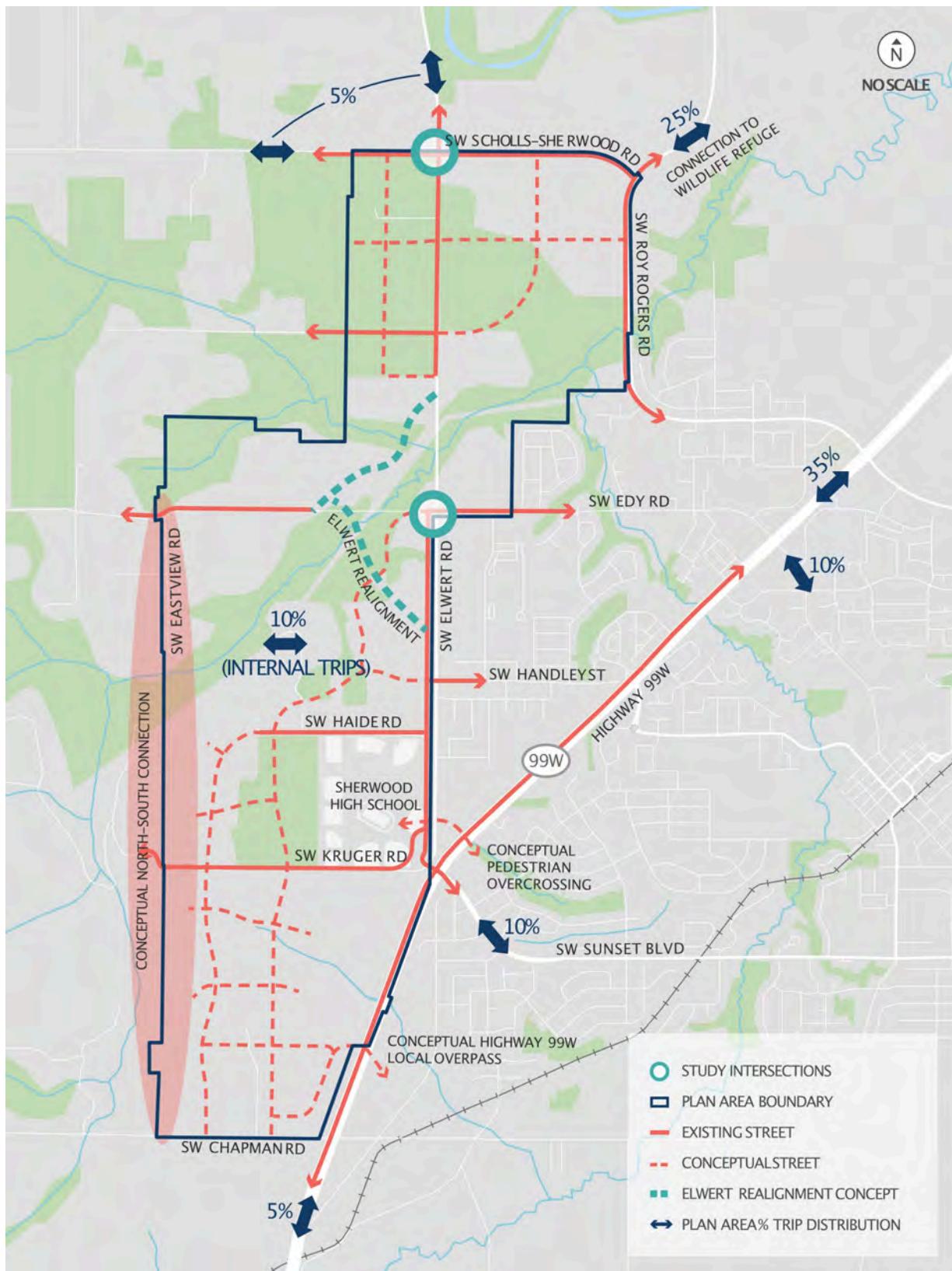


FIGURE 1: PLAN AREA AND TRIP DISTRIBUTION

PLAN AREA TRAVEL FORECAST

VEHICLE TRIP GROWTH ESTIMATE

Trip generation for the three land use alternatives is estimated based on the Westside Travel Demand Model and the number of the expected housing units and jobs provided by each alternative. Summarized in **Table 2**, all three land use alternatives are expected to generate a similar number of vehicle trips when the area is fully developed. The values reported in **Table 2** are total vehicle trips during the 2-hour PM peak period. The magnitude of vehicle trips is comparable to the number of anticipated trips estimated by the previously completed Urban Reserve Transportation Study (URTS) for this area. By way of comparison, the URTS assumed land uses included a higher level of households (6,495) and minimal jobs (545) within the planning area.

TABLE 2: VEHICLE TRIPS DURING 2-HOUR PM PEAK PERIOD

	ALT 1	ALT 2	ALT 3	URBAN RESERVE TRANSPORTATION STUDY
TOTAL VEHICLE TRIPS (2-HOUR PM PEAK)	6,040	6,725	6,780	6,470

Note: values rounded to the nearest multiple of 5

REGIONAL TRIP PATTERNS

Regional trip patterns for the Plan Area were estimated using the Westside Travel Demand Model to help understand the primary travel directions for trips that start or end in Sherwood West. As shown in **Figure 1**, most Plan Area travel demand is to/from the northeast of the Plan Area, either on Roy Rogers Road, OR 99W, and to/from the east on Tualatin-Sherwood Highway. Approximately 60% of vehicle traffic that begins or ends within the planning area will use these three routes. About 30% of travel demand crosses OR 99W to/from the rest of the City of Sherwood, while only 5% is to/from south of the Plan Area via OR 99W, and 5% is to/from northwest of the Plan Area on Lebeau Road and Scholls Sherwood Road. The analysis also showed that about 10% of traffic remains internal to the Plan Area, meaning that the trips start and end within the planning area.

STREET NETWORK AND CONCEPTUAL STREET ALTERNATIVES

Several transportation network improvements were considered as part of the Preliminary Sherwood West Concept Plan and others as part of this subsequent analysis, including:

- The realignment of Elwert Road west of Chicken Creek.
- A conceptual north-south connection between Chapman Road and Edy Road.
- A new pedestrian over crossing near OR 99W at Sunset.
- A new multimodal overcrossing at OR 99W north of Brookman Chapman Road; and

- Several new internal local and connector roadways.

The conceptual locations of these upgrades are illustrated in **Figure 1**. All future facilities would meet current City multimodal street and trail facility standards. Major roadways generally would have one travel lane in each direction with center turn lanes (Scholls-Sherwood Road, Elwert Road, Edy Road, and Kruger Road), while local streets would be one lane in each direction. As noted above, the north-south connector is not a site-specific alignment. For this analysis, a two-lane road is assumed.

ELWERT ROAD RE-ALIGNMENT CONCEPT

Elwert Road from OR 99W to Scholls-Sherwood Road is a two-lane rural arterial. Washington County and the City of Sherwood's Transportation System Plan identify the future build-out condition of Elwert Road as a 3-lane arterial, including sidewalks and bike lanes on both sides of the road. According to the County's Road Design Standards, this type of facility requires 90 feet of road right-of-way which includes 50 feet wide pavement, 2 travel lanes, a center turn lane and 2 bike lanes, plus landscape areas and sidewalks behind the curbs. The existing Elwert Road north of Edy Road has a paved area about 24 feet wide with ditches on both sides. As described in the Preliminary Concept Plan, the existing rural condition of Elwert Road would require significant expansion and upgrading to accommodate the city's adopted roadway design standards. This would include land acquisition for road right-of-way and could include re-grading the vertical alignment to improve driver sight distance. In addition, the portions of Elwert Road constrained by the Chicken Creek watershed would further require large cut-and-fill sections and significant environmental mitigation.

As a result, the Preliminary Concept Plan identified re-aligning Elwert Road west of the creek as being more cost-effective and preferred from a constructability standpoint rather than improving the existing alignment. Re-aligning Elwert Road is a transportation recommendation that has been carried forward as part of the current Sherwood West Concept Plan Re-Look project and is analyzed in this memorandum.

As shown in **Figure 1**, this future re-alignment is preliminary and subject to further study and design. Issues to be addressed in future work should include the following:

- Full or partial closure of existing creek crossings
- Cost and constructability
- Safety for all travel modes
- Local circulation for adjacent property and neighborhood connectivity
- Natural resource impacts and permitting
- The potential for a jurisdictional transfer of SW Elwert Road from the county to the city
- Implementation of an SW Elwert Road Design Concept

This initial study did not evaluate specific designs for the re-alignment – that is left to be addressed during future studies. However, this study did confirm that the existing alignment and traffic controls at Elwert/Edy need to be improved to safely serve the expected growth, as discussed in a later section of this memo. As discussed in the next section, this study also confirms that the re-aligned Elwert Road can function effectively as a two-lane cross-section, with appropriate pedestrian-bike facilities provided and center turn lanes/median where needed.

NORTH-SOUTH CONNECTOR

The core idea of the north-south connector is to connect SW Chapman Road to the north end of Sherwood West, enhancing regional connectivity and providing an option away from neighborhoods. The specific route is conceptual, and its alignment has yet to be identified, as reflected by the wide shaded area in **Figure 1**. The City is aware of challenges – topographic, environmental, and conflicts with existing development – but seeks to continue to study this long-range transportation corridor. This connector would require approximately 1.7 miles of new roadway plus a new bridge structure across Chicken Creek.

TRAFFIC PERFORMANCE ANALYSIS

Based on the initial travel forecast for 2040, the general travel conditions were reviewed to assess the planning street system overall based on expected daily traffic volumes and a more detailed review at two key study intersections during peak hours that have historically had operational issues. After the Sherwood West Concept Plan is approved, a further detailed operational analysis will be made to identify specific geometric and traffic control improvements that will be needed at other intersections as the area develops, which will be incorporated into the capital improvement program and the City's Transportation System Plan. A prior study of the OR 99W intersection at Brookman Road-Chapman Road recommended upgrading that intersection to traffic signal controls as development continues in the south end of Sherwood.

It is recognized that Sherwood West will not be fully built out by 2040, but a horizon year 20 years from the existing conditions was selected for analysis. The analysis includes the existing (2019) and future (2040) conditions. Both horizon year scenarios assume the existing lane configurations and controls of the study intersections. Analysis has been conducted using Highway Capacity Manual (HCM) 6th Edition methodology and Synchro 11 software suite.

As all three land use alternatives are expected to generate a comparable number of total vehicle trips, analysis has been conducted for Alternative 3 since it had the highest vehicle trip estimate. Plan Area generated traffic has been assigned to the study road network based on the regional travel patterns described in the previous section.

DAILY TRAFFIC VOLUMES

The daily traffic volumes on the major roadways within the Plan Area provide a general performance indicator for road segment capacity. Depending on access management and cross-

street spacing, a 3-lane arterial or collector roadway can carry 15,000 to 20,000 vehicles daily. 2040 daily traffic volume forecasts have been reviewed within the planning area, as summarized in **Table 3**. Each roadway was shown to carry below this maximum level and will therefore provide satisfactory service. Further studies will be required during the development review to determine appropriate geometric improvements and traffic control upgrades at significant intersections.

TABLE 3: DAILY TRAFFIC FORECASTS ON SELECTED ROADWAYS

ROAD SEGMENT	2040 DAILY TRAFFIC
SCHOLLS-SHERWOOD ROAD BETWEEN ELWERT ROAD AND ROY ROGERS ROAD	13,000
ELWERT ROAD NORTH OF CHICKEN CREEK	10,000
EDY ROAD EAST OF ELWERT ROAD	9,000
EDY ROAD WEST OF CHICKEN CREEK	1,500
NORTH-SOUTH CONNECTOR ROAD	4,000*
CHAPMAN ROAD WEST OF OR 99W	9,000

Note: *The volume estimate ranged from 1,500 to 4,000 ADT on this facility.

