

PROJECT MEMO



TO: Kim Mahoney
FROM: Nicole Stickney
Tacoma - (253) 383-2422
DATE: November 6, 2024
PROJECT NO.: 2230242.30
PROJECT NAME: Orting Comprehensive Plan Update
SUBJECT: Proposed Additional Changes to the draft Comprehensive Plan

INTRODUCTION

In this memo we document the small set of additional proposed changes to city’s Comprehensive Plan document. These changes are shown in the Comprehensive Plan Update “final draft” document dated November 1, 2024 (typically with gray highlights for easy identification).

The proposed changes are the result of feedback received from agencies, staff, and members of the public per:

- A public hearing held on October 7, 2024 by the Planning Commission
- SEPA environmental review
- Review by the Puget Sound Regional Council (pre-certification)¹
- Comments from City Staff on the Transportation Element (received following preparation of the Planning Commission’s packet)
- Comments included in the attached Comment Matrix (note: some edits were made to earlier drafts in response to comments; this was dependent on timing)

To date, no comments have been received from state agencies (other than DNR) and a letter from Commerce may still be anticipated by mid-November (in accordance with the state mandated 60-day review period which was initiated on September 16, 2024).

PROPOSED CHANGES AND EDITS

Table 1: Proposed Changes and Edits to the Introduction, Land Use Element, Housing Element, Capital Facilities & Utilities Element and the Natural Environment Element

Proposed Change	Discussion
On Page I-2 we updated the graphic, adding the following to the description about the goals and policies in the Natural Environmental Element: “and information about environmentally Critical Areas”	Per DNR comments.
On Page I-12 we revised “natural hazard mitigation” to instead say “natural and geologic hazard mitigation.”	Per DNR comments.
On page LU-2 we corrected the typo about employment figures (the wrong year was listed)	PSRC commented “the city should ensure the final plan uses land use assumptions throughout that are substantially consistent

¹ State law requires PSRC to certify local comprehensive plans for consistency with VISION 2050, the Regional Transportation Plan, and transportation-related planning requirements. Jurisdictions must have a certified or conditionally-certified plan to be eligible to compete for regional transportation funds.



	with the adopted countywide growth targets. There are currently inconsistencies in the draft, including the employment growth target in the land use element (page LU-2).”
On page CFU-9 we corrected the name of the Pierce County Comprehensive Flood Hazard management Plan	Comment from Pierce County Public Works
<p>On page CFU-10 and CFU-14 we updated the number of PSE customers for electrical, gas service.</p> <p>We also added the following description regarding electrical service:</p> <p><i>“The City of Orting is mainly served from one 115/12kV distribution substation, namely Orting substation. This substation, with circuit ties to several adjacent substations included a well-connected transmission backbone system, is currently serving the city and surrounding population. The electrical system can be expanded as the area load develops. The timing of any future capacity additions is largely dependent on the development growth of the City, as well as any reliability-related improvement work that would be needed.”</i></p> <p>We also added the following description about natural gas service:</p> <p><i>“supply mains range from 4”-20” to 2”-20”. PSE currently operates one 2’ high-pressure natural gas main within the City.”</i></p>	Puget Sound Energy comments
On page CFU-12 we edited Table CFU-1 regarding capacity of the electrical system. (No Gray highlights are shown)	Puget Sound Energy comments
On page CFU-13 we corrected the project information about the new 12kV distribution circuit (project was completed)	Puget Sound Energy comments
On page NE-1 we added <i>“This element discusses natural features, environmentally critical areas, geologic hazard areas, critical aquifer recharge areas, fish and wildlife habitat conservation areas, flood hazard, topography and soils, climate, hazard mitigation planning, lahar preparedness, and wildfires.”</i>	Staff comment (and relates to DNR comments).
We added an Appendix, “Appendix III: Housing Data and Supplemental Analysis” to assess potential Racially Disparate Impacts and Displacement Risk in Orting. Exclusion is also addressed. No changes were made to proposed new policy language addressing these themes, as these topics were already sufficiently covered.	PSRC commented: “Analysis of racially disparate impacts, exclusion, and displacement should be included in the draft plan or an accompanying housing analysis. Commerce provides guidance on how to approach analysis of racially disparate impacts. PSRC’s Community Profiles include Racially Disparate Impacts measures that may be helpful.”



