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TRANSPORTATION SYSTEM PLAN

September 2022



City of Yelm

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TRANSPORTATION PLAN UPDATE

PROJECT INFORMATION

Contact

Casey Mauck
Assistant Planner
City of Yelm
106 Second St SE
Yelm, WA 98597
(360) 400-5001

PROJECT STAFF SUPPORT

City Staff

Patrick T. Hughes, P.E., *City Engineer*
Landon Hawes, *Planning & Building Manager*
Brianna Feller, *Communications Specialist*

Yelm Planning Commission

Jerry Fugich
John Graver
Bob Howard
Carlos Perez
Floyd Sheldon
John Thomson
Anne Wahrmond

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ACRONYMS & REFERENCES

ADA	Americans with Disabilities Act
CTED	Washington Department of Community, Trade & Economic Development
EA	Environmental Assessment
ECY	Washington Department of Ecology
EIS	Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highways Administration
GMA	Growth Management Act
HSS	Highways of Statewide Significance
HSP	Highway System Plan
ISTEA	Intermodal Surface Transportation Efficiency Act
LID	Local Improvement District
LOS	Level of Service
MPO	Metropolitan Planning Organization
OCD	Office of Community Development
PWTF	Public Works Trust Fund
RTP	Regional Transportation Plan
RTPO	Regional Transportation Planning Organization
RCW	Revised Code of Washington
SR	State Route
TBD	Transportation Benefit District
TDM	Transportation Demand Management
TFC	Transportation Facilities Charge
TFSSS	Transportation Facilities and Services of Statewide Significance
TIA	Traffic Impact Analysis
TIB	Transportation Improvement Board
TIP	Transportation Improvement Program
TRPC	Thurston Regional Planning Council
TSM	Transportation System Management
TSP	Transportation System Plan
UGA	Urban Growth Area
WSDOT	Washington State Department of Transportation
WTP	Washington Transportation Plan
YMC	Yelm Municipal Code

Background

What is a Transportation System Plan?

The Transportation System Plan (TSP) is the long-range guiding document that directs transportation planning in the City of Yelm for a 20-year horizon. The Transportation System Plan serves to identify areas of concern in our transportation system as the City grows, create projects that will address current and future issues, and map out funding sources that will be used to carry out improvement projects. This plan also outlines the City's long-term transportation visions and creates specific projects from the goals of the Transportation element of the Comprehensive Plan.



Figure 1. Mount Rainier as seen from a residential area in the City of Yelm. Photo taken by Zachary Smith.

The TSP builds on the goals and policies in the [Yelm Comprehensive Plan](#), which plans for a 25-year horizon. Projects identified in the TSP are used in the Six-Year Capital Improvement Plan and Six-Year Transportation Improvement Program, internal plans updated annually that identify specific projects to complete over a six-year horizon.

In addition to this Transportation System Plan, the City of Yelm adopts the following documents and successive updates to be effective in the Urban Growth Area:

- Washington State Active Transportation Plan, 2020 and Beyond, adopted 2021
- Regional Transportation Plan 2045 for the Thurston Region, Washington State, adopted 2020
- 2040 and Beyond, Washington Transportation Plan, adopted 2018
- Yelm/Thurston County Joint Comprehensive Plan – Transportation Chapter, adopted 2017
- East Gateway Environmental Impact Statement, 2015
- State Highway Transportation System Plan (2007-2026), adopted 2008
- Sustainable Thurston, adopted 2013
- Thurston Highlands Master Planned Community Environmental Impact Statement, 2008

Objective of the Transportation System Plan

The objective of the Transportation Plan is to provide a cost-effective network to accommodate all modes of travel in and around the core area. To accomplish this objective, Yelm will actively pursue:

1. A connected-streets policy to promote the efficient flow of traffic, and travel by all modes within the community.
2. A series of connected arterials that will permit traffic to bypass the urban core if it is merely passing through, to reduce congestion in the central core.
3. A multimodal streets policy that increase safety and accessibility to pedestrians, cyclists, and other alternative modes of transportation.
4. A mitigation/impact fee strategy which will promote alternative routes and alternative methods of transportation rather than merely building ever larger streets.
5. Collecting traffic mitigation fees from new development activity, by means of the City's Transportation Facility Charge (TFC) Chapter 18.16 Yelm Municipal Code, to assist in funding selected system improvements identified on the 6-year Transportation Improvement Program.