The notable finding from this review was the expected low vehicle traffic usage on the conceptual north-south connector roadway. As shown in **Table 3**, the volumes are expected to range from a low of 1,500 to 4,000 vehicles daily, which is consistent with local street or neighborhood routes. Further study is recommended as the planning advances.

INTERSECTION OPERATIONS

Summarized in **Table 4**, the results of the traffic operations analysis indicate that the study intersections are found to be operating acceptably under existing conditions. The Elwert Road & Lebeau/Scholls-Sherwood Road intersection, which is controlled by all-way stop signs, is operating at LOS D, with the highest delays experienced by the westbound shared movement. The Elwert Road at Edy Road intersection is currently controlled by a traffic signal and shared approach lanes on all legs. It operates at overall LOS A, and LOS B or better for all individual approaches.

Results of the traffic operation analysis indicate that by 2040, conditions at Elwert Road at Lebeau/Scholls-Sherwood Road intersection would be expected to deteriorate to LOS F if no capacity improvements are made, with significant delays experienced by the westbound and southbound movements. The Elwert Road at Edy Road signalized intersection would be expected to operate acceptably at LOS C through to 2040 with existing capacity (no geometric improvements). However, as noted previously, to comply with the city's urban street design standards, this intersection requires expansion to accommodate safe walking and bicycling, which is important given the proximity of two school campuses. Refer to **Appendix B** for more details on these intersection analyses.

TABLE 4: EXISTING AND FUTURE INTERSECTION OPERATIONAL ANALYSIS SUMMARY

INTERSECTION	WORST MOVEMENTS	2019 PM		2040 PM	
		DELAY	LOS	DELAY	LOS
ELWERT ROAD & LEBEAU/SCHOLLS-SHERWOOD ROAD	Westbound Scholls-Sherwood	41.0	E	165.7	F
	Southbound Scholls-Sherwood	23.5	C	46.0	E
	OVERALL	28.8	D	98.1	F
ELWERT ROAD & EDY ROAD	Eastbound Edy	9.0	A	35.3	D
	OVERALL	12.2	B	27.9	C

Note: Worst movements noted have the highest delay for a given roadway approach. In all cases, the approach shares a single lane for all left-turning, through, and right-turning traffic. Refer to Appendix B for calculation details.

CONCLUSIONS

This memorandum summarizes the preliminary findings of the transportation impacts of the three land use concepts developed for the Plan Area as part of the Sherwood West Concept Plan Re-Look.

All three land use concepts being contemplated as part of the Re-Look have a comparable number of total proposed housing units and total jobs. Despite each alternative varying in terms of housing typology and land use layout, all three would be expected to generate a similar number of overall vehicle trips to the number estimated by the previously completed URTS for this area.

Regional travel patterns identified using the Westside Travel Demand Model indicate that most Plan Area traffic travels to or from outside the Plan Area, with only 10% of travel demand remaining internal. Most travel demand (60%) is to/from the northeast of the Plan Area, and about 30% is traveling to/from the City of Sherwood east of OR 99W. Variations in land use and layout in the three Alternatives would be expected to have a minimal impact on overall travel patterns.

The Sherwood West Concept Plan describes two road network upgrades that are being examined as part of the Re-Look: the realignment of Elwert Road and a new conceptual north-south parallel route that would connect Chapman Road to Edy Road. The realignment of Elwert Road was identified as a preferred option as part of the Preliminary Concept Plan, and this current Re-Look project, due to the required cross-sectional upgrades and the existing alignment's confluence with Chicken Creek.

Results of the intersection operational analysis indicate that conditions at Elwert Road at Lebeau/Scholls-Sherwood Road intersection would be expected to deteriorate to excessive congestion (LOS F) during peak travel hours if no capacity improvements were made. In contrast,

the intersection of Elwert Road at Edy Road would be expected to operate acceptably with its existing signalized configuration through to the 2040 horizon year. However, both locations will need to be improved to accommodate multimodal facilities as required by the county and city's urban street standards.

The Concept Plan includes urban upgrades to significant roadways within the Plan Area, such as Elwert Road, Kruger Road, Chapman Road, and Edy Road. The planned upgrades include two to three-lane cross-sections and upgrading several existing intersections to either roundabouts or traffic signals. Our initial finding is that Sherwood West Growth will be served adequately with the planned street network as described in the Concept Plan. Further study is recommended to develop a more comprehensive list of improvements and associated cost estimates as this area is made ready for urban development.

RECOMMENDATIONS

Based on the high-level findings of this memorandum, the following are recommended:

- The Elwert Road re-alignment concept be advanced with the Sherwood West Concept Plan, and further studies be conducted to determine the best alignment and intersection configurations.
- The Elwert Road corridor should adopt design themes consistent with the city's vision, as represented by the Sunset Road corridor.
- Upgrade Elwert Road to three lane cross-section with bike lanes and sidewalks take place as development occurs.
- Upgrades to the Elwert/Lebeau Road at Scholls-Sherwood Road intersection be made to provide additional capacity to adequately support traffic growth through to the 2040 horizon year. The intersection with Elwert Road will require additional study, reconfiguration, and eventual signalization or roundabout improvement as development occurs.
- Multimodal safety improvements be made to the Elwert Road and Edy Road intersection consistent with the cross-sectional upgrades to these roadways outlined in the Concept Plan. Other intersections should also be reviewed for possible multimodal safety upgrades as development occurs nearby, including the Elwert Road at Handley Road intersection, and the Elwert Road at Haide Road intersection.
- Edy Road between Elwert Road and Borchers Drive is as a 3-lane collector with bike lanes and sidewalks in the city's Transportation System Plan. This project should be included for the portion within the concept planning area.
- Edy Road west of Chicken Creek should be a two-lane collector road without on-street parking within the concept planning area.
- The north-south connector concept should be further studied to better address the cost/benefit trade-offs for this new route. Sufficient north-south connectivity should be incorporated into the growth area to provide direct north-south multimodal service parallel to SW Elwert Road.

APPENDIX M

Housing Memo

Background on Housing Needs and Consistency with State/Metro Requirements



HOUSING MEMO

Supplemental to Housing Policy Implications Memo

TO: Community Advisory Committee
FROM: Erika Palmer, Planning Manager
CC: MIG|APG
DATE: April 2023

Introduction

This memorandum provides supplemental information to the Housing Implications Memo that summarizes the future of housing in Sherwood to help inform discussions on this topic. This memorandum provides background on housing needs in Sherwood and how the Sherwood West Concept Plan is consistent with state and regional requirements.

STATE LAND USE GOAL 10, HOUSING

The purpose of Goal 10 is to provide for the housing needs of Oregonians. Goal 10 requires Sherwood to maintain and plan for an adequate land supply to accommodate at least 20 years of future growth, providing flexibility in housing location, type, and density to ensure the availability and prices of housing units are commensurate with the needs and financial capabilities of households. The City is required to meet the Metropolitan Housing Rule (OAR 660-007) that is designed to “assure opportunity for the provision of adequate numbers of needed housing units and the efficient use of land within the Metropolitan Portland (Metro) Urban Growth Boundary (UGB).” Needed housing means housing types determined to meet the need shown for housing within an urban growth boundary at particular price ranges and rent levels. The rule also specifies the mix and density of new residential construction for cities within the Metro UGB. Sherwood is required to provide the opportunity for at least 50 percent of new residential units to be attached single-family housing or multi-family housing. In addition, the rule sets specific density targets for cities in the Metro UGB. Sherwood’s average density target is six dwelling units per net buildable acre.

Sherwood's housing stock is predominantly single-family detached at roughly 75% (2021 American Community Survey, US Census). Sherwood's population growth and shifting demographics affect future housing growth and shape the changes in the City's housing market. While Sherwood's population has been growing relatively fast in recent years, the population has been aging while the community continues to attract younger people and more households with children. In addition, Sherwood's population is becoming more ethnically diverse. If these trends continue, there will be changes in the types of housing demanded in the community's future.

The aging population is likely to result in increased demand for smaller single-family housing detached and attached, multi-family housing, and senior living facilities. The growth of younger and diversified households will likely result in increased demand for a wider variety of affordable and appropriate housing for families with children, such as small single-family housing, townhouses, duplexes, and multi-family housing choices. Smaller housing units such as cottage clusters can be an attractive option for a wide variety of community members including seniors, empty-nesters looking to downsize, and young adults. Cottage housing is smaller and may be more accessible than a typical single-family home. The smaller size makes it a more attainable option for first-time home buyers than a larger home due to less expensive insurance, energy, property taxes, and mortgages. The number of people living in multigenerational family households is growing due to many reasons including finances, caregiving, childcare, or a change in relationship status. Accessory Dwelling Units, plexes, cottage clusters can help provide housing types where families can live close together.

Housing prices are higher in Sherwood than regional averages, though the City's increasing homeownership costs are consistent with the upward national trend. Almost three-quarters of Sherwood's residents own their homes. Sherwood households have a relatively high income, which affects the type of housing that is affordable, particularly for young people and new families. Future housing affordability will depend on the relationship between income and housing price and whether housing prices will continue to outpace income growth.

2019-2039 Housing Needs Analysis

Sherwood's 2019-2039 Housing Needs Analysis (HNA), adopted by reference in the City's Comprehensive Plan, provides technical and factual background relating to current and future housing needs. The Oregon Department of Land Conservation and Development acknowledged the HNA and no one appealed the document to the Land Use Board of Appeals. As state law requires, the HNA examines household growth based on Metro's coordinated forecast. The forecast includes growth in both areas within the city limits and areas currently outside the city limits that the City expects to annex for residential uses (Brookman area). ***The HNA identifies an additional 1,728 new households between 2019 and 2039. Sherwood must provide enough land to accommodate forecasted housing needs for the next 20 years which can be met through continued annexation of the Brookman area and planning for Sherwood West.***

Sherwood's HNA includes information about the factors that could affect housing development, including historical and recent development trends; projections of new housing units needed in the next 20 years; demographic and socioeconomic factors affecting housing choice, and regional and local trends in housing cost and affordability.

The forecasted growth rate in the HNA 2019-2039 is 1.1% based on Metro's forecast. The HNA provides a forecast of housing by type and density of housing. The HNA includes a Buildable Lands Inventory (BLI) for housing within the Urban Growth Boundary. The BLI demonstrates that the current land use designations provide an adequate short- and long-term land supply for housing development, meeting existing needs and 65%, and projected growth over the next 20 years. However, Sherwood has a deficit of land for 608 dwelling units, and annexations will need to continue in Brookman to provide an adequate land supply.

The HNA analyzes existing development patterns and intensity, existing land use designations and zoning, and building constraints to determine where vacant land and/or land that is likely to be redeveloped and then compares the existing supply of land to emerging development trends and projection of needed housing units.

The HNA 2019-2039 makes the following conclusions regarding compliance with Goal 10:

- Sherwood will need to plan for enough residential land to accommodate forecasted housing needs for the next 20-years:
- Sherwood is forecast to add 1,728 new households between 2019 and 2039. Of these 700 new households are inside existing city limits; 1,029 new households are outside current city limits.
- Sherwood's land base can accommodate most of the forecast for growth. Vacant and partially vacant land in the Sherwood Planning Area has the capacity to accommodate about 65% of the forecast for new housing on areas within the city limits and the Sherwood Planning Area.
- Sherwood has a deficit of land for housing. The deficit of land is for 608 dwelling units. The largest deficits are in Medium Density Residential-Low (154 dwelling units); Medium Density Residential-High (252); and High-Density Residential (145 dwelling units).
- To provide adequate land supply, Sherwood will need to continue annexing the Brookman Area, the primary designated residential area in the Sherwood Planning Area. Without the Brookman area developing, the City has a projected deficit of 1,155 dwelling units
- Sherwood will need Sherwood West to accommodate future growth beyond the existing city limits and the UGB (Brookman area). There is a deficit of 608 dwelling units over the next 20-years in Sherwood city limits and Brookman Area. The growth rate of Metro's forecast for household growth (1.1% average annual growth) is considerably lower than the City's historical population growth rate over the last two decades (8% average annual growth). At the historic growth rate, Sherwood will be out of buildable lands for residential development within 4-10 years.
- Sherwood has a relatively limited supply of land for moderate and higher density housing. The limited supply of land in these zones is a barrier to development of townhouses and multi-family housing, which is needed to meet the housing demand for growth of people over 65, young families, and moderate-income households. Sherwood will need to plan for a greater variety of housing types.
- Sherwood will have an ongoing need for providing affordable housing to lower-income households. About 31% of households in Sherwood have incomes below 80% of the MFI. These households will need a range of housing types, such as lower-cost single family housing, townhouses, or multi-family housing. Sherwood currently has a limited supply of land available in its planning area for moderate and high-density housing.