<p>On page NE-21 we added language to policy NE 4.1: “including native vegetation and tree canopy.”</p>	<p>PSRC commented: “The plan includes a policy to encourage use of native vegetation. It should also include a policy to protect and restore tree canopy.”</p> <p>This relates to MPP-EN-9 and MPP-EN-13.</p>
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The PSRC also commented: “The city should clarify the capacity for housing to meet various income levels. In the draft plan, ADUs are included as providing capacity for housing under 80% AMI. Guidance from Commerce considers ADUs as moderate income (80->120% AMI) for higher-cost communities. All central Puget Sound cities are considered higher-cost communities. The plan must also demonstrate capacity for allocated emergency housing needs.”

We have not made any changes based on this comment. Instead, we supplemented the discussion in *Appendix I: Land Capacity Analysis* to provide a rationale for our approach in using Commerce’s guidance for “moderate-cost communities.”

We also received a comment from PSRC relating to capacity for Emergency Housing. In the forthcoming 20 year planning period Orting needs to be able to accommodate just 14 Emergency Housing beds. We added a footnote (footnote 7) to page H-14 in the Housing element to explicitly list out where these uses are allowed in the city; this information should satisfy this requirement.

Table 2: Proposed Changes and Edits to the Transportation Element

Proposed Change	Discussion
Page T-1: we added that Kansas St SW is also a significant arterial.	Correction from Staff
Page T-2: we added the length of roadways and description of the different road surface types in the City.	This is useful information found in the city’s Pavement Management System document, which we added for useful context.
Page T-3: added the name “Emergency Evacuation Bridge” and added a sentence about mitigation projections to SR 162 due to surrounding development (including at Tehaleh).	Staff Comments
Page T-8: we corrected the text to show that intersection P operates at LOS F (As shown in the figure)	Correction from Staff
Page T-15: we moved the reference to water/ sewer/ stormwater system improvements to the footnote. Removed “Calistoga Street” project (it is not in the TIP)	Staff comment / correction



<p>Page T-16: we updated all project descriptions to match what is shown on the STIP. Additionally we added italicized statements such as “Both Orting and WSDOT are awaiting NEPA approval before continuing with the project” For the Whitehawk Blvd. Extension project. We updated details for the Orting Foothills Trail Realignment and Safety project.</p>	<p>Staff comment; we accessed STIP project descriptions from the WSDOT website at https://wsdot.wa.gov/business-wsdot/support-local-programs/delivering-your-project/statewide-transportation-improvement-program-stip</p>
<p>Page T-17: we corrected the completion date for the Emergency Evacuation Bridge System</p>	<p>Staff correction</p>
<p>Page T-22: minor edit about project lists</p>	<p>Staff correction</p>
<p>Page T-23: we added the phrase “... <i>and would require WSDOT assistance on SR 162.</i>” For the Harman Way and Kansas Street discussion. We also added “<i>The district is also looking to construct an additional school buildings off of SR 162 across from the Whitehawk Blvd. intersection, which may result in the elementary school being relocated, which would reduce the pick-up/drop off traffic at the high school. This is awaiting the school district bond measure passing.</i>”</p>	<p>Staff comment</p>
<p>Page T-24: we added details about the city’s crosswalk safety program and revised the statement about bicycle lanes to only include Calistoga Street W. We added a reference to the City’s Main Park Master Plan regarding planned changes to the Foothills Trail.</p>	<p>Staff comments</p>
<p>Goal T.4: added a definition of Complete Streets Infrastructure (footnote) based on OMC 8-10-4</p>	<p>Staff comment.</p>
<p>Table T-7: added additional detail and information based on exiting city documents</p>	<p>PSRC commented “The city must identify projects and programs, including roadway projects, non-motorized projects, and system maintenance, necessary to meet transportation demands. The plan currently includes only roadway projects in the 2044 Improvement Program list. The plan must include a complete project list, including non-motorized and maintenance projects. Information on these requirements is provided in Commerce’s Transportation Element Guidebook”.</p>
<p>Under the heading “Funding the Transportation Vision” we added text:</p>	<p>PSRC commented, “The Growth Management Act (RCW 36.70A.070(6)) requires that local comprehensive plans include a multiyear transportation financing plan for how the</p>