Section 36.70A.070 RCW Compliance

The 1998 legislation, House Bill 1487, known as the "Level of Service" Bill, amended the Growth Management Act; Priority Programming for Highways; Statewide Transportation Planning, and Regional Transportation Planning Organizations. The combined amendments to these RCWs were provided to enhance the identification of, and coordinated planning for, "transportation facilities and services of statewide significance (TFSSS)". HB 1487 (RCW 36.70A.070) recognizes the importance of these transportation facilities from a state planning and programming perspective. It requires that local jurisdictions reflect these facilities and services within their comprehensive plan.

To assist in local compliance with RCW 36.70A.070 , the Washington State Department of Transportation (WSDOT), Transportation Planning Office and the Washington State Department of Community Trade and Economic Development, Growth Management Program (CTED) promulgated implementation guidelines in the form of a publication entitled "Coordinating Transportation and Growth Management Planning."

Together with these entities, the City of Yelm has worked to compile the best available information to include as required. See **Appendix A**.

The City of Yelm asserts that proposed improvements to state-owned facilities will be consistent with the Regional Transportation Plan (RTP) and the State Highway System Plan within Washington's Transportation Plan (WTP).

The City of Yelm will continue to collaborate with WSDOT, CTED and the Thurston Regional Planning Council (TRPC) to enhance the consistency of statewide transportation planning at the local, regional and state level and will make necessary changes in the transportation elements of the comprehensive plan as new or final information becomes available.

Inventory

Situated between the City of Olympia to the Northwest and Mount Rainier to the East, the City of Yelm serves as a common thoroughfare for travelers moving between Mount Rainier and Puget Sound. The City contains the intersection of State Routes 510 and 507, which are often traversed in lieu of I-5 during freeway closures. SR 507 and SR 510, known locally as 1st Street and Yelm Avenue, intersect in downtown Yelm. Both state highways serve not only as main arterials in Yelm, with Yelm Avenue functioning as the downtown “Main Street”, but also as significant commuter routes for regional traffic. As such, these two roads and the intersection in downtown Yelm experience significant congestion that creates safety hazards. The current conditions do not support non-motorized travel and negatively impact access and circulation for local businesses.

Transportation Modes

1. Passenger Vehicle

The Yelm community relies heavily on passenger vehicles to move around the City and reach essential services. Car ownership is approximately the same as the national average, with an average of 2 cars per household. Providing safe and efficient transportation systems for passenger vehicles is a priority in the City’s long-term planning process.

2. Railroad

The City of Yelm has purchased 4.55 miles of the Burlington Northern Santa Fe Railroad which had been threatened for abandonment, now known as the Yelm/Roy Prairie Line (YRPL), preserving and enhancing a vital transportation link in Thurston County. It is not feasible to use the rail line for freight or other rail operations, and the line is now part of the extension of the Yelm Prairie Line Trail Project. It will serve as a multimodal bike and pedestrian corridor. The former rail line is no longer eligible for hauling freight.

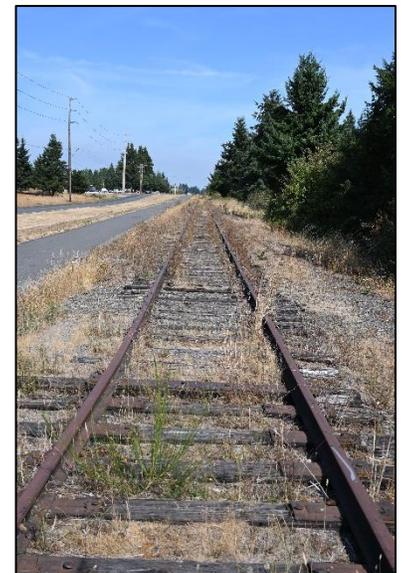


Figure 2. Burlington Northern Santa Fe Railroad along Northern Pacific Rd.

3. Air

The City of Yelm supports scheduled air service at the Port of Olympia air terminal in Tumwater. While not in Yelm, the community benefits from this service.

4. Public Transit, Carpool, and Van

The City of Yelm supports the work of InterCity Transit in providing bus and other transit services to the urban area. City development regulations encourage

development near transit services and provide parking incentives for transit and vanpool programs.

5. Alternate Modes of Transportation

The City of Yelm supports alternate modes of transportation, including walking and bicycling. A connected network of sidewalks, bicycle routes and trails support bike and pedestrian travel. Wheeled All-Terrain Vehicles (WATV) are allowed on all city streets with a speed limit off 35 mph or less, pursuant to the requirements of Chapter 10.34 YMC. Development regulations such as frontage improvements support and encourage all forms of alternate transportation. Supporting alternate modes of transportation is a growing priority as the Yelm community grows, increases in density, and works to decrease our community emissions.