To comply with Goal 10, the City will need to either change its policies to allow for more development on the inventory of vacant land within the City boundary (greater densities, greater building heights), request a UGB expansion from Metro, or both. An urban growth boundary expansion proposal to Metro will allow the community to accommodate needed housing and provide the opportunity for a variety of housing types in locations and at price points that meet the needs of current and future residents.

The Sherwood West Concept Plan includes land use designations that provide for a variety of housing types: single-family residential detached, single-family residential attached (townhomes), duplexes, triplexes, quadplexes, cottage clusters, accessory dwelling units, and multi-family units. The Concept Plan supports homeownership and lower-income housing opportunities with access to jobs, transportation choices, parks and open spaces, and other supportive amenities of a complete community.

Metropolitan Housing Rule: OAR 660, Division 007

The planning process for the Sherwood West Concept Plan applied the Metropolitan Housing Rule. As identified in Table 1 below, the Concept Plan provides for a variety of residential land use districts that allow for multiple housing types at a range of prices and rent levels. Table 1 presents estimated housing units and densities based on the proposed Concept Plan map. The assumptions regarding residential densities were developed in collaboration with the Community Advisory Committee and are based on existing zone densities in the Sherwood Development Code. The metrics assume that Sherwood West will build out based on recent density trends in each residential designation. Recent density trends in Sherwood show that developments are utilizing the maximum densities per acre allowed in each zone.

In each of the “Neighborhood” designations, middle housing will be permitted along with single-family detached housing. Table 1 includes a range of total housing units depending on how much middle housing is built in these areas, showing 0, 10, 20, or 50 percent middle housing scenarios. The range shows 3,117 units on the low end to a high of 5,582 units if 50 percent of middle housing was constructed in the neighborhood designations. The density ranges from 9.2 units per net buildable acre with 0 percent middle housing to 16.4 units per net buildable acre if 50 percent of middle housing was constructed in the neighborhood designations.

Table 1. Sherwood West Housing Estimates

	Density Range (Net)	Total Acres (Net)	% of Residential Acres	Total Housing Units (with % of Middle Housing in Neighborhood areas)			
				0% MH	10% MH	20% MH	50% MH
Multi-Family	16.8 to 24	33	10%	798	798	798	798
Middle Housing	5.5 to 11	16	5%	173	173	173	173
Cottage Cluster	12.8 to 16	23	7%	362	362	362	362
Med/High Density Nbhd	5.5 to 11	23	7%	248	279	311	406
Medium-Density Nbhd	5.6 to 8	102	30%	816	990	1,163	1,683
Low-Density Nbhd	3.5 to 5	144	42%	720	1,008	1,296	2,160
TOTAL		340	100%	3,117	3,610	4,108	5,582
<i>Total Average Density</i>				9.2	10.6	12.1	16.4
<i>Total Average Density with Open Space</i>				7.8	9.0	10.3	13.9

The Sherwood West Concept Plan has provided the opportunity for at least 50 percent of new housing types to be single-family detached and 50 percent a mix of single-family attached and multifamily. The Low and Medium neighborhood designations provide the opportunity for a range of single-family

detached and by law allow the full range of middle housing types (attached housing) with design standards. The Middle Housing, Cottage Cluster, and Medium/High designations allow the opportunity for attached single-family units (cottages, plexes, townhomes). The Multi-Family designation allows for multi-family units. As described below in Table 2, even if zero percent middle housing is produced in the Low and Medium Density Neighborhoods, there is an opportunity for 50 percent attached housing. Table 2 identifies the estimated allocation of housing units to residential designations in Sherwood West.

Table 2. An estimated allocation of housing units to residential designations in Sherwood West

	Estimated		Housing Units by Mix	
	Dwelling Units	% of Units		
Multi-Family	798	26%	Multifamily	25%
Middle Housing	173	6%	Attached	25%
Cottage Cluster	362	12%	SFD	50%
Med/High Density	248	8%		
Medium Density	816	26%		
Low Density	720	23%		
Total	3,117			

METRO URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN

TITLE 11 – PLANNING FOR NEW URBAN AREAS

The Regional Framework Plan calls for long-range planning to ensure that areas brought into the UGB are urbanized efficiently and become or contribute to mixed-use, walkable, transit-friendly communities. It is the purpose of Title 11 to guide such long-range planning for urban reserves and areas added to the UGB.

UGMFP 3.07.110(b)(1)(C)

(b) A local government, in creating a concept plan to comply with this section, shall consider actions necessary to achieve the following outcomes:

(1) If the plan proposes a mix of residential and employment uses:

(C) A range of housing of different types, tenure, and prices addressing the housing needs in the prospective UGB expansion area in the context of the housing needs of the governing city, the county, and the region if data on regional housing needs are available, in order to help create economically and socially vital and complete neighborhoods and cities and avoiding the concentration of poverty and the isolation of families and people of modest means;

The City of Sherwood is experiencing a housing shortage, as with other cities within Washington County, the Portland Metro region, and the state of Oregon. It is estimated that between 2020-2040 the Portland

Metro region will need almost 295,000 housing units.¹ The ongoing undersupply of housing is one factor in the rapidly rising home prices and rent increases throughout the metro area and other cities and counties throughout the state.

According to the Case-Schiller price index, home prices in the Portland MSA have more than doubled in the past 15 years.² The strong housing market during the pandemic resulted in higher rents and home prices. Seasonally adjusted home prices are down about 4% for the Portland metro region this past year (2022), but only 19% of the Portland area households are estimated to afford the monthly payment on the median home sold. This is a decline of 131,000 households since the start of 2022.³ Housing affordability has two components: housing costs and household income. Affordability is the ratio of the two. As such, a growing economy with more-plentiful and better-paying job opportunities does help housing affordability, at least insofar as incomes rise faster than housing costs do.⁴ Housing cost burdens create impacts. Households that spend a higher proportion of their income on housing will have fewer resources for other basic needs. In addition, high rents lead to a lower rate of savings which can lead to economic instability if there is a loss of employment, an emergency, or an unexpected expense.

Sherwood's population growth and shifting demographics affect future housing growth and shape city housing market changes. While Sherwood's populations have been growing relatively fast in recent years, the population has been aging while the community continues to attract younger people and more households with children. In addition, Sherwood's population is becoming more diverse. If all these trends continue, there will likely be changes in the types of housing demanded in Sherwood in the future.

The aging of the population is likely to result in increased demand for smaller single-family housing, multifamily housing, and senior living. The growth of younger and diversified households will likely result in increased demand for a wider variety of affordable and appropriate housing for families with children, such as small single-family housing, townhouses, duplexes, and multifamily units.

Currently, Sherwood's housing stock is predominantly single-family detached. Housing prices in Sherwood are higher than the regional averages, though the City's increasing homeownership costs are consistent with the upward national trend. Almost three-quarters of Sherwood's residents own their homes and households have a relatively high income, which affects the affordable housing type, particularly for young people and new families.

The City's most recent Housing Needs Analysis (HNA) for the 2019-2039 period provides Sherwood with a factual basis to support future planning efforts related to housing. It is used to help develop

¹ Oregon Department of Land Conservation and Development Regional Housing Needs Analysis Presentation, Washington County Coordinating Committee, December 14, 2020.

² <https://fred.stlouisfed.org/series/POXRSA>

³ <https://oregoneconomicanalysis.com/2022/12/09/oregon-homeownership-affordability-november-2022/>

⁴ <https://oregoneconomicanalysis.com/2022/02/15/construction-housing-supply-and-affordability/>

Comprehensive Plan goals and policies that are consistent with the HNA while reflecting City priorities and strategies.

As required by state law, Sherwood's Housing Needs Analysis examines household growth based on Metro's coordinated forecast. The forecast includes growth in both areas within the city limits and areas currently outside the city limits that the city expects to annex for residential uses. The HNA identifies an additional 1,728 new households between 2019 and 2039. Sherwood must provide enough land to accommodate forecasted housing needs for the next 20 years which can be met through continued annexation of the Brookman area and planning for Sherwood West. Sherwood can accommodate about 65% of the forecast for new housing within city limits and the Brookman area. Sherwood has a deficit of 608 dwelling units in all residential zones (low, medium, and high). Without the Brookman area developing, the City has a greater projected deficit of 1,155 dwelling units.

The City of Sherwood has implemented a number of policies over the last couple of years to meet the Comprehensive Plan goal to "Provide the opportunity for a variety of housing types in locations and at price points that meet the needs of current and future residents."

Some of the policies include:

- Allowing for middle housing types in all residential zones
- Implementing clear and objective standards for all housing types
- Eliminating off-street parking requirements for accessory dwelling units (per Oregon House Bill 2001) and reducing parking requirements for multi-family housing per Oregon Climate-Friendly and Equitable Communities (CFEC) rules adopted by the Oregon Land Conservation and Development Commission in July 2022.

In addition, the City's Comprehensive Plan sets out policies relating to attractive and attainable housing within the community including:

Policy 3.2 Identify opportunities to support the city's housing mix, to ensure the housing supply includes a variety of housing types and unit sizes that support a range of housing prices

Policy 3.3 Support a variety of housing types such as but not limited to, townhomes, cottages, courtyard housing, accessory dwelling units, single-story units, and extended family and multi-generational housing.

Policy 3.4 Support housing affordable to Sherwood's residents and workers at businesses in Sherwood, including housing options for first-time homebuyers, new families, the elderly, and persons with disabilities.

Policy 3.5 Support homeownership opportunities for all housing types by encouraging condominiums, cooperative housing, and other types of ownership methods

Policy 3.6 Collaborate with organizations to provide opportunities for the development of lower-cost housing and housing development incentives in areas with access to jobs, transportation, open spaces, schools, and supportive services and amenities.

The Sherwood West Concept Plan proposes a mix of housing types, leading to different tenures and price points. The Sherwood West Concept Plan provides a variety of housing types: single-family

residential detached, single-family residential attached (townhomes), duplexes, triplexes, quadplexes, cottage clusters, accessory dwellings, and multi-family units. A proposed middle housing designation comprised of apartments, condominiums, townhomes, and plexes, and a cottage cluster designation provides more options for homeownership as compared to single-family detached housing on large lots.

As discussed above, the Concept Plan also ensures that the density and mix of housing types for new residential units are planned for the opportunity of at least 50 percent single-family detached and 50% attached and multi-family housing units.

There are six residential designations, which will allow multiple housing types and varying lot sizes within Sherwood West. As described above, the Concept Plan includes a range of housing estimates for the “Neighborhood” (single-family) designations – depending on how much middle housing could potentially be built (including scenarios from 0-50%). Based on current development trends and consultation with developers in the region and housing economists, the City believes that a realistic estimate is that somewhere in the range of 5-10% of single-family areas will be developed with middle housing.

Two residential designations (Middle Housing and Cottage Cluster) will solely allow for middle housing types and are responsive to many voices in the Concept Plan process who have advocated for housing for young families and people in Sherwood who would like to age in place. The Concept Plan provides housing types that are needed for the community while allowing for a transition to lower urban densities adjacent to the rural reserve in the hillier areas of Sherwood West.