<p><i>“In addition, the city’s Pavement Management System (SCJ Alliance, 2024 or as amended) and the ADA Transition Plan (2024 or as amended) are incorporated into this Plan by Reference.”</i></p>	<p>jurisdiction will meet the mobility needs identified for the planning period. The plan includes a list of transportation investments and estimated costs. It includes a list of funding sources but should also include estimated probable revenues available to the city and an analysis of the sufficiency of funding resources compared to estimated costs identified. Further guidance on how to address the financial analysis in the plan can be found in the Department of Commerce’s Transportation Element Guidebook, pages 202-212.”</p>
<p>Table T-7: added into sourced from the 2024 Pavement Management System (PMS) Plan by SCJ Alliance, 2024</p>	<p>PSRC commented, “The plan should include at least a conceptual plan for maintenance in the 20-year project list and financing plan. PSRC’s Transportation Element Guidance provides information for developing a project list.”</p>
<p>Modification to Policy T 1.1</p>	<p>City staff edit.</p>
<p>Modification to Policy T 1.30</p>	<p>PSRC commented, “The plan correctly states that SR 162 is a Highway of Regional Significance. It should clearly identify the level of service standard for SR 162 (LOS D). Policy T1.30 states that the standard for SR 162 is LOS E through part of Orting.”</p>
<p>Modification to Policy T 1.8</p>	<p>PSRC commented, “The plan should include a policy to prepare the transportation and other systems for emergencies.”</p>

Anticipated future meetings and processing includes:

- **November 18, 2024:** Planning Commission will hold a special meeting to consider rendering a recommendation to the City Council to approve 2024 Comprehensive Plan & implementing code changes
- **November 20, 2024:** City Council will conduct a study session 2024 Comprehensive Plan Update project & implementing code changes and consider the Planning Commission’s recommendation to approve the plan and proposed changes to the Orting Municipal Code (OMC)
- **December 11, 2024:** City Council will hold a public hearing adopt the 2024 Comprehensive Plan Update and proposed changes to the Orting Municipal Code (OMC) at a regular meeting.

After the City Council adopts the Comprehensive Plan update and changes to the Orting Municipal Code by Ordinance, the action is subject to an appeal period. Furthermore, the City will need to transmit the Plan to the Puget Sound Regional Council for Plan Certification and to Commerce per GMA statute.

NS/ns

c: Scott Larson – City of Orting
Wayne Carlson, Anisa Thaci - AHBL

Attachment

City of Orting Comprehensive Plan Update Project
Comments and Responses

#	Date Received	Name	Element or Topic	Version	Comments	Response
<p>*Notes that comments were received were through an anonymous comment form provided on the City's Comprehensive Plan website. The purpose of the anonymous comment form was to encourage those who may otherwise not have wanted to provide a comment to feel comfortable doing so. Due to the responses being anonymous, we are unable to respond to those individual comments, but will instead provide our responses for public view on the City's Comprehensive Plan Update website.</p>						
1	4/18/2024	*Anonymous	Transportation	N/A	Additional infrastructure to ease the commute in and out of Orting. Widen the roads or add additional routes if possible	Thank you for your comment. The Transportation Element is in the process of being updated and will identify existing deficiencies and will propose goals and policies for addressing the identified deficiencies.
2	4/18/2024	*Anonymous	Parks and Recreation/ Natural Environment	N/A	I would love to see a larger and improved off leash dog park / off leash dog area. Idaho has a large dog park with grass, plus "beach" area that goes down to the river. Steilacoom dog park is massive and such a great place with restrooms, playgrounds and trails. Hounds Hollow dog park in Bonney Lake has turf, an agility course and wooded trails. As his community continues to grow, I'd love for it to be more dog friendly and for the residence to have access to additional off leash dog park(s)/areas or a massive improvement to what we have and increase its size.	Thank you for your comment. The City recently completed an Updated Parks, Trails, and Open Space Plan in 2022, which provides goals and policies for existing and future parks and recreation needs.
3	4/19/2024	*Anonymous	Parks and Recreation	N/A	Add pickleball courts in the main park or any park in Orting for citizens to use.	Thank you for your comment. The Draft Orting Main Parks Master Plan includes the proposed addition of multiple pickleball courts adjacent to the proposed tennis courts. More information on the Main Parks Master Plan can be found here: https://www.cityoforting.org/government/project-updates/main-parks-master-plan
4	5/30/2023	Casey Twiggs - Tacoma-Pierce County Affordable Housing Consortium	General Update Process / Housing	Initial Draft	<p>I represent the Tacoma-Pierce County Affordable Housing Consortium and I am tracking and mapping where each jurisdiction is in the process to update their Comprehensive Plan for 2024. I am trying to get a hold of someone who can answer a couple of simple questions regarding Orting's update progress. Can you or anyone in the Planning Commission answer these questions or forward me to someone who can? I have not been able to get in touch with the Planning Department.</p> <p>These are my questions: 1) What stage of the update process is Orting in currently? 2) Are there any amendments or proposed amendments related to affordable housing?</p>	Thank you for your comment. Orting is currently in the process of drafting the Comprehensive Plan and conducting additional public engagement to receive feedback on proposed changes. The SEPA public comment period for the Comprehensive Plan Update is anticipated to be September 9-23. A public hearing for the Draft Comprehensive Plan will be held on October 7th. Proposed changes related to affordable housing include those required by the recent updates to the Growth Management Act (GMA) and Pierce County Countywide Planning Policies. Some of the proposed changes include a new policy (H4.1), stating, "Review and streamline development standards and regulations to advance their public benefit, provide flexibility, and minimize costs to housing."
5	3/1/2024	Genevieve Rigler (WSDOT)	General Comment	Initial Draft	<p>WSDOT Olympic Region is proactively reviewing documents for the Comprehensive Plan Periodic Update and meeting with jurisdictions. We would appreciate if you could share when you anticipate releasing your DS/DNS, Transportation Chapter, Land Use Chapter, and Capital Facilities Plan documents for public comment. Knowing ahead of time will ensure that we can allocate adequate time to review your documents.</p> <p>We are finalizing a reference document for jurisdictions to use to understand WSDOT's role and priorities throughout the update process and we will send this to you once it is finished. Lastly, if you have an email notification system for updates on your comprehensive plan, please add our team email (ORPlanview@wsdot.wa.gov).</p>	Thank you for your comment. The SEPA public comment period for the Comprehensive Plan Update is anticipated to be September 9-23. A public hearing for the Draft Comprehensive Plan will be held on October 7th. Your team email (ORPlanview@wsdot.wa.gov) has been added to our Comprehensive Plan Update list.
6	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>On behalf of Puget Sound Energy (PSE), I am reaching out to convey our thoughts for your consideration as part of the periodic update to the comprehensive plan and development regulations under the Revised Code of Washington (RCW), specifically Chapters 36.70A and 43.21C. The attached spreadsheet contains suggested language as it relates to customer programs and our shared climate goals. In the attached, you will find 7 tabs grouped by category. At PSE, we recognize that climate change is one of the biggest existential threats facing our planet today. As one of the largest producers of renewable energy in the Pacific Northwest, PSE has been an early leader in addressing climate change and investing billions in renewable resources and energy efficiency for homes and businesses. Now, PSE is on the path to meet the current and future needs of its customers and to deliver on the requirements to decarbonize operations and serve its customers and communities equitably. This transition is unprecedented in terms of the magnitude of the change and the accelerated time frame in which it must be achieved. By working together, we can successfully drive towards our shared clean energy goals.</p> <p>PSE looks forward to providing input as the comprehensive plan items are discussed in more detail. Together, we can reduce emissions and keep energy safe, reliable, and affordable.</p>	Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.