Road Classifications

Road classifications are used to determine the appropriate design standards and expected traffic on each street within the Yelm Urban Growth Area (UGA). Road classifications are made using WSDOT’s Functional Classification Map, TRPC, and the City of Yelm Planning Commission. Streets listed in **red** indicate changes from the most recent classification listed in the [Yelm Development Guidelines](#).

Classification	Purpose	Current Streets
Major Arterial	Highest traffic volume corridors, carry a high proportion of total urban travel on a minimum of mileage	<ul style="list-style-type: none"> • First Street (from Y-1/Y-2 intersection to Yelm Ave) • Y-1 (SR 510) • Y-2 (SR 507)
Urban Arterial	Connects with and augments the major arterial system. Accommodates trips of moderate length at a somewhat lower level of travel mobility than major arterials	<ul style="list-style-type: none"> • Yelm Ave • Killion Rd (formerly Major Arterial) • Tahoma Blvd (formerly not listed) • Bald Hills Rd • First St (north of Yelm Ave)
Commercial Collector	Provides for movement of traffic between arterial routes and local traffic in commercial areas	<ul style="list-style-type: none"> • Canal Rd (formerly Urban Arterial) • Grove Road (formerly Urban Arterial) • Stevens-Coates Connector (formerly Urban Arterial) • Creek Street SE • Edwards Street NW (Yelm Ave to Coates St SE) • Morris Rd SE • N.P. Rd SE • Rhoton Rd NW (1st St to Rhoton Ct) • Stevens Ave NW

		<ul style="list-style-type: none"> • West Rd SE • 103rd St NE (Yelm Ave to Creek St)
Neighborhood Collector	Provides for movement of traffic between arterial routes and local traffic in residential areas	<ul style="list-style-type: none"> • Burnett Rd SE • Clark Rd SE • Coates St SE • Crystal Springs Rd • Cullens Rd • Middle Rd SE • Mill Rd SE • Mosman Ave • Mountain View Rd NW • Ordway Dr • Railway St SE • Rhoton Road NW (Rhoton Ct to Canal Rd) • Southwest Access (Y-7 improvements) • Vancil Rd SE • Wilkensen Rd • 93rd Ave SE • 105th Ave
Local Access Commercial	Allow direct access to abutting commercial land and connections to higher order street systems; lowest level of mobility and discourage major through traffic movements	<ul style="list-style-type: none"> • Edwards St SW (Yelm Ave to Mosman Ave) • Jefferson Ave • Jones Street SE • Longmire St S W(Jones St) • McKenzie Ave SE (SR 507 to 2nd St) • Railroad St NW • Rice St SW (Jones St to Jefferson Ave) • Solberg St SW (Jones St to Jefferson Ave) • Third St SE (Jones St to Jefferson Ave)
Local Access Residential	Allow direct access to abutting residential land and connections to higher order street systems; lowest level of mobility and discourage major through traffic movements	<ul style="list-style-type: none"> • Flume Rd SE • Fourth St SE • Longmire St SW (to Jones St) • 100th Way SE • 103rd St NE (Creek St to Canal Rd) • All remaining roadways within Yelm UGA

Level-of-Service Standards

Level-of-Service (LOS) is the established minimum capacity of public facilities or services that must be provided per unit of demand or other appropriate measure of needed. LOS standards are used to determine if public facilities or services are adequate to support a development's impact at the time it occurs. The city has designated levels of service road facilities in the comprehensive plan, as follows:

- In all residential zones, LOS C
- In all commercial and light industrial zones, LOS D
- In the urban core between 4th Street and Solberg Street, LOS F is recognized as a level of service where mitigation to create traffic diversions, bypasses, and alternate routes and modes of transportation are authorized and being planned, funded, implemented, and can result in improved LOS.



Figure 3. The roundabout at the intersection of SR 510 and SR 510 Alt, a completed phase of Y1.

Transportation Improvement Program

A major part of any Transportation Plan is the Transportation Improvement Program. The 2022 update depicts the overall transportation future of Yelm. Included are the recommended projects for the City and its Urban Growth Area. The improvements of this transportation program are not only the City's future transportation focus, but also the manifestation of the planning policies for providing adequate transportation facilities and services for the next 20 years.

Background Studies

Development of the Transportation Program was based upon studies completed for the Transportation Plan update, including the Thurston Regional Planning Council 2018-2045 transportation model. These studies include identifying existing and future safety and capacity deficiencies. A program was developed to improve existing facilities, connections to "fill-in" the existing system, and new facilities to meet the projected travel needs throughout Yelm and the Yelm Urban Growth Area. Modifications have been made to the 2009 update based on the most current information on travel demand and roadway deficiency.