There is a need for both housing and employment opportunities in Sherwood. The most recent Economic Opportunities Analysis indicates Sherwood has a deficit of roughly 277 buildable acres of employment land. The Sherwood West Concept Plan proposes 265 net buildable acres of employment land. The mixed employment areas are anticipated to provide a mix of office, light industrial, and flex space uses for target industries such as clean tech and advanced manufacturing identified in the city's Economic Opportunities Analysis. It is estimated that 4,524 jobs can be accommodated and the employment-to-housing ratio for the plan area is estimated at 1.3 (but would depend on the middle housing scenarios described above). The Concept Plan is anticipated to meet the projected community housing needs and employment needs to create a walkable community with a balance of employment, residential, commercial, and greenspace land uses – to be place where families can safely live, work, shop and play.

APPENDIX N

Infrastructure and Phasing Analysis



INFRASTRUCTURE & PHASING ANALYSIS

TO: Sherwood West Technical & Community Advisory Committees
FROM: Erika Palmer, Planning Manager; Jason Waters, City Engineer
CC: Kate Rogers and Darci Rudzinski, MIG|APG
DATE: February 7, 2023

Purpose

This memorandum outlines the following:

1. Existing infrastructure conditions in Sherwood West (including water, sanitary sewer, stormwater, and transportation); and
2. The opportunities and constraints in Sherwood West for the provision of extending public facilities and services, and potential future phasing.

Attachments:

- Figure 1: Existing Water System Map
- Figure 2: Existing Sanitary Sewer Map
- Figure 3: Existing Stormwater Facility Map
- Figure 4: Washington County Functional Street Classification Map
- Figure 5: City of Sherwood Street Classification Map

WATER SYSTEM

Existing Conditions

The current Water System Master Plan was adopted in May 2015. The Master Plan considers all areas within city limits, the urban growth boundary, and the West Urban Reserve (Sherwood West study area). The City's primary water supply is from the Wilsonville Water Treatment Plant, supplemented by groundwater wells. The City maintains an emergency connection and transmission piping to the Tualatin-Portland supply main. The City's distribution system includes three service zones supplied by three storage reservoirs and two pumping stations. The majority of Sherwood customers are served from the 380 Pressure Zone, which is supplied by gravity from the City's Sunset Reservoirs. The 535 Pressure Zone serves the area around the Sunset Reservoirs, supplied with constant pressure by the Sunset Pump Station, and the 455 Pressure Zone serves higher elevation customers on the City's western edge by gravity from the Kruger Reservoir.

Opportunities and Constraints in Sherwood West

Existing water facilities in or near the study area include a water reservoir, a supply line, and distribution lines. The Kruger Reservoir is a 3.0 MG reservoir located inside the study area, south of SW Kruger Road and approximately one-half mile west of Hwy 99W. The Kruger Reservoir serves the 455 pressure zone. An 18-inch transmission line is located in SW Kruger Road between the reservoir and Hwy 99W.

The area south of SW Handley Street is split between the Future 455 West and Future 630 West zones. The area north of SW Handley Street falls primarily within the Future 380 West pressure zone.

An 18-inch water main from the Kruger Reservoir extends north in SW Elwert Road for approximately 800 feet. The line then reduces to a 12-inch line and continues north to SW Handley Street. In addition, a short segment of a 12-inch waterline has been constructed in Elwert Road in the vicinity of Derby Terrace. A 16-inch water main located in SW Copper Terrace terminates at SW Edy Rd, approximately 840 feet east of the study area.

Initial anticipated growth in Sherwood West will be served by extending the existing 380 and 455 Zone distribution mains. Future customers along the ridge north and south of the existing Kruger Reservoir will be served by constant pressure from the proposed Kruger Pump Station at the existing reservoir site. This proposed closed zone is referred to as the 630 West Zone. Some future customers in the West Urban Reserve at the interface between the 630 West and 455 Zones may need to be served through a PRV-controlled sub-zone or through individual PRVs on each service in order to maintain required service pressures. This area is referred to as the 630 West PRV Zone.

A small area on the western edge of the West Urban Reserve along Edy Road near Eastview Road is too high in elevation to receive adequate service pressure from the adjacent 380 Zone. This area will be served as part of the closed 475 West Zone by constant pressure from the proposed Edy Road Pump Station. An additional pump station would potentially be needed to serve the 630 West PRV Zone. Extensive large diameter mains will be needed to expand the City's water service area to supply Sherwood West as development occurs.

Implications for Water Facilities on Phasing

The West and Southwest districts in Sherwood West have the opportunity to be served with water infrastructure in the near future. Water infrastructure will need to be extended east to west to serve the hillsides. The Far West district can be served after water infrastructure improvements, such as an additional pump station, are constructed. The Northern District will need further study and significant water infrastructure improvements to be served.

See Figure 1. Existing Water System Map

SANITARY SEWER SYSTEM

Existing Conditions

The current Sanitary Sewer Master Plan was completed in 2016. The Master Plan considers all areas within the city limits and the urban growth boundary. The West Sherwood Concept Plan study area is outside the urban growth boundary and was not included in the Master Plan. Two sanitary sewer trunk lines serve the City of Sherwood, the Sherwood Trunk Sewer (24-inch), which conveys sewage from the Cedar Creek sewage

collection basin, and the Rock Creek Trunk (18-inch), which conveys sewage from the Rock Creek sewage collection basin. Both trunk lines convey flows to the Sherwood Pump Station, owned by Clean Water Services (CWS), which sends sewage to the Durham Advanced Wastewater Treatment Plant via the Upper Tualatin Interceptor, also owned by Clean Water Services (CWS).

Opportunities and Constraints in Sherwood West

Existing sanitary sewer facilities adjacent to or near this site are limited. A pump station is needed in the West subarea and a new trunk line extended to the Sherwood High School from the Brookman area.

Pump station

A 15" diameter Sanitary Sewer (SS) mainline was constructed in Copper Terrace as part of the Sherwood School District Area 59 elementary/middle school development. This mainline runs up Edy Road, down Copper Terrace, and ends at the north end of the school perimeter.

To use this line, a new pump station is needed from the south to the crest of Handley Street. The line would need to cross private property or run to and down Edy Road to connect in.

The two main drawbacks are:

1. It requires the use of a 55 pump station for conveyance operations. This creates a situation of long-term maintenance costs.
2. The Sherwood Trunk pump station requires upgrading to handle future flows.

The three main positive aspects are:

1. That it utilizes an already existing trunk line (Sherwood Trunk)
2. The Sherwood Trunk has the capacity for the future development of this area (existing flow= 6.4 cfs, build-out capacity flow= 11.5 cfs).
3. That it does not require constructing a sanitary line across Hwy 99W and has limited crossings of stream corridors and buffers.

Trunk line extension

The Brookman sanitary trunk line will gravity flow across Hwy 99W at the future Brookman Road intersection to a future gravity system serving the Brookman Area (Area 54/55) expansion. The Sherwood Trunk line serves this area.

The two main drawbacks are:

1. That the Sherwood Trunk line is undersized for the combined future flows. The downstream system would need to be upsized to accommodate future flows.
2. That the alignment of the conveyance system needs to cross Hwy 99W and run down a stream corridor to be able to serve the overall area.

The main advantage is that it appears that the entire UGB area addition could be served by gravity using this line. The trunk line has the capacity to serve the future expansion (existing flow= 1.4 cfs, build-out capacity flow= 5.8 cfs). A current CWS project is upgrading a portion of the system from 15" to 18" and

extending the sewer trunk line to the boundary of the Brookman Addition (Area 54/55) and then north of Highway 99W to serve the new Sherwood High School. It is anticipated that this project will be completed in 2025. Recently approved subdivisions in the Brookman area have extended the sewer line to serve these developments.

Implications for Sanitary Sewer Facilities on Phasing

The West and Southwest districts in Sherwood West have the opportunity to be served with sanitary sewer infrastructure in the near future through either option described above. Sanitary sewer infrastructure would need to be extended into the hillside area of the West and Southwest districts and Far West District as those areas develop. The North District needs further study on how to serve the area and if any significant infrastructure is necessary to serve sanitary sewers in this area.

See Figure 2: Existing Sanitary System Map

STORMWATER SYSTEM

Existing Conditions

The current Stormwater System Master Plan was updated in 2017. The Master Plan considers all areas within the city limits and the urban growth boundary. The Sherwood West Concept Plan area is outside the urban growth boundary and was not included in the Master Plan.

The Sherwood West Concept Plan area lies primarily within the Chicken Creek Drainage Basin. The basin flows north and northeast along Chicken Creek, which bisects the plan area. Cedar Creek flows into Chicken Creek at the northeast corner of the plan area, west of SW Roy Rogers Road. The West Fork of Chicken Creek enters the plan area near the northwest boundary and flows east into Chicken Creek.

A small portion of the plan area in the southeastern area is part of the Cedar Creek Drainage Basin. On-site runoff enters Goose Creek, which flows from west to east, crossing Highway 99W and reaching Cedar Creek. The Stormwater Master Plan notes that Chicken and Cedar Creeks have been identified by the Environmental Protection Agency (EPA) as providing habitat for anadromous fish listed as threatened under the Federal Endangered Species Act.

According to the Storm Water Master Plan, on-site soils fall primarily in Hydrologic Soils Group C, with small areas of Groups B and D. The areas near Chicken and Cedar Creeks and their tributaries have been designated by Metro as riparian corridors, upland wildlife habitat, and aquatic impact areas. Some areas within the riparian corridors are also shown on the National Wetland Inventory.

Opportunities and Constraints in Sherwood West

Sherwood West is undeveloped, and as such, there is no existing stormwater infrastructure. As development occurs in the future, stormwater would likely be discharged onto the floodplain of the adjacent creeks and tributaries. The City of Sherwood requires that all stormwater facilities meet the requirements of Clean Water Services Design and Construction Standards for conveyance, water quality treatment, and water quantity treatment. Regional stormwater facilities within Sherwood West are the City's preferred method for handling stormwater.

Implications for Stormwater Facilities on Phasing

All areas within Sherwood West can handle stormwater with required infrastructure improvements as development occurs. The West and Southwest Districts in Sherwood West may be the easiest to serve.

See Figure 3: Existing Stormwater Facilities Map

TRANSPORTATION SYSTEM

Existing Conditions

The current Transportation Systems Plan (TSP) was updated in 2014. The TSP considered all areas within the city limits and the urban growth boundary. The Sherwood West Concept Plan area is outside the urban growth boundary and was not included in the Plan.

Elwert Road from Highway 99W to Scholls-Sherwood Road is currently functioning as a two-lane rural arterial. Elwert Road historically was a rural road used primarily for providing transportation access for farm equipment and rural residents. Over time, Elwert Road has become a secondary route for commuter traffic (through trips) traveling between Highway 99W and Scholls-Sherwood Road and Roy Rogers Road, avoiding the intersection signals along the Highway 99W route.

Elwert Road's physical characteristics consist of two 11-foot paved lanes, a straight horizontal alignment, and a vertical alignment consisting of rolling hills that include acute vertical sags and crests, which result in poor vertical sight distances, and intersection sight distances. Access points onto Elwert Road include several private driveways and seven street intersections (both local and collector). The intersecting streets and their proposed classifications are listed below.

- Kruger Road – Collector
- Orchard Hill Road – Local
- Edy Road – Collector
- Schroeder Road – Local
- Haide Road – Local
- Handley Road – Collector
- Conzelmann Road – Local
- Lebeau Road - Local

The City's TSP and Washington County's TSPs identify the future build-out condition of Elwert Road as a 3-lane arterial, including sidewalks and bike lanes on both sides of the road. Both Edy and Chapman roads are classified as collectors within Washington County TSP. Edy Road, within the current City boundary, is also designated a collector street within the City's TSP.

Given the terrain, the presence of significant natural areas, and the current parcelization of the area, there are likely to be significant costs and challenges with constructing and connecting roadways within the study area.

Opportunities and Constraints in Sherwood West

Elwert Road

Two options for the design of Elwert were included in the 2016 Preliminary Concept Plan. The City Engineer provided a Transportation Options Alternative Analysis Report that is included in the appendices of the 2016 Preliminary Concept Plan and is described below.