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7	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Energy Equity: <i>"Partner with PSE to promote financial assistance and discounted billing programs for income qualified residents in order to ensure that the most vulnerable are not disproportionately impacted by the State's clean energy transition."</i></p> <p>PSE's financial assistance and discounted billing programs include the following:</p> <p>PSE's Bill Discount Rate (BDR): Our BDR program provides income qualified customers with ongoing help on their monthly energy bill. Depending on household income and size, customers can save 5% to 45% a month on your bill.</p> <p>PSE Home Energy Lifeline Program (HELP): PSE provides qualified customers with bill-payment assistance beyond the Washington state LIHEAP program. Customers do not need to owe a balance on their PSE bill to apply.</p> <p>LIHEAP Program: This government program provides financial assistance so eligible households can maintain affordable, dependable utility services and avoid disconnection. PSE can assist with eligibility requirements and applications.</p> <p>The Salvation Army Warm Home Fund: Administered by the SA and funded by voluntary contributions from PSE customers, employees, and investors. The Warm Home Fund provides short-term, emergency bill payment assistance to PSE customers facing financial difficulties.</p> <p>Payment Arrangements: PSE will work with customers to produce a manageable payment schedule with a realistic timeline for up to 18 months.</p> <p>Budget Payment Plan: PSE provides customers with a predictable average monthly payment to reduce bill fluctuation and avoid unplanned high bills during winter heating months.</p> <p>Home Weatherization Assistance: This program provides free upgrades for single-family homes, manufactured homes or eligible apartment buildings. Upgrades can include insulation, duct sealing and much more.</p> <p>Energy Efficiency Boost Rebates: PSE offers higher rebates on energy-efficient upgrades to income-qualified customers.</p> <p>Low-Income Eligible Community Solar: This no cost program enables bill savings of up to \$40 per month for income eligible customers.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>
8	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Electric Vehicles: <i>"Support EV charging infrastructure throughout the community in order to support the decarbonization of our transportation sector."</i></p> <p>PSE's Up & Go EV Charging programs include the following:</p> <p>PSE Up & Go Electric for Public: PSE helps organizations easily and affordably install public charging for all EV drivers.</p> <p>PSE Up & Go Electric for Fleet: PSE empowers businesses, municipalities and more with electrifying their fleets.</p> <p>PSE Up & Go Electric for Multifamily: PSE brings pole charging to multifamily properties to attract new residents and keep existing ones.</p> <p>PSE Up & Go Electric for Workplace: PSE brings charging to workplaces so employees can electrify their commutes.</p> <p>PSE Home Charging: PSE provides rebates and incentives for the installation of home EV charging stations.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>
9	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Energy Efficiency: <i>"Partner with PSE to promote energy efficiency programs and initiatives" and "Expedite permitting processes related to energy efficiency upgrades."</i></p> <p>PSE's Energy Efficiency Charging programs include the following:</p> <p>Home Energy Assessment: PSE offers a quick and convenient 3-step process to help customers understand and control their home's energy usage.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>