Figure 4. Pedestrian trail along SR 510 Alt, which will eventually continue along the northern edge of the City.

The 2022 update identifies projects anticipated to be needed as growth occurs, including adding connections to the existing transportation network. Both regional and local facilities have been recommended to remedy the existing and future deficiencies.

Future Travel Conditions

The current (2045 Horizon) Thurston Regional Planning Council (TRPC) transportation model was used to identify future travel conditions in Yelm. These travel projections were based upon 20-year+ (2018-2045) land use forecasts prepared by TRPC staff and the Yelm Public Services Department. The land use forecasts were studied and accepted by the County and the cities and towns within Thurston County as the likely development patterns of the Yelm area.

Results from the transportation model still show a strong need for projects – especially new connections to accommodate future growth in the Yelm Urban Growth Area. As identified in past plans the central issue was the construction of a system that provides greater opportunities

for traffic to travel around and through the City while promoting commercial growth in the center of Yelm. The answer to this issue was to develop alternatives to travel on Yelm Avenue with a recommendation for north loop and south loop roadways. Although these routes are alternatives to travel through the City Center, the City chose to locate the routes as close as possible to the core of Yelm and adopt a Commercial Siting policy in the Yelm/Thurston County Joint Comprehensive Plan to restrict commercial development along these loop roadways. By taking this approach, the loop roadways can be developed as high-capacity, limited access facilities. An Environmental Assessment in February, 2000 analyzed a new highway corridor around the City of Yelm to provide an alternate east-west route, known as Y2/Y3, and an Amendment to the 1995 Comprehensive Plan incorporated the corridor plan and the specific corridor route location based on the Environmental Assessment.

Map 1 depicts the locations of the proposed 20-year improvement programs for the plan update. Descriptions of the primary projects identified in the plan are presented in the following section.

Plan Recommendations

The following lists the primary roadway facilities and recommendations of the 2022 Transportation Improvement Program Update. Commentary is provided describing the need for improvement, planned construction of the facility, potential alternatives to the route, and preliminary cost estimate of implementing the recommendation. The cost estimates are preliminary and do not substitute for detailed estimates that will be developed as part of engineering design studies.



Street Connections are necessary to achieve a cost-effective network of travel in and around the core area. Improvements listed below have been created to facilitate travel outside of the City's main arterials and provide options for local movements.

Figure 5. The current terminus of Parkview Dr, which will eventually be extended west below Cochrane Park to meet Mill Rd (Y11).

Street Connections				
Project Number	Name	Description	Cost (2021 dollars)	Priority
Y1	SR 510 to SR 507 Loop	Construct a major arterial which would extend south from 93 rd Ave through the Thurston Highlands and connect to SR 507 between Yelm and Rainier	61,000,000	Low
Y2	<i>SR 507 Loop</i>	<i>Construct 2-lane from SR 507 on the east side of Yelm with SR 507 on the south end of Yelm, creating an alternate route around the SE quadrant of the City</i> <i>*Accomplished by Y2A, Y2B, and Y2C</i>	<i>24,200,000</i>	<i>Low</i>
Y2A	Vancil Rd to Morris Rd Connection	Construct a new collector street from Vancil Rd to Morris Rd	6,600,000	Low
Y2B	Morris Rd to Bald Hill Rd Connection	Extend 109 th Ln within the Y2 corridor from Bald Hill Rd to Morris Rd	8,600,000	Low
Y2C	Bald Hill Rd to SR 507/SR 510 Yelm Loop	Construct a new collector street between Bald Hill Rd and the traffic signal at SR 507/SR 510 Yelm Loop	9,000,000	Low
Y3	SR 510 Yelm Loop (SR 510 to SR 507)	Construct a North loop around City center – <i>WSDOT Project</i>	58,700,000	High
Y4	<i>Northern Mini Loop</i>	<i>Create a series of connected streets running west to east parallel to SR 510/SR 507 (Yelm Ave) to allow local traffic to move through town off of Yelm Ave</i> <i>*Accomplished by Y4A</i>	<i>1,820,000</i>	<i>Medium</i>

Y6	105 th Ave Mini Loop	Construct and improve a series of connected streets running west to east parallel to SR 507 to allow local traffic to move through town off of Yelm Ave *Accomplished by Y6A, Y6C, & Y6D		Medium
Y6C	105 th Ave Extension: Mill Rd to Yelm Terra	Extend 105 th Ave from Mill Rd to the current terminus of the road at the west end of the Yelm Terra subdivision	950,000	Medium
Y6D	105 th Ave Extension: Clark Rd to Vancil Rd	Construct a new connection of 105 th Ave between Clark Rd and Vancil Rd	1,810,000	Medium
Y11	Parkview Dr	Construct a local access residential connection, including sidewalks and a bike lane from Parkview Loop to Mill Rd	950,000	Medium

Pedestrian improvements are necessary to facilitate alternate modes of travel and decrease dependence on passenger vehicles in the City. Pedestrian improvements have been identified to increase safety and accessibility of movements to walkers and cyclists in the community.