SW Elwert Road is classified as an arterial road with a future 3-lane configuration with; two 12-foot travel lanes, a 14-foot center turn lane, two 6-foot bike lanes, two 5-foot wide planter strips, two 8-foot wide sidewalks, and two 1-foot clear areas behind the sidewalks to the right of way line in both the City's and Washington County's Transportation System Plans (TSPs). The overall right-of-way width required with this cross section is 78 feet.

Transportation Alternative Analysis Report – Defining Options for SW Elwert Road

The major limiting condition for the transportation options analysis is the phasing break between three areas. These areas include:

- Elwert between Highway 99W and SW Handley (West District)
- Elwert between SE Handley and SW Conzelman Rd (West and North Districts); and
- Elwert between SW Conzelman Rd and the SW Lebeau/Scholls-Sherwood Intersection (North District)

Two options were analyzed with respect to constructability, construction costs, and environmental impacts.

Option 1

Option 1 consists of realigning SW Elwert Road and SW Edy Road. The realignment would cross two Chicken Creek tributary streams at the narrowest points in order to reduce or eliminate wetland mitigation issues. The realignment follows the existing terrain, eliminates the need for excessive fills, and minimizes impacts to the wetlands within the SW Elwert Road and SW Edy Road intersection. Option 1 will require the construction of structural bridging and the acquisition of right-of-way to accommodate the realignment of SW Elwert Road.

The realignment of SW Elwert Road will include the construction of roundabouts at major intersections, such as with SW Edy Road. The combination of roundabouts and curved alignments would likely discourage freight traffic usage of the road and reduce speeds of commuter traffic while still allowing significant local residential and commuter traffic flow.

Construction of this option will also allow the existing SW Elwert Road and SW Edy Road alignments and intersection to remain in use until construction of the realigned roadway is nearly complete. The 2016 Preliminary Concept Plan estimated this option to be the least costly and have less impacts to the environment however, additional analysis is needed to review the two options.

Option 2

Option 2 consists of correcting the vertical alignment of the SW Edy Road and SW Elwert Road intersection to meet ASSHTO design standards. Specifically, raising the road elevation to reduce the adverse vertical curves and meeting stopping sight distances at intersections. This means raising the road approximately 10 to 20 feet (15 foot average) in elevation. The impacts from the intersection along SW Elwert Road from this action extend for approximately 2,050 feet, and approximately 790 feet along SW Edy Road.

By raising the road along this length, impacts to the existing right-of-way and adjacent wetlands occur due to the need for fill with a 2:1 slope ratio. It is estimated that an additional 20 to 40 feet (30-foot average) of right-of-way would be required to account for fill slope. The standard wetland/vegetated corridor mitigation requirement is approximately 2:1 (Clean Water Service, R&O 07-20, Table 3-2).

Additionally, the existing culvert crossing would most likely need to be updated to meet future Clean Water Services (CWS), Environmental Protection Agency (EPA), United States Army Corps of Engineers (USACE), and Oregon Department of Fish and Wildlife (ODFW) requirements. Reconstruction of SW Elwert Road would require the closure of the roadway to through traffic until roadway construction completion. This would have a definite negative impact on local and commuter traffic during the expected 1 to 2-year construction cycle.

The 2016 Preliminary Concept Plan estimated this option as the most expensive financially due to mitigating environmental impacts to the Chicken Creek corridor environment and impact on local and commuter traffic during construction. However, as stated above a more detailed analysis is needed on review the two options.

Highway 99W

Highway 99W is a state-designated freight corridor and limited-access highway and is identified as a principal arterial in Washington County and the City of Sherwood TSPs. Access to Highway 99W would be coordinated with the Oregon Department of Transportation. The intersection of Highway 99W with SW Chapman and SW Brookman roads is planned as a future signalized intersection with pedestrian and bicycle enhancements.

A Grade Separated Crossing over Highway 99W

An alternative crossing study between the Brookman Area and Sherwood West was recently completed and will require additional study. The preferred crossing approach is a grade-separated crossing to serve local access (no interchanges from Highway 99W) between the Brookman and Sherwood West areas. The proposed location would be north of Highway 99W and the SW Chapman and SW Brookman intersection. Access to an overcrossing over Highway 99W would be from a local street connection from Old Highway 99W in Brookman to a new street in Sherwood West crossing over Highway 99W.

The Kruger/Elwert/Sunset Boulevard/Highway 99W intersection

This intersection was recently reconstructed with a roundabout. This is intended to alleviate a current condition of inadequate stacking distance and restricted traffic by-pass flow off Highway 99W towards Scholls-Sherwood Road.

Scholls-Sherwood Road

Scholls-Sherwood is designated as an arterial within the Washington County TSP. According to Washington County, rural arterials serve a mix of rural-to-urban and farm-to-market traffic. In some cases rural arterials, especially in rural/urban fringe areas, accommodate significant amounts of urban-to-urban through-traffic during peak commuting time periods. This is not the intended function of the rural arterial designation and is often the result of congestion on urban arterials. Rather, arterials are intended to provide freight movement in support of principal arterials. Arterials have strong access control for cross streets and driveways. Scholls-Sherwood Road will need to be improved to urban standards on the south side and along Roy Rogers Road. There are two intersections along Scholls-Sherwood Road within the study area. The intersection with Elwert Road will require additional study, reconfiguration, and possible signalization as Sherwood West is developed. The intersection of Roy Rogers Road was recently reconfigured and signalized as a Washington County transportation improvement. Per the City's current TSP standards for arterial roads, new access should be spaced between 600 to 1,000 feet apart.

Remaining Streets within Sherwood West

The remaining transportation network will be local neighborhood streets. While local streets are not intended to serve through traffic, the aggregate effect of local street design can impact the effectiveness of the arterial and collector system when local trips are forced onto the arterial street network due to a lack of adequate local street connectivity.

Implications for Transportation Facilities Phasing

Given the terrain, the presence of significant natural areas, and the current parcelization of the area, there are likely to be significant costs and challenges with constructing and connecting roadways within Sherwood West. The finance of urban services is a significant conversation in all urban boundary expansion areas. The City may want to develop specific policies focusing on infrastructure financing and the feasibility and timing of the extension of public facilities, including implementing financing strategies for transportation systems in Sherwood West.

We have heard from Sherwood stakeholders that new development should pay for its own infrastructure. Development-derived tools include system development charges and Washington County's transportation development tax (TDT). Other tools may need to be considered to support transportation improvements, such as new taxing districts, Local Improvement Districts (LIDs), county funding sources, and supplemental system development charges.

See Figure 4: Washington County Street Classification Map

See Figure 5: City of Sherwood Street Classification Map

PHASING AND NEXT STEPS

Considering the capability of extending existing public facilities and constructing needed new infrastructure to serve the Sherwood West area, the West and Southwest Districts are the most logical for development to occur first. However, diversifying the tax base by creating a better employment-to-population ratio is a critical goal of the City. The North District is best suited for employment land needs, but serving this area with the appropriate infrastructure will be challenging. This district will need additional infrastructure analysis. With this economic development goal in mind, the City should initiate infrastructure planning in this area as soon as possible.

The City may want to consider new annexation policies based on a phasing plan for development within Sherwood West. The annexation policies could consider priority areas to provide an orderly and efficient transition from rural to urban land uses to ensure public infrastructure needs are met to provide homes and jobs in Sherwood West.