					<p>Energy Efficiency Rebates:</p> <ul style="list-style-type: none"> • Appliance program • Electric hybrid heat pump water heaters • Smart thermostats program • Weatherization program • Windows, water heat and space heat programs • Home weatherization assistance • Insulation <p>Other PSE Energy Rebates:</p> <ul style="list-style-type: none"> • EV chargers • New construction <p>Clean Buildings Accelerator: PSE assists customers with complying with Washington’s Clean Buildings Law (HB 1257, 2019).</p>	
10	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Green Options: <i>"Partner with PSE to promote local investments and customer enrollment in clean energy projects and programs in order to achieve clean energy goals."</i></p> <p>PSE's programs related to Green Options include the following:</p> <p>Green Power: PSE customers can voluntarily contribute to PSE investments in renewable energy projects in the Pacific Northwest.</p> <p>Solar Choice: PSE customers can voluntarily purchase solar energy from independent sources through PSE.</p> <p>Carbon Balance: PSE customers can voluntarily purchase carbon offsets from local forestry projects through PSE.</p> <p>Community Solar: PSE customers can voluntarily contribute to solar projects of their choice installed on such facilities as local school and community centers.</p> <p>Renewable Natural Gas: PSE customers can voluntarily purchase blocks of RNG to lower than carbon usage and support the development of locally produced RNG.</p> <p>Green Direct: This program is offered to local municipalities and corporations seeking to reduce their carbon footprint by investing in large scale renewable energy projects. This program is currently full.</p>	Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.
11	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Demand Response - Energy Management: <i>"Partner with PSE to promote and support programs designed to decrease load on the grid during times of peak use."</i></p> <p>PSE's programs related to Demand Response - Energy Management include the following:</p> <p>Time of Use (TOU) Program: PSE's current pilot program uses variable 24 hour pricing to incentivize customers to use less power during times of peak demand.</p> <p>Flex Rewards: This program encourages and financially incentivizes voluntary reduction in energy use during peak demand.</p> <p>Flex Smart: This program financially rewards customers for allowing PSE to make remote minor adjustments to thermostats during periods of high peak load and demand.</p> <p>Flex EV: This program incentivizes EV charging during off-peak hours.</p>	Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.
12	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Grid Modernization & Infrastructure: <i>"Partner with PSE to effectively meet rapidly increasing electrical demand as the City and region work to achieve a Clean Energy Transition by adopting codes that support siting existing and new technologies."</i></p> <p>PSE's New Carbon Free Electrical Generation & Energy Storage Systems include the following:</p> <p>Wind and Hybrid Wind (co-located wind and battery): A variable source of power representing approximately 30% of PSE's future electric resource need by 2030.</p>	Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.

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Solar and Hybrid Solar (co-located solar and battery): A variable source of power representing approximately 16% of PSE's future electric resource need by 2030.

Utility-Scale Battery Energy Storage Systems (BESS): A technology that will allow energy to be stored for future use representing about 22% of PSE's future electric resource need by 2030. Types of energy storage technology include:

- Chemical (e.g., Lithium-Ion Iron-Air)
- Thermal (e.g., carbon, molten salt)
- Gravity (e.g., water pumping, mechanical)

Variable generation sources (wind & solar) require large scale **Battery Energy Storage Systems (BESS)** to be fully utilized since the sun goes down when demand increases and wind often fades when most needed; such as during extremely cold weather. Batteries maximize electrical production from variable generation sources, help meet periods of peak demand, and provide greater reliability for the grid.