Pedestrian Improvements				
Project Number	Name	Description	Cost (2021 dollars)	Priority
Y7B	Yelm Prairie Line Rail Trail	Extend the Yelm Prairie Line Trail to the City of Roy using the former rail line	1,600,000	High
Y14	Central Business District Sidewalks	Reconstruct and construct pedestrian oriented sidewalks throughout the CBD	1,750,000	Medium
Y15	2 nd St SE Improvements	Construct new 5-ft multi-use concrete sidewalk along west side of 2 nd St SE from Cochrane Park to existing sidewalk at Mosman Ave SE	310,000	High

Y19	Pedestrian Bridge over Yelm Ave	Construct a pedestrian bridge over Yelm Ave between Railroad St and 1 st St	1,250,000	Low
Y20	Activated Alleys in CBD	Activate alleyways in the Central Business District by repurposing underused alleyways with murals, seating, lighting, retail, and unique paving surfaces	*Cost TBD	Low
Y22	Cullens Street Improvements – Yelm Ave to Van Trump St	Install a sidewalk and bike lane along Cullens St between Yelm Ave and Van Trump St	490,700	Medium
Y24	Railway Rd Improvements - 1 st St to Middle Rd	Install a sidewalk and bike lane along Railway Rd between 1 st St and Middle Rd	780,500	High

Intersection improvements address safety and efficiency concerns at key intersections in the City. Many intersection improvement projects involve realigning intersections, which increases safety through better visibility and easier turning movements to passenger and emergency vehicles alike.

Intersection Improvements				
Project Number	Name	Description	Cost (2021 dollars)	Priority
Y5A	Burnett Rd & 93 rd Ave SE Realignment & Traffic Signal	Adjust 93 rd Ave SE and Burnett Rd SE to meet straight on and install a traffic signal – ROW acquisition will be required	3,800,000	Medium
Y5B	Longmire St & Yelm Ave Signal	Install a signal at the intersection of Longmire St & Yelm Ave	850,000	Medium
Y5G	170 th St & SR 507 Roundabout	Install a roundabout at the intersection of 170 th St & SR 507 with multimodal options – <i>WSDOT Project</i>	2,500,000	High

Y6A	Mill Road & SR 507 Intersection Realignment	Realign the intersection of Mill Road & SR 507 to collector standards with a dedicated left turn lane on Mill Rd and a left turn pocket on SR 507	950,000	High
Y16	Crystal Springs Rd & Coates Rd SE Roundabout	Install a roundabout at the intersection of Crystal Springs, Coates Rd, and Edwards St with multimodal options	1,300,000	Medium
Y17	West Rd & 103 rd Ave Roundabout	Install a round-about at the intersection of West Rd & 103 rd Ave & the Nisqually Plaza parking area	1,650,000	Low

Street Improvements are projects that address aging streets that do not meet current street standards. Many improvements involve the addition of sidewalks, planter strips, bike lanes, and other facets that aid alternate modes of travel throughout the City.

Street Improvements				
Project Number	Name	Description	Cost (2021 dollars)	Priority
Y4A	Coates Rd NW Extension	Install streetscape improvements, reclaimed water lines, power, gas, and future fiber system on Coates Rd between Killion Rd and Cullens Rd, and provide improvements to the Coates Rd and Cullens Rd intersection	1,820,000	Low
Y5	<i>Yelm Ave Improvements</i>	<i>Improve Yelm Ave to reduce congestion and increase accessibility</i> <i>*Accomplished by Y5A, Y5B, Y5C, Y5D, and Y5E</i>		Low