Figure 1: City of Sherwood Existing Water System Map

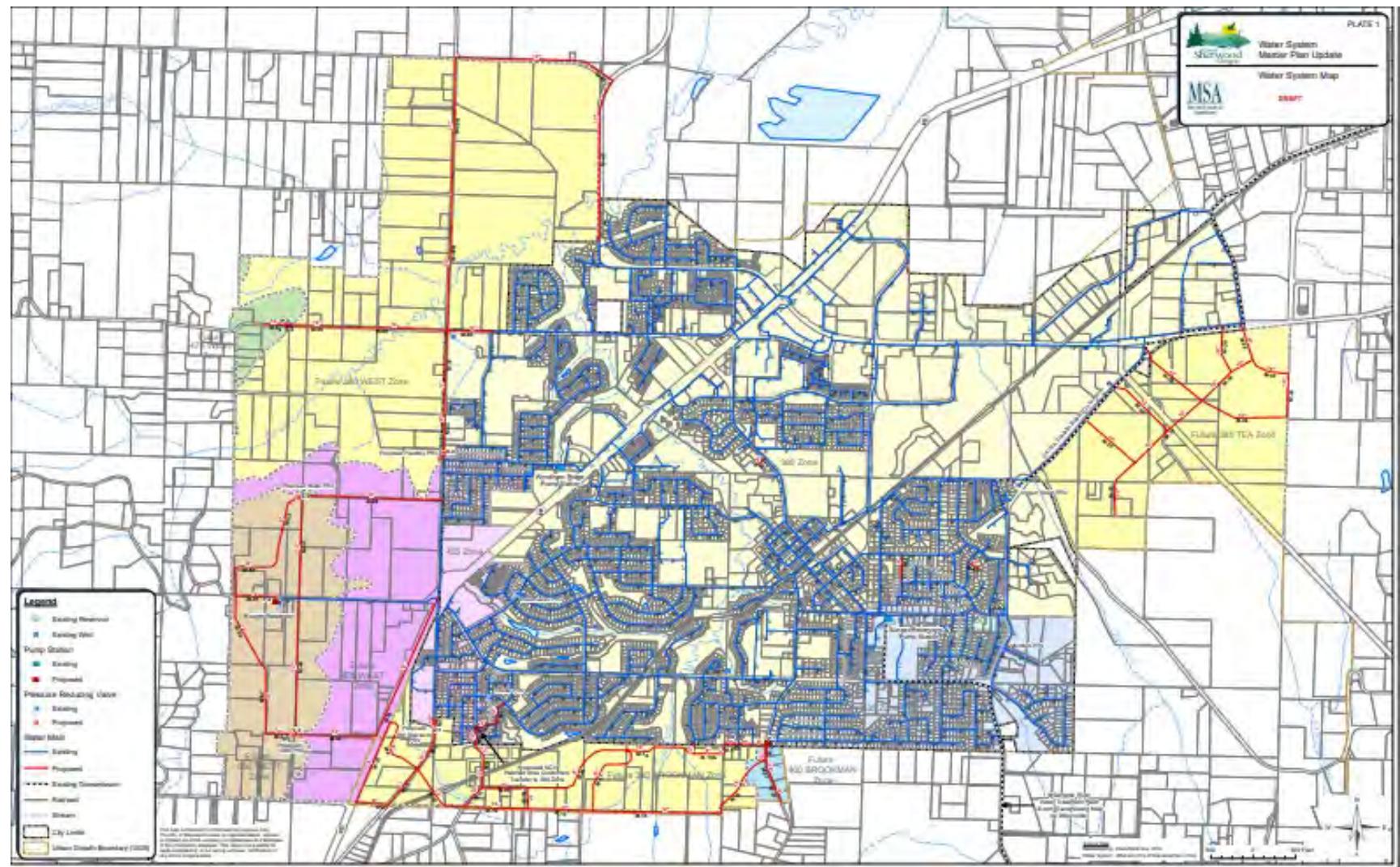


Figure 2: City of Sherwood Existing

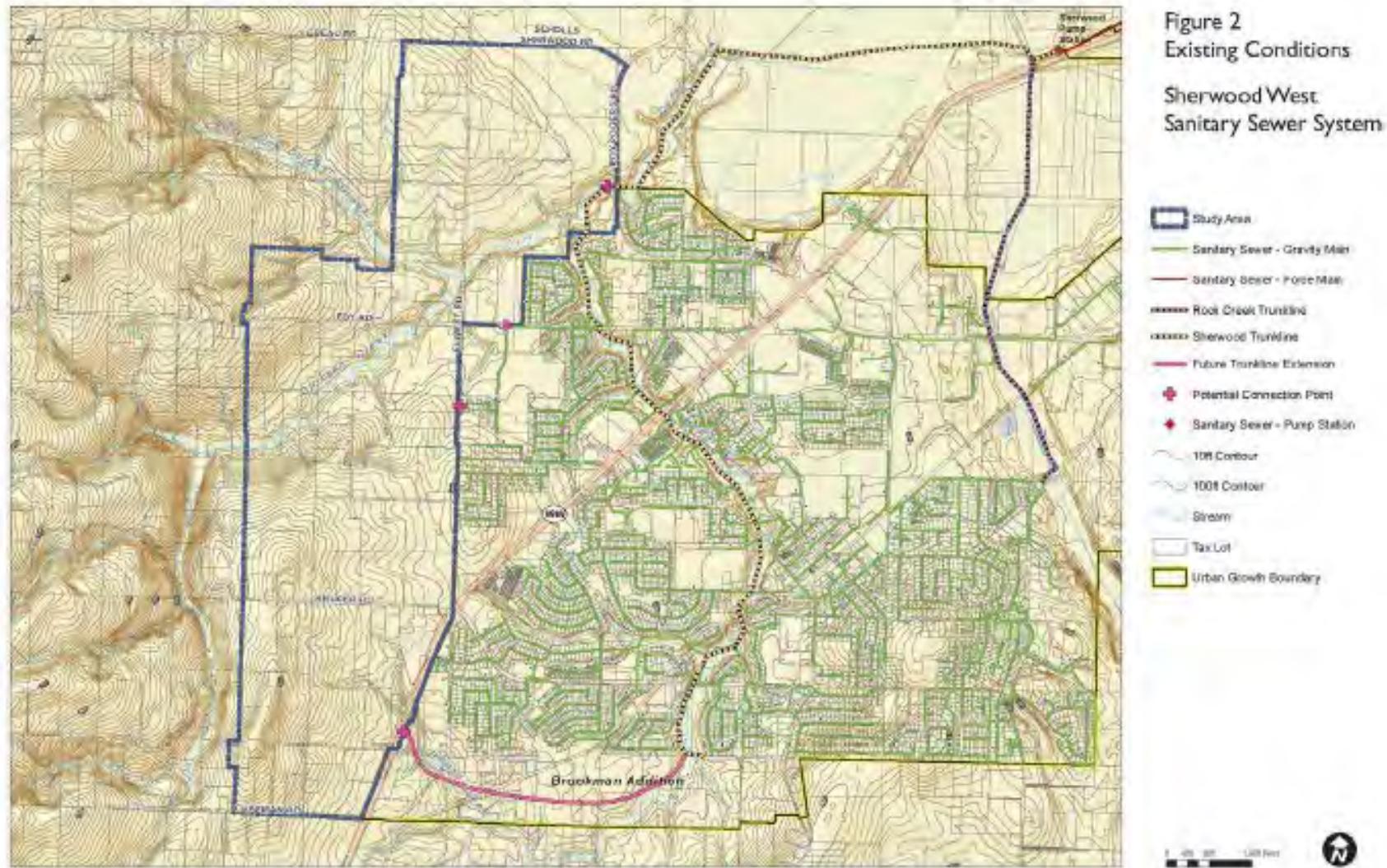


Figure 3: City of Sherwood Existing Storm Water System Map

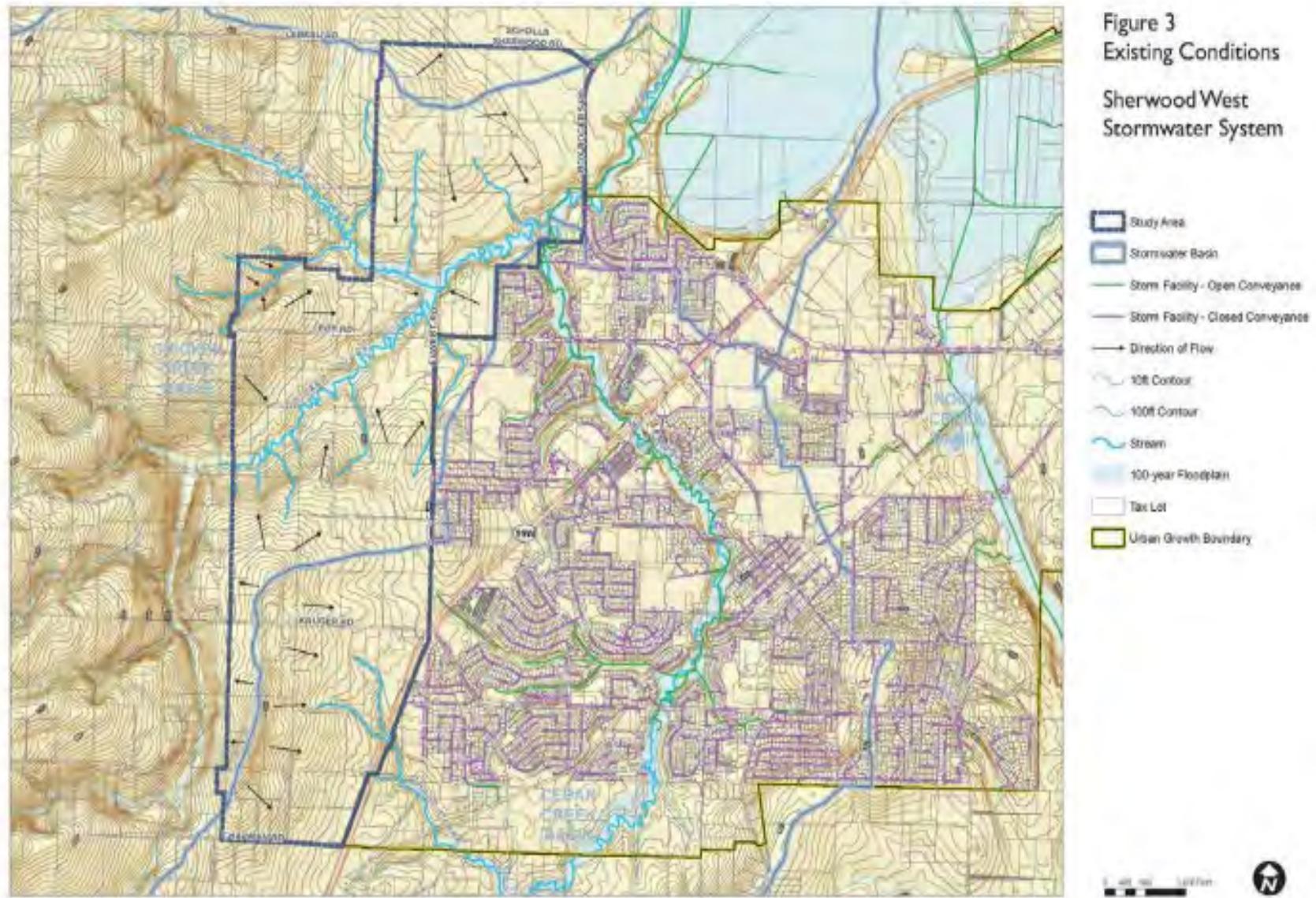
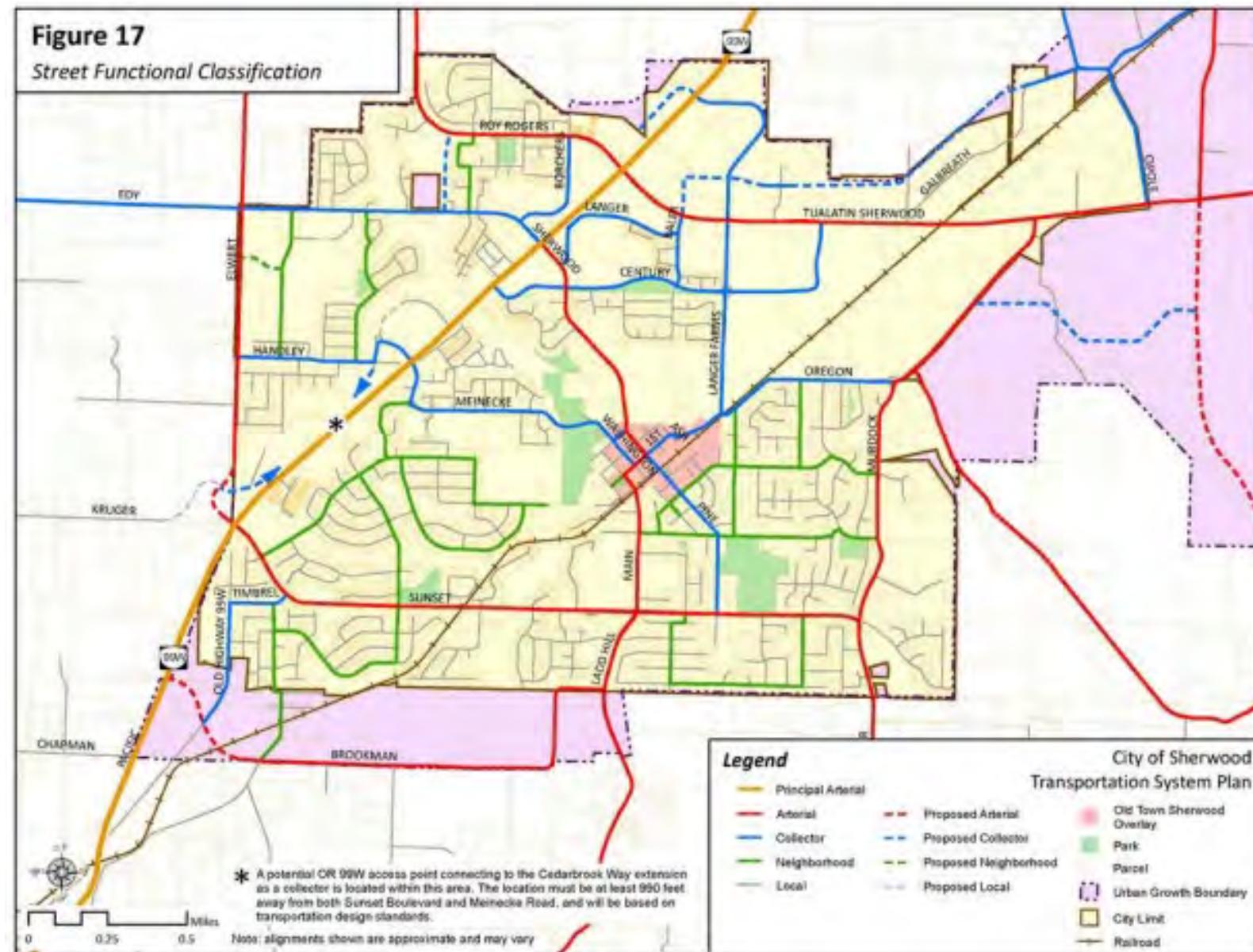


Figure 4. Washington County Street Classification Map



Figure 5. City of Sherwood Street Classification Map



APPENDIX O

Preliminary Infrastructure Funding Strategy

Sherwood West Concept Plan

Preliminary Infrastructure Funding Strategy

Date March 10, 2023
To Kate Rogers and Darci Rudzinski, MIG|APG
From Ellen Bini, Leland Consulting Group
Chris Zahas, AICP, Leland Consulting Group
CC Erika Palmer, City of Sherwood

Introduction

This Infrastructure Funding Strategy memorandum accompanies the Sherwood West Preliminary Concept Plan Re-Look by providing a high-level estimate of infrastructure costs and potential tools for funding the development of priority districts in the Sherwood West area. It builds upon a preliminary exploration of infrastructure costs and funding tools that were developed during the 2016 Sherwood West Preliminary Concept Plan.