13	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Grid Modernization & Infrastructure: "<i>Expedite the local permitting and approval process in order to maintain grid capacity and reliability.</i>"</p> <p>PSE's New and Upgraded Transmission Lines, Substations, and Distribution Lines include the following: New regional transmission lines are needed to serve new utility scale clean energy resources, such as wind and solar.</p> <p>New local transmission lines are needed to meet increasing local demand due to growth, EV's, and electrification of the heating sector (e.g., Sammamish to Juanita line in Kirkland).</p> <p>Transmission upgrades are needed to meet increasing local demand (e.g., Energize Eastside line in Redmond, Bellevue, Newcastle, and Renton upgraded from 115kv to 230kv) due to growth, EVs, and electrification of the heating sector. In order to assure continued capacity and reliability, new and larger substations will be needed to meet growing energy needs due to growth, EVs and electrification of the heating sector.</p> <p>electrification of the heating sector.</p> <p>PSE proposes the following language related to Grid Modernization & Infrastructure: "Promote and support the growth of customer owned distributed energy resources."</p> <p>Behind the Meter - Distributed Energy Resources (DER) Customer Connected Solar: PSE assists customers with information and resources for installing residential solar projects and how to apply for interconnection and net metering with PSE.</p> <p>Battery Walls: PSE offers installation guidelines and a process whereby customers can report battery installations. Host An Energy Project: Community partners can get paid to lease space to PSE to develop distributed solar and/or battery storage projects.</p> <p>Distributed Renewables: PSE supports the development of commercial customer-owned renewable energy projects that generate between 100 kilowatts and 5 megawatts to interconnect to the PSE electrical distribution grid.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>
16	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Grid Modernization & Infrastructure: "<i>Support ongoing vegetation management in order to maintain system reliability.</i>"</p> <p>PSE's Vegetation Management strategies include: Many cities are pursuing aggressive urban forestry programs in order to beautify their community, reduce heat islands, and to provide carbon offsets. Such policies should be balanced with the need to protect electrical system reliability around overhead lines.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>

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17	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Grid Modernization & Infrastructure: "Pursue public-private partnership to seek funding sources to accelerate clean energy projects. "</p> <p>PSE's Public Funding strategies include: Recent state and federal legislation, including the IIJA and IRA, have unlocked public funding for climate and environmental benefit. PSE is aggressively pursuing all applicable funding opportunities to support lower customer bills, reduced power costs, and investments in the grid and clean energy. PSE is also supporting municipalities, tribes, and non-profits in their applications for public funding.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>
18	4/23/2024	David Parker Brown (PSE)	Future Climate Element		<p>PSE proposes the following language related to Wildfire Preparedness: "Support PSE's wildfire mitigation efforts including electric system upgrades, year-round vegetation management, and fire weather operational procedures. Work closely with utilities and local fire departments to lessen the risk and impact of wildfires. "</p> <p>PSE's Wildlife Mitigation strategies include the following: Situational Awareness: PSE evaluates the condition of the electric system, as well as the environment around it, using real-time weather data, wildfire risk modeling and pre-wildfire season inspections. Strengthening the electric system: PSE regularly maintains and updates the electric system to provide safe and reliable power to our customers. In areas of high wildfire risk, we identify maintenance and improvement activities that will further reduce the risk of wildfire, including vegetation management, equipment upgrades, and in some cases, moving power lines underground.</p> <p>Operational Procedures: During wildfire season, PSE may change some device settings or implement operational procedures to reduce the risk of wildfire. In the future, PSE may proactively turn off power during high wildfire risk conditions to help prevent wildfires. This is called a Public Safety Power Shutoff (PSPS) . Emergency Response: During an emergency, including an active wildfire, PSE will coordinate with local emergency officials and may implement emergency response procedures. This may include turning off power at the request of emergency officials for public and first responder safety.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>
19	4/23/2024	David Parker Brown (PSE)	Future Climate Element	N/A	<p>PSE proposes the following language related to Gas Conservation & Decarbonization: "Evaluate the potential for renewable, recoverable natural gas in existing systems. "</p> <p>PSE's Renewable Natural Gas Production strategies include the following: Utilizing wastewater facility, landfill, or similar system.</p>	<p>Thank you for your comment. This comment may be further addressed in a future Climate Element (required by 2029), which is outside the scope of this update. The 2024 Comprehensive Plan Update will not include a Climate Element but will have goals and policies incorporated throughout the Plan in other elements.</p>
20	8/9/2024	*Anonymous	Transportation	N/A	<p>Orting needs more public transportation. Note: This comment is not a direct quote. This is a summary of general discussions had with attendees/general comments received at the 8/9/2024 Comprehensive Plan Open House.</p>	<p>Thank you for your comment. The Comprehensive Plan Update includes updates to the Transportation Element including the following related to encouraging multiple forms of transportation options: <i>"Goal T 8: Ensure preparedness and flexibility in the transportation network for changes in transportation technologies and mobility patterns."</i></p> <p><i>"Policy T 1.8: Maintain and improve the network of highways, streets, and roads that moves people, goods, and services safely and efficiently; minimizes social and environmental impacts; and supports various modes of travel."</i></p> <p>The existing Transportation Element includes the following goal, proposed to remain: <i>"Goal T1: Maintain a transportation system that accommodates the separation of through and local traffic, provides adequate internal circulation, and interconnects effectively to the regional highway, non-motorized, and public transportation systems is responsive to the mobility needs of City businesses and neighborhoods, and guides future developments."</i></p>