Y5C	Yelm Ave Improvements in Central Business District	Construct, repair, and replace sidewalks, parallel parking, intersection treatments, and access control channelization along Yelm Ave (SR 507) from 1 st St SE to 4 th St SE	2,900,000	High
Y5D	SR 507 Improvements 5 corners to SR 510 loop	Reconstruct Yelm Ave from 5 corners to SR 510 Yelm Loop to City standards for an urban arterial with bike lanes, planter strip, and reconstruction of Grove Rd intersection and access control – <i>WSDOT Project</i>	3,850,000	Low
Y5E	Yelm Ave Boulevard Improvements	Reconstruct Yelm Ave from Burnett Rd to 1 st St with boulevard swales and restricted left turn lanes	*Cost TBD	Low
Y8B	Solberg St Improvements	Reconstruct Solberg St to City standards with 2 drive lanes, shoulder, sidewalk, and planter strip from Yelm Ave to Mosman Ave	1,200,000	Medium
Y9	Bald Hill Rd Reconstruction	Reconstruct Bald Hill Rd to a 3-lane facility from Western Chehalis Railroad to intersection with Yelm Ave	3,750,000	Medium
Y10	Northern Pacific Road Improvements	Reconstruct N.P. Rd and a portion of Wilkensen Rd SE from 1 st St to the intersection of the planned Yelm loop (SR 510 Alt)	6,800,000	High
Y13	Rhoton Rd NW Improvements	Reconstruct Rhoton Rd NW from Railway St SE to the intersection of the planned Yelm loop (SR 510 Alt)	5,850,000	High

Y18	Bald Hill Flooding Study	Feasibility study to identify a project that resolves seasonal flooding issues on Bald Hill Rd from City limits to 5 corners intersection	100,000	High
Y21	103 rd Ave SE Bridge Replacement	Replace the bridge across 103 rd Ave SE near the intersection of Creek Road	690,000	Medium
Y23	Washington/McKenzie One-Way Couplet	Reconstruct Washington St and McKenzie Ave to be one-way streets with pedestrian facilities and intersection improvements between 2 nd St SE and 3 rd St SE	1,163,600	Medium

Funding & Implementation

Funding

The following funding sources are available for transportation facilities:

Transportation Facilities Charge (TFC) are required at the time of development of a site, and are charged depending on the expected trip generation of a use. The City of Yelm is expected to generate approximately \$89,820 from Transportation Facilities Charges in 2021.

Development Project Mitigation Funds may be required at the time of a site development if the traffic impact analysis for the development shows a drop in Level-of-Service. These funds may be used towards projects in the City's Six-Year Transportation Improvement Program.

Grants are state, federal, county, or other agency funding sources that can be used for specific purposes. Grant applications require staff time, but can be lucrative options for smaller cities to implement major infrastructure projects. **Transportation Improvement Board (TIB) grants** are generated from the statewide gas tax and can be used by cities and counties for transportation projects. Grant funds awarded depend on the amount requested, and often have a match requirement of roughly 13.5-25%. The City of Yelm received \$310,029 in Federal Highway Administration grant funds and \$190,518 in TIB grant funds in 2021.

The City General Fund, Gas Tax Revenue, Bonds and Real Estate Excise Tax can be used to implement transportation projects in the Urban Growth Area. Municipal Research and Services Center of Washington (MSRC) estimates that the City of Yelm will generate \$182,866 from gas tax revenue in 2022.

Local Improvement Districts (LIDs) are a tool for assisting benefitting properties in financing capital improvement projects through establishing a special assessment district. Special assessment districts permit improvements to be financed and paid for over a period of time through assessments on the benefitting properties. The City has not initiated an LID in several years.

Transportation Benefit Districts (TBDs) are local option taxing districts authorized by state statute (Chapter 36.73 RCW). A TBD is a quasi-municipal corporation and independent taxing district that can raise revenue for specific transportation projects. In Washington State, TBD revenue is usually raised through a sales tax increase (typically 0.1% to 0.2%) or a vehicle license fee increase (typically \$20 and \$40). Some jurisdictions implement a combination of the two mechanisms.

Implementation

Transportation planning and development in the Urban Growth Area is a joint exercise of responsibility between the City, the County and the State. Yelm is responsible for planning and implementation of the policies of the City's Transportation Plan, assisting with the planning of policies in the incorporated Urban Growth Area, and keeping Thurston County advised of any new projects or changes to existing programs that the County should consider in its planning or review, in order to assure consistency, conformance, and concurrency. Thurston County will be responsible for planning and implementing the policies of the current Regional Transportation Plan within the unincorporated Urban Growth Area, and will keep the City advised of any projects, programs, or changes which the City should consider in its planning or project review, in order to assure consistency, conformance, and concurrency. The City and the County will jointly cooperate to encourage the State Department of Transportation to support, promote, and conform to the plans adopted hereunder. Proposed improvements to state-owned facilities will be consistent with the Regional Transportation Plan (RTP) and the State Highway System Plan within Washington's Transportation Plan (WTP).



Figure 6. The intersection of Coates Rd, Cullens Rd, and Edwards St. This 3-way intersection will be improved through Y16.