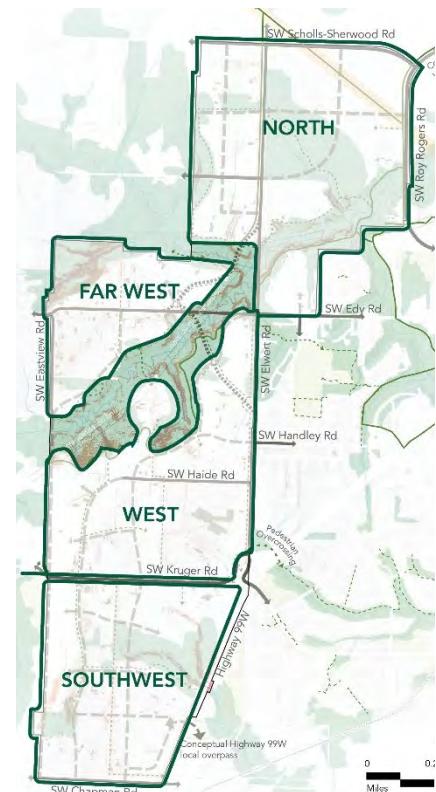
This memorandum is organized as follows:

- **Infrastructure Funding Gap Analysis.** We present a high-level summary of likely infrastructure costs required to make the various subdistricts of Sherwood West developable and compare them to the system development charges (SDCs) and other development impact fees that would be generated by development in Sherwood West to help pay for such infrastructure. This calculation identifies funding gaps that will need to be addressed for Sherwood West to build out. The types of infrastructure evaluated in this memorandum include water, sanitary sewer, storm water, and transportation.
- **Funding Toolkit and Strategy.** To address the anticipated funding gaps, the memo identifies potential funding tools and strategies that could supplement the baseline SDC revenues to make development feasible. This memo builds upon the tools discussed in the 2016 Sherwood West Preliminary Concept Plan and recommends those that have the most promise for filling any funding shortfalls.

In all steps of this analysis and throughout this memorandum, the focus is on regional infrastructure necessary to provide access or utility service to development parcels. For the most part, this means major arterials, collectors and trunk utility lines that will serve multiple parcels within Sherwood West. Roads and infrastructure internal to development sites is not considered here and is assumed to be a developer cost.

Catalyst Projects

Based on City priorities and existing infrastructure availability, it is anticipated that two of the four districts in the current concept planning process—North and West—will develop first. Because infrastructure costs were provided by the City for sectors ("A" through "F," aligned with the 2016 Preliminary Concept Plan Phasing boundaries), the following analysis aggregates costs for sectors "C" and



"D" as the North district, and "A," "B," and "E" for the West/Southwest districts (Southwest included with West because sector "E" spans both West and Southwest). Appendix B includes the map that engineering used to put together the estimates for the Sectors "A" through "F." Through public investment and private development, attention in these districts will help lay the foundation for the long-term evolution of Sherwood West. The analysis, therefore, takes a close look at the infrastructure that will help these two areas serve as catalysts for subsequent development elsewhere in Sherwood West.

- **North District.** The North District is best suited for employment uses that support the City's economic development goals, and the concept plan accordingly shows a future focus on mixed employment uses in this area. Serving this area with appropriate infrastructure will be a challenge—requiring additional infrastructure analysis. Below is a list of projects that collectively account for over 70% of associated "hard" costs (or those not including design, construction, and land acquisition) for infrastructure serving this area. Transportation and water projects have the highest projected costs for this district, with the Elwert Road and Scholls-Sherwood improvements collectively accounting for 30% of costs, followed by 22% of costs attributed to water improvements along Elwert, Roy Rogers, and Scholls-Sherwood roads. Storm water improvements along Elwert Road account for 16% of costs, and a sewer trunk line extension accounts for an estimated 5%. It is expected that a large proportion of transportation project costs will be paid by developers on a project-by-project basis, though the City will need to plan for capital projects serving the area (e.g., the Elwert and Scholls-Sherwood intersection).

Table 1. North District Catalyst Project Cost Estimates

Project	Type	Cost	% of North District Costs
Elwert Road	Street	\$7,432,500	24%
Elwert Road	Storm	\$4,955,000	16%
Elwert Road	Water	\$2,973,000	10%
Roy Rogers	Water	\$1,836,000	6%
Scholls-Sherwood	Street	\$1,830,000	6%
Scholls-Sherwood	Water	\$1,830,000	6%
Trunk Line	Sewer	\$1,650,000	5%
Total		\$22,506,500	73%

- **West/Southwest Districts.** Development of the West District has already begun with the new high school, finished in 2021. In the current concept plan, this district is expected to be developed with a mixture of housing types and employment uses adjacent to Highway 99W. According to an infrastructure and phasing analysis prepared by City staff, this area can more readily accommodate most needed infrastructure improvements with existing water and sewer infrastructure currently being planned and constructed by Clean Water Services—but road construction and financing will pose significant costs and challenges throughout Sherwood West given the terrain, the presence of significant natural areas, and the current parcelization of the area. This finding is reflected in the list of major projects below, 39% of which are transportation-related, followed by 23% for water and 10% for storm water improvements.

Table 2. West/Southwest District Catalyst Project Cost Estimates

Project	Type	Cost	% of West/Southwest District Costs
New Collector (2-lane) in "A"	Street	\$5,910,000	11%
New Collector (2-lane) in "B"	Street	\$4,692,000	9%
Elwert in "A"	Street	\$4,500,000	8%
Pump facility in "A"	Water	\$4,500,000	8%
Finish Loop in "E"	Water	\$3,440,000	6%
Highway 99 in "B"	Water	\$2,520,000	5%
Elwert/Edy Intersection in "A"	Street	\$2,400,000	4%
New Collector (2-lane) in "A"	Storm	\$1,970,000	4%
New Collector in "A"	Water	\$1,970,000	4%
Chapman Road in "E"	Street	\$1,950,000	4%
Elwert in "A"	Storm	\$1,800,000	3%
Chapman Road in "B"	Street	\$1,695,000	3%
Total		\$37,347,000	69%

Infrastructure Funding Gap Analysis

Methodology

The table below compares infrastructure costs and revenue scenarios to calculate the funding surplus (positive amounts) or gap (negative amounts) that would be generated through development fees. Some notes on the methodology used are included below, with a detailed account of the methodology found in Appendix A:

- **Revenues.** The primary revenues that will be generated by development in Sherwood West and used to fund infrastructure are system development charges (SDCs) and Washington County's Transportation Development Tax. Some additional funds may be available from other public agencies and other local funding tools, described briefly at the end of this memorandum. All revenues shown are based on a full build out of the area, and the land use programs developed during the current Sherwood West concept planning effort—with low and high scenarios for the housing estimates. The low housing scenario signifies 0% middle housing (2-4 plexes, townhomes, and cottage clusters) built in areas designated for single-family homes, and the high scenario signifies 20% middle housing built in those areas. This analysis does not take into account the timing of infrastructure costs or revenues. Additionally, low and high scenarios for sewer revenue generation for Mixed Employment and Commercial development were included given the uncertainty over the scale of development.
- **Costs.** Not included are costs internal to development projects, such as site preparation and construction, that will be paid by private developers. The City will likely also have additional costs not covered here in the development of public spaces such as parks design and development. Infrastructure costs for water, sanitary sewer, storm water, and transportation facilities were provided by the City engineering team. Low and high sewer flow count estimates for Mixed Employment and Commercial uses were also provided by the City engineering team.

Table 3. Sherwood West Infrastructure Funding Gap Analysis

Preliminary Gap Analysis: **Low** Density Housing (0% Middle Housing), **Low**-End Mixed Employment/Commercial Sewer Revenues Scenario

	Water	Sewer		Storm	Parks	Transportation	
Revenues to City of Sherwood	City SDC	City SDC	CWS RCC	City SDC	City SDC	City SDC	County TDT
North ("C" & "D")	\$4,304,851	\$435,991	\$3,292,666	\$1,849,623	\$5,515,847	\$6,901,574	\$43,658,755
Far West ("F")	\$4,674,244	\$474,952	\$3,504,625	\$425,369	\$7,933,413	\$1,040,374	\$5,288,942
West/Southwest ("A," "B," "E")	\$15,397,353	\$2,019,462	\$15,355,574	\$2,590,460	\$28,811,193	\$36,041,567	\$69,719,304
Total Sources	\$24,376,448	\$2,930,405	\$22,152,865	\$4,865,452	\$42,260,453	\$43,983,514	\$118,667,001
Costs to City of Sherwood							
North ("C" & "D")	\$10,954,350	\$3,531,250		\$18,634,500	-	\$20,995,625	
West/Southwest ("A," "B," "E")	\$27,749,100	\$3,679,350		\$22,312,850	-	\$46,829,175	
Far West ("F")	\$7,476,000	\$4,801,500		\$10,447,500	-	\$10,658,750	
Total Uses	\$46,179,450	\$12,012,100		\$51,394,850	-	\$78,483,550	
Funding Surplus/Gap	-\$21,803,002	\$13,071,171		-\$46,529,398	\$42,260,453	\$84,166,965	

Preliminary Gap Analysis: **High** Density Housing (20% Middle Housing), **Low**-End Mixed Employment/Commercial Sewer Revenues Scenario

	Water	Sewer		Storm	Parks	Transportation	
Revenues to City of Sherwood	City SDC	City SDC	CWS RCC	City SDC	City SDC	City SDC	County TDT
North ("C" & "D")	\$4,923,371	\$498,839	\$3,756,416	\$1,905,910	\$6,565,637	\$6,983,934	\$44,077,425
Far West ("F")	\$7,475,256	\$759,564	\$5,604,750	\$680,269	\$12,687,462	\$1,413,350	\$7,184,919
West/Southwest ("A," "B," "E")	\$20,690,117	\$2,557,263	\$19,323,949	\$3,072,116	\$37,794,396	\$36,746,338	\$73,301,923
Total Sources	\$33,088,744	\$3,815,666	\$28,685,115	\$5,658,295	\$57,047,495	\$45,143,622	\$124,564,267
Costs to City of Sherwood							
North ("C" & "D")	\$10,954,350	\$3,531,250		\$18,634,500	-	\$20,995,625	
West/Southwest ("A," "B," "E")	\$27,749,100	\$3,679,350		\$22,312,850	-	\$46,829,175	
Far West ("F")	\$7,476,000	\$4,801,500		\$10,447,500	-	\$10,658,750	
Total Uses	\$46,179,450	\$12,012,100		\$51,394,850	-	\$78,483,550	
Funding Surplus/Gap	-\$13,090,706	\$20,488,681		-\$45,736,555	\$57,047,495	\$91,224,338	

Preliminary Gap Analysis: **Low** Density Housing (0% Middle Housing), **High**-End Mixed Employment/Commercial Sewer Revenues Scenario

	Water	Sewer		Storm	Parks	Transportation	
Revenues to City of Sherwood	City SDC	City SDC	CWS RCC	City SDC	City SDC	City SDC	County TDT
North ("C" & "D")	\$4,304,851	\$517,882	\$4,614,499	\$1,849,623	\$5,515,847	\$6,901,574	\$43,658,755
Far West ("F")	\$4,674,244	\$474,952	\$3,504,625	\$425,369	\$7,933,413	\$1,040,374	\$5,288,942
West/Southwest ("A," "B," "E")	\$15,397,353	\$2,360,274	\$15,914,799	\$2,590,460	\$28,811,193	\$36,041,567	\$69,719,304
Total Sources	\$24,376,448	\$3,353,108	\$24,033,922	\$4,865,452	\$42,260,453	\$43,983,514	\$118,667,001
Costs to City of Sherwood							
North ("C" & "D")	\$10,954,350	\$3,531,250		\$18,634,500	-	\$20,995,625	
West/Southwest ("A," "B," "E")	\$27,749,100	\$3,679,350		\$22,312,850	-	\$46,829,175	
Far West ("F")	\$7,476,000	\$4,801,500		\$10,447,500	-	\$10,658,750	
Total Uses	\$46,179,450	\$12,012,100		\$51,394,850	-	\$78,483,550	
Funding Surplus/Gap	-\$21,803,002	\$15,374,930		-\$46,529,398	\$42,260,453	\$84,166,965	

Preliminary Gap Analysis: **High** Density Housing (20% Middle Housing), **High**-End Mixed Employment/Commercial Sewer Revenues Scenario

	Water	Sewer		Storm	Parks	Transportation	
Revenues to City of Sherwood	City SDC	City SDC	CWS RCC	City SDC	City SDC	City SDC	County TDT
North ("C" & "D")	\$4,923,371	\$580,730	\$5,078,249	\$1,905,910	\$6,565,637	\$6,983,934	\$44,077,425
Far West ("F")	\$7,475,256	\$759,564	\$5,604,750	\$680,269	\$12,687,462	\$1,413,350	\$7,184,919
West/Southwest ("A," "B," "E")	\$20,690,117	\$2,898,074	\$19,883,174	\$3,072,116	\$37,794,396	\$36,746,338	\$73,301,923
Total Sources	\$33,088,744	\$4,238,368	\$30,566,172	\$5,658,295	\$57,047,495	\$45,143,622	\$124,564,267
Costs to City of Sherwood							
North ("C" & "D")	\$10,954,350	\$3,531,250		\$18,634,500	-	\$20,995,625	
West/Southwest ("A," "B," "E")	\$27,749,100	\$3,679,350		\$22,312,850	-	\$46,829,175	
Far West ("F")	\$7,476,000	\$4,801,500		\$10,447,500	-	\$10,658,750	
Total Uses	\$46,179,450	\$12,012,100		\$51,394,850	-	\$78,483,550	
Funding Surplus/Gap	-\$13,090,706	\$22,792,441		-\$45,736,555	\$57,047,495	\$91,224,338	

Findings

Across all four scenarios, revenues generated under a full buildout of Sherwood West are sufficient to cover estimated infrastructure costs for sewer, parks, and transportation, but not water and storm infrastructure. Parks show a surplus across all scenarios because the cost of parks were not included in this analysis. Sewer and transportation show a surplus due to the inclusion of funding mechanisms in addition to City SDCs:

- **Clean Water Services (CWS) Regional Connection Charge (RCC).** Clean Water Services is a “water resources management utility” providing sewer and surface water management in Washington County.¹ This analysis assumes RCC revenue will be available for funding infrastructure expansion in Sherwood West.
- **County Transportation Development Tax (TDT).** The TDT, passed by Washington County voters in 2008, is a one-time charge on development (like an SDC) that funds transportation capital improvements designed to accommodate growth. A list of eligible projects is maintained by the County and are “generally limited to improvements on major roads (arterials and collectors) and selected transit capital projects.”²

It is unusual to have a surplus on transportation infrastructure but that is the case here due to the sizeable TDT revenues and the fact that cost estimates assume no Chicken Creek bridge—which would represent a significant expense and cut into the transportation surplus found by this analysis. The calculation of storm water revenues assumed no CWS Regional Storm Drainage Improvement Charges were collected due to credits given for water detention and water quality projects, per City guidance. With an additional 45% reduction in assumed City storm water SDC collection (due to participation in water quality projects), the largest shortfall across all infrastructure categories—\$46,529,398—is found for stormwater under both low housing scenarios.

This is a preliminary analysis and should be revisited as the City conducts additional infrastructure planning, as development is implemented, and as other aspects of development in Sherwood West change—including significant changes to costs and timing of development.

Funding Toolkit and Strategy

Recommended Funding Strategies

LCG recommendations for supplementing existing baseline funding are informed by recent development experience in the region and review of existing resources, including the Phasing and Funding Strategy prepared by ECONorthwest for the Preliminary Concept Plan in 2016 and the 2020 Washington County Infrastructure Funding Plan Toolkit (which provides guidance on funding transportation infrastructure in urban reserve areas specifically).

Supplemental SDC. Based on recent development experience in the region, especially Frog Pont West in Wilsonville, LCG recommends focusing first on Supplemental SDCs to meet any funding gaps. Supplemental SDCs are essentially additional SDCs for a sub-area of the City, paid by developers. By using the SDC tool, costs can be shared across multiple developers over time. As with standard SDCs, developers can be credited and/or reimbursed for oversized infrastructure that they construct that benefits other developers and/or the city as a whole. As with any development cost, the costs of supplemental SDCs will ultimately get passed on to homebuyers and commercial and residential tenants in the form of higher housing costs and rents. The next steps to implementing a

¹ Clean Water Services “About Us”, <https://cleanwaterservices.org/about/who-where/>.

² Washington County Department of Land Use and Transportation, Transportation Development Tax Annual Reports 2009–Present.

supplemental SDC would involve the following, which should be managed by City staff with the support of a municipal finance consultant:

- Ongoing refinement of project engineering and costs;
- Outreach to property owners and developers to refine development projections and phasing and to negotiate the specifics of a potential fee;
- Financial modeling of a potential fee, including identification of specific projects that would be included in the fee and exploration of scenarios that might vary the fee in different parts of Sherwood West;
- Engagement of the Sherwood City Council and Planning Commission;
- Development of a final proposal for adoption.

Regional Sources. In addition to a supplemental SDC and other tools mentioned above, securing “outside” funding sources for needed infrastructure can help reduce costs on a dollar-for-dollar basis. Therefore, the City should seek to leverage additional existing funding through other government sources, including:

- **Major Streets Transportation Improvement Program (MSTIP).** MSTIP is a county-wide road improvement program funded by countywide property taxes. The 2023-2028 System of Countywide Interest Map identifies Elwert Road as an “eligible arterial/principal,” and may receive funding through MSTIP as a major road. There is MSTIP funding for SW Roy Rogers Road, but not currently for the portion adjacent to Sherwood West.
- **Metropolitan Transportation Improvement Program (MTIP).** MTIP, overseen by Oregon Metro, “records how all federal transportation money is spent in the Portland metropolitan area” and monitors significant state and locally funded projects with an impact on air quality. MTIP follows a four-year construction schedule and is updated every two to three years. Sherwood West projects may be eligible for the next round of MTIP funds.
- **Regional Flexible Funding.** Regional flexible funding for transportation projects, administered by Oregon Metro, provides “federal funding for investments in sidewalks, trails, and roadways in communities across the region.” Regional funds not already allocated for ongoing commitments may be applied for by regional jurisdictions through a project selection process. Projects for the 2025-2027 cycle were selected in October 2022, but the City can plan to submit a project proposal for the next funding cycle—which to be successful, will need to demonstrate alignment with regional investment priorities.

State Funding Sources. Business Oregon operates industrial and employment land readiness programs that may have the potential to fund infrastructure development in Sherwood West, particularly in the North District.

- **Regionally Significant Industrial Sites Program (RSIS).** RSIS is “a profit sharing economic development tool that offers state income tax reimbursements for approved industrial site readiness activities,” and can cover activities such as transportation and infrastructure improvements. Local governments can apply if they own or act as a sponsor for privately-owned industrially zoned sites.
- **Emerging Opportunities.** Finally, the City should watch the state legislature, as state resources may become available to support industrial site readiness and best position the state for federal funding via new legislation, such as the CHIPS Act and Inflation Reduction Act.

Additional funding strategies

Additionally, the four funding tools identified as preferred in the Preliminary Concept Plan could also be considered, but would be a lower priority than supplemental SDCs, regional, and state sources:

- **Local Improvement District (LID).** “An LID is a special assessment district where property owners are assessed a fee to pay for capital improvements, such as streetscape enhancements, underground utilities, or shared open

space.³ With LIDs, landowners within the district are assessed a fee based on the proportional benefits they receive from the district, established at inception. LIDs typically require the approval of 60 percent of the affected property owners in the district. Owners benefit from paying costs over time and the City's access to a lower interest rate. LIDs would have much the same impact as a supplemental SDC, therefore we recommend focusing on a supplemental SDC as the primary tool before considering using LIDs.

- **Utility fees:** Utility fees for regional infrastructure are much less common in Oregon and, while allowed, would be relatively unique and less familiar to developers than a supplemental SDC. A utility fee also would be paid by end users (homeowners and tenants) and could therefore create a timing issue where revenues aren't realized until after the infrastructure is built.
- **Property Tax (GO) Bonds:** While citywide general obligation bonds backed by a temporary increase in property tax rates are a legal option for consideration, the need for a public vote and the fact that all city residents would bear the funding burden limits the appropriateness of this tool to infrastructure projects that have a citywide benefit. Given the need for a public vote and the greater ease of implementing other tools, we do not recommend GO bonds as a funding tool for Sherwood West.

Urban Renewal was also considered in the previous Phasing and Funding Strategy, but not as a preferred tool. Nevertheless, it could potentially be used with some caveats as discussed here. Through tax increment financing, urban renewal can help pay for infrastructure through the increase in property taxes that occur in the urban renewal area over time. Urban renewal is typically implemented in existing areas of a city where revitalization is desired or there is a need to address specific infrastructure deficiencies that are barriers to new investment, and its use in new undeveloped areas of the city may face political challenges in implementation. There are also strict limits on how much of a city can be within an urban renewal district, both by taxable value and geographically. This would need to be considered since Sherwood already has two existing urban renewal areas.

Conclusion

Key findings of this preliminary infrastructure funding strategy analysis include:

- Development envisioned for the focus areas of this analysis include employment uses in the North and a mix of housing (including middle housing intermixed with low and medium-density single family development) and employment uses along Highway 99W in the West/Southwest.
- Several infrastructure projects are catalytic to making development possible in these areas. For both the North and West/Southwest districts, transportation projects are projected as the highest-cost, including the extension of Elwert Road for both areas, Scholls-Sherwood Road in the North, and a new 2-lane collector in the West/Southwest. Additional catalytic projects include extending water and storm improvements along Elwert Road in the North and expanding water service in the West/Southwest.
- Preliminary analysis shows a shortfall for water and storm and surplus for transportation, sewer, and parks when regional connection charge revenues to Clean Water Services and the Washington County TDT are included.
- Of all the potential funding strategies, a supplemental SDC would be easiest to implement to cover the gap, though the City should also aggressively seek outside funding from regional, state and federal programs to reduce the overall cost.
- Next steps involve continued refinement of projects and costs and financial modeling and discussions with developers on a potential supplemental fee.

³ ECONorthwest, Preliminary Concept Plan Phasing and Funding Strategy.

Appendix A: Methodology

The following assumptions were made for the Sherwood West Infrastructure Funding Strategy and Action Plan revenue gap analysis:

Development Programming

- To match development programming by Concept Plan "district," costs were summed as follows:
 - North ("C" & "D")
 - West/Southwest ("A," "B," "E")
 - Far West ("F")
- Mixed Use treated as Commercial, with no additional estimates for housing.

Revenue Calculation

- FAR of 0.35 was applied to programming acreage for non-residential land uses, and multifamily for water SDC revenue calculation when calculating connection charges for water, sewer, and park revenues.
- For sewer SDCs:
 - For City SDC calculation, an EDU is equivalent to 150 gallons per day. Low/high flow counts for Mixed Employment and Commercial were provided by the City and used to generate a low and high-sewer revenue scenario.
 - For CWS SDC calculation, an EDU is equivalent to 16 "fixture units." Low/high flow counts for Mixed Employment and Commercial were provided by the City and used to generate a low and high-sewer revenue scenario.
- For stormwater SDCs:
 - The CWS Regional Storm Drainage Improvement Charge was not tracked because most users have these charges waived because their projects provide water quality and water detention services.
 - As with the CWS Regional Storm Drainage Improvement Charge, it is expected that many users will receive a 45% discount for designs that support water quality (a discount for water detention is not available for the City's SDC). For this reason, in the calculation of the City of Sherwood's stormwater SDC, only 55% of the charge was included. For this SDC, one equivalent service unit (ESU) of 2,640 feet is equivalent to one single-family residence. For other uses, calculations were area based, after removing 10% of land area as estimated non-pervious surface (for Multifamily, Mixed Employment, and Commercial/Mixed Use/Hospitality uses).
- For City of Sherwood transportation SDCs, fees associated with the following non-residential "Type" were used:
 - Mixed Employment: "General Light Commercial"
 - Commercial, Mixed Use, Hospitality: "Specialty Retail"

Appendix B: Sherwood West Preliminary Concept Plan Phasing