City of Orting Comprehensive Plan Update Project

Comments and Responses

21	8/9/2024 *Anonymous	General Comment	N/A	No more growth within the City. Note: This comment is not a direct quote. This is a summary of general discussions had with attendees/general comments received at the 8/9/2024 Comprehensive Plan Open House.	Thank you for your comment. Per the Puget Sound Regional Council (PSRC) projections, the population of Orting is anticipated to increase, with an estimated population of 9,550 persons by 2044. Due to the growth targets for cities across Washington state (including Orting), the City must properly plan for projected growth. The Comprehensive Plan Update provides goals and policies for sustainable growth that align with the City's character and vision, including (but not limited to): <i>"Goal LU 1: Be true to the vision for Orting by encouraging the expansion of its economic base while retaining elements of its agricultural heritage "</i> <i>" Policy LU 1.9: Review proposed commercial and public developments (including new construction or major renovation and alteration) according to the Architectural Design Review process to ensure consistency with the adopted Orting theme of "Turn of the Century Western and Victorian," a style of building, architecture, and exterior lighting used in Orting and the area from statehood in 1889 through World War I. Evaluation of a project will be based on the quality of its design and its relationship to the natural setting of the valley and mountain settings."</i>
22	8/9/2024 *Anonymous	General Comment	N/A	Growth is inevitable and is something that people need to adapt to. Note: This comment is not a direct quote. This is a summary of general discussions had with attendees/general comments received at the 8/9/2024 Comprehensive Plan Open House.	Thank you for your comment.
23	8/9/2024 *Anonymous	General Comment	N/A	No more growth within the City. Note: This comment is not a direct quote. This is a summary of general discussions had with attendees/general comments received at the 8/9/2024 Comprehensive Plan Open House.	Thank you for your comment. Per the Puget Sound Regional Council (PSRC) projections, the population of Orting is anticipated to increase, with an estimated population of 9,550 persons by 2044. Due to the growth targets for cities across Washington state (including Orting), the City must properly plan for projected growth. The Comprehensive Plan Update provides goals and policies for sustainable growth that align with the City's character and vision, including (but not limited to): <i>"Goal LU 1: Be true to the vision for Orting by encouraging the expansion of its economic base while retaining elements of its agricultural heritage "</i> <i>" Policy LU 1.9: Review proposed commercial and public developments (including new construction or major renovation and alteration) according to the Architectural Design Review process to ensure consistency with the adopted Orting theme of "Turn of the Century Western and Victorian," a style of building, architecture, and exterior lighting used in Orting and the area from statehood in 1889 through World War I. Evaluation of a project will be based on the quality of its design and its relationship to the natural setting of the valley and mountain settings."</i>
24	8/9/2024 *Anonymous	Parks and Recreation/ Natural Environment	N/A	Desire for more nature/recreational opportunities within the City Note: This comment is not a direct quote. This is a summary of general discussions had with attendees/general comments received at the 8/9/2024 Comprehensive Plan Open House.	Thank you for your comment. The City recently completed an Updated Parks, Trails, and Open Space Plan in 2022. Additionally, a Natural Environment Element was added to the Comprehensive Plan, which focuses on protection of existing critical areas within the City. Additionally, the City is in the process of developing the Main Parks Master Plan, which proposes additional amenities including pickle ball courts, a splash pad, playgrounds, relocating foothill trails, and additional amenities. More information on the Main Parks Master Plan can be found here: https://www.cityoforting.org/government/project-updates/main-parks-master-plan
25	8/10/2024 *Anonymous	Maintenance/ Parks and Recreation	N/A	I noticed a new restroom that is being built on the Orting Trail. However, my concern is safety and why the existing bathroom at the park is updated, or at least thoroughly cleaned, and repaired with soap and toilet paper stocked. I'm there almost everyday and the bathroom is disgusting and whomever cleans it is doing a terrible job.	Thank you for your comment. The comment has been noted and sent to the Public Works Department.
26	9/17/2024 *Anonymous	Transportation	Draft for SEPA Environmental Review and Public Comment	Why are we taxed for public transportation when we have no public transportation? Why do we allow so much housing being built without addressing infrastructure particularly 162, I've lived here 22+ years and it has gotten worse and there's been nothing done with the main road in and out. Explain to me why that hasn't been taken care of before we let more people build. Also. Why don't we do like some counties and cities in the Northeast they do not allow anything over 12 feet to be on the roads during rush hour i.e. logging trucks gravel trucks tractor trailers. Why don't we implement something like that.	Thank you for your comment. The Puget Sound Regional Council (PSRC) has developed a regional growth strategy, which has allocated growth targets among various jurisdictions. As for taxing, the local comprehensive plan does not address public transportation taxes.

City of Orting Comprehensive Plan Update Project
Comments and Responses

27	9/18/2024 *Anonymous	Land Use/ Natural Environment	Draft for SEPA Environment al Review and Public Comment	I am concerned to preserve the farmland around Orting. Since farmland is practically irreplaceable, I think the development of the city should seriously consider the impact of development on the surrounding farms. If we could facilitate economic growth through farm related services and agritourism as well as other businesses, we might have the most sustainable plan. Also we should discourage housing options that tend towards the development of slums, such as the use of tiny houses.	<p>The Economic Development Element of the Comprehensive Plan includes a goal (Goal ED 6) that states <i>"Promote regional tourism focused on eco-tourism and agritourism."</i> Additionally, the Land Use Element of the Comprehensive Plan provides goals and policies for sustainable growth that align with the City's character and vision, such as:</p> <p><i>"Goal LU 1: Be true to the vision for Orting by encouraging the expansion of its economic base while retaining elements of its agricultural heritage"</i></p> <p>There is one small community of tiny homes that has been developed in Orting for homeless veterans. No changes are being proposed at this time for tiny homes, but tiny homes can serve multiple purposes and are not exclusively used to address homelessness.</p>
28	9/25/2024 *Anonymous	Transportation / Housing	Draft for SEPA Environment al Review and Public Comment	<p>As highlighted in the survey results, it's clear why so many people love living in Orting: the small-town charm, strong sense of community, and close-knit relationships are what make this place special. However, the very things that draw people to Orting are being jeopardized by unchecked growth and increasing traffic concerns. These issues are also the main reasons many feel compelled to leave.</p> <p>It's essential that we pause the continuation of allowing large organizations to build multi-unit complexes and townhomes that don't serve the long-term interests of our community. Instead, we should promote homebuilding that supports our current and future residents, fostering growth that aligns with Orting's values and unique character.</p> <p>Take, for example, the commute from Orting to Sumner—what should be a 9-mile drive can often take up to an hour due to traffic congestion. This alone highlights the strain our infrastructure is under. The number one priority for our community should be improving our roads and addressing traffic issues. If we don't focus on fixing these problems, the very reasons people love Orting will be eroded by unsustainable growth and lack of infrastructure development. Orting cannot solve the world's problems, but we do have the responsibility to solve our own. With the current rate of growth and lack of proper infrastructure, such as adequate roads, we need to prioritize what Orting needs, not what politicians in Olympia dictate. This is about protecting the future of our town and ensuring it remains a place that reflects the values and desires of its residents, not outside interests.</p> <p>Let's focus on thoughtful growth that preserves Orting's character and addresses the real needs of our community.</p>	<p>Thank you for your comment. Please see responses above regarding growth targets. In order to prepare for this anticipated growth, new 2023 Washington State legislation require cities to provide for missing middle housing and includes new regulations for Accessory Dwelling Units (ADU's) and allowing for higher densities.</p>
29	9/30/2024 Elizabeth Weldin (Pierce County - Planning and Public Works)	Natural Environment	Draft for SEPA Environment al Review and Public Comment	<p>We would like to become a Party of Record for the 2024 Comprehensive Plan Periodic Update.</p> <p>Pierce County appreciates the opportunity to review and comment on Orting's 2024 Comprehensive Plan update. Pierce County recommends that the City of Orting review and reference the Pierce County's 2023 Comprehensive Flood Hazard Management Plan (CFHMP). We look forward to continued coordination with City staff to address flood-related concerns of the Carbon and Puyallup Rivers surrounding the City. On page 9 of Packet 3, the highlighted new section describes Pierce County's planning efforts. The Pierce County flood plan should be titled "Pierce County Comprehensive Flood Hazard Management Plan". The paragraph also lists several proposed projects on the Carbon and Puyallup Rivers near the City of Orting. Pierce County has identified projects