The Transportation plans adopted herein have been reviewed for consistency with land use plans and are in aid and support of the land use plans. Where changes in land use or transportation occur, this Plan shall be specifically reviewed to assure consistency, conformance, and concurrency and that the goals continue to be met. The City of Yelm will continue to collaborate with WSDOT, CTED, and TRPC to enhance the consistency of statewide transportation planning at the local, regional, and state level and will make

necessary changes in the transportation elements of the comprehensive plan as new or final information becomes available. The City of Yelm acknowledges that the concurrency requirement does not apply to transportation facilities and services of statewide significance in Thurston County, State Highway 101 and I-5.

As the Transportation Plan is amended and the six-year TIP is updated annually, the Concurrency Management Program for Yelm will be used to determine when the mid and long-range projects should be constructed. By following the Concurrency Management Program, the City will be assured that the appropriate transportation facilities will be in-place as development comes occurs.

Future Policy Considerations

The following conditions should be considered in future updates to the transportation system plan. While the City does not yet have the resources to evaluate these issues, they may play a large role in transportation trends going forward. These issues should be considered in subsequent comprehensive plan, Six-Year Transportation Improvement Program, and work plan updates.

Climate Change

The City of Yelm recognizes the impacts that our changing climate has on our environment, and specifically transportation system. Earth's atmosphere acts as a greenhouse, and greenhouse gases increase the amount of heat trapped by the atmosphere. The burning of oil, coal, and other fossil fuels substantially increases the amount of greenhouse gases in the atmosphere.

Planners must take into consideration the impacts that climate change has on land use and transportation, while also encouraging strategies that mitigate greenhouse gas emissions. Transportation infrastructure faces increased damage due to more frequent and severe flooding and wildfires. The City will look to the most current FEMA (Federal Emergency Management Agency) flood maps to find frequently flooded areas, and continually update critical area codes to reflect the best available performance standards in these areas.

Transportation-related emissions are the second-largest source of greenhouse gas emissions in Thurston County. Increasing the availability of ride-share services and public transit decreases the need for travel by personal vehicle, which has several positive effects on the community. Not only do emissions decrease, but congestion on the transportation system is also reduced. Encouraging alternative modes of transportation such as biking and walking also decreases emissions while increasing community health outcomes.

Electric Vehicle Infrastructure

As electric vehicles become more prevalent in the area, it is important to evaluate the accessibility of charging stations to residents. Electric vehicles can have a large impact on reducing greenhouse gas emissions, as more utility companies focus on renewable sources of energy.



Figure 7. Electric vehicle chargers in Yelm City Park.

Future efforts to increase electric vehicle infrastructure could include incentivizing developers to install charging stations and installation of chargers at public facilities. Current charging stations in Yelm can be found at Yelm Public Works, City Park, Olympia Federal Savings, and Safeway.

Equity

Addressing disparities in our transportation system should be a key focus in Yelm's Comprehensive Plan and other plan updates going forward. Equity differs from equality in that equality concentrates on providing the same resources to all, while equity recognizes that adjustments are necessary to right imbalances.

Historically, transportation systems have been focused around cars and there has not been significant efforts to provide safe, efficient alternative modes of transportation. Directing funding to pedestrian and cyclist facilities is one way to address modal inequity and provide options for all residents.

Spatial inequity describes the geographical distribution of different communities. Differences in infrastructure throughout the City contributes to spatial inequity, whether that means areas lack sidewalks or are frequently congested and could benefit from intersection improvements. With only one transit line in Yelm, there is a limited number of residents that live within walking distance of transit. As the population grows it is imperative to work with transit partners and encourage the addition of new line(s) while also requiring adequate sidewalks and bicycle lanes in all new developments.



Figure 8. A bus stop on Intercity Transit route 94, the only route that runs through the City of Yelm. This stop is located at the intersection of Yelm Ave and 3rd St in the Central Business District.

Pedestrian facilities must always meet current Americans with Disabilities Act (ADA) requirements to decrease inequities due to ability. Connectivity in multimodal systems should be a priority for the City going forward, and future projects should address breaks in facilities that could otherwise be connected.

The City does not yet have comprehensive data showing the distribution of age, race, income level, and other demographic characteristics throughout the UGA. This analysis should be conducted and used in future plan updates to mitigate inequities in transportation throughout the community.



Figure 9. The Yelm Prairie Line Trail, which connects with the Yelm-Tenino trail and links every major town in Thurston County.

Online Work

In 2020, a significant shift towards online work was made in response to the COVID-19 pandemic. It is assumed that post-COVID-19, there may be a large group of workers continuing to telework. Teleworking can reduce congestion on streets, alter peak hour trip trends, and may reduce the percentage of people that choose to own cars. It is unknown how many Yelm residents will continue to telework after COVID-19, but if a reduction in commute trips occurs after the pandemic, it may be beneficial to reallocate space and funds previously used for cars to other modes of transportation such as sidewalks or bike lanes.

Appendix A

The following information is included to comply with RCW 36.70A.070 which amended the Growth Management Act to include information about state-owned transportation systems. This information was obtained from the 2007-2026 Highway System Plan Technical Update by WSDOT.

Inventory of State-Owned Transportation Facilities

There are two state highways within the City of Yelm: SR 507 & SR 510

SR 507 is within the incorporated city limits of Yelm between milepost 27.32 and milepost 29.23. SR 507 has a state functional classification of R2, or Rural-Minor Arterial. SR 507 has the following highway access management classifications between mileposts within Yelm (See WAC 468-51 and 468-52 for more detail about classifications). Cities typically follow these classifications by adoption through ordinance or create their own more stringent classifications.

- MP 27.32 to MP 27.95, Yelm SCL to Vic Mill Road, Class 2
- MP 7.95 to MP 28.07, Vic Mill Road to Mosman Avenue, Class 4
- MP 28.07 to MP 28.48, Mosman Avenue to Fourth Street, Class 5
- MP 28.48 to MP 29.23, Fourth Street to ECL, Class 4

SR 507 is a Highway of Regional Significance (Non-HSS). It is not of statewide significance. This means adopted level-of-service thresholds are set by the Thurston Regional Planning Council (MPO/RTPO) jointly with WSDOT. Also, through GMA, the threshold can be urban rather than rural for cities with less than 5,000 population (federal urban threshold that WSDOT typically uses).

SR 510 is within the incorporated city limits of Yelm between milepost 14.41 and milepost 15.67. SR 510 has a state functional classification of R2 which means it is a Rural-Minor Arterial. SR 510 has the following highway access management classifications between mileposts within Yelm:

- MP 14.41 to MP 15.20, Yelm WCL to Cullens Street, Class 4
- MP 15.20 to MP 15.67, Cullens Street to Jct SR 507, Class 5

SR 510 is also a Highway of Regional Significance (Non-HSS) and is not of statewide significance. Again, TRPC jointly with WSDOT sets the level-of-service threshold for Regionally Significant State Highways (Non-HSS).

SR 510 Yelm Loop Phase 1 (SR 510 Spur) is a two-lane highway that extends from the intersection of SR 510 and Mud Run Rd southeast to Cullens Rd NW. Phase 2 will extend from Cullens Rd NW to the intersection of SR 507 and 170th St SE.

Estimate of Traffic Impacts to state-owned facilities resulting from

their land use assumptions

Traffic impact analysis would be provided by the City of Yelm or their consultant to address concurrency issues. This analysis would include state highway facilities even though HSS state highways are exempted and Non-HSS state highways are silent about concurrency. WSDOT has provided prior comments for City of Yelm comprehensive plan updates.

State Transportation System Improvements Needed to Meet Demand

The traffic analysis for the comprehensive plan would have to first identify if there are any existing and future deficiencies based upon adopted LOS thresholds (TRPC jointly with WSDOT), and provide recommendations for system improvements. Those recommendations could be incorporated into subsequent State Highway Transportation System Plans, Local and Regional TIP lists, etc. The current 2007-2026 State Highway Transportation Plan (HSP) identifies the following conceptual solutions within City of Yelm incorporated limits:

- Appendix J Solutions: 2007-2026 HSP Implementation Strategies
 - Tier II: Moderate to higher cost projects with potential network benefits
 - SR 510/Burnett Rd to SR 507 - Two Way Left Turn Lane and Sidewalk, MP 11.81 to MP 13.07
 - Tier III: Higher cost projects with corridor-wide benefits
 - SR 510/Yelm Loop - New Alignment Y-3, MP 10.75 to MP 13.07
- Appendix K Solutions: Requires Further Analysis
 - SR 507/South Thurston County Subarea – Roadway Network Study
 - SR 507/Yelm Loop - New Alignment Y-2
 - SR 510/Yelm Loop - New Alignment Y-1, MP 10.75 to MP 10.76
 - This improvement has been completed.
- Appendix L: Locations that Require Further Analysis
 - SR 507 from Lewis/Thurston county Line to Thurston/Pierce County Line, MP 5.44 to MP 30.67

Adopted Level-of-Service Standards for State-Owned Highways

All state highways have an adopted Level-of-Service D. The City of Yelm Road Adequacy Policy (Level of Service Standard) is included with all Transportation Goals and Policies in Yelm/Thurston County Joint Comprehensive Plan. See Goal 2.1 and Policy 2.1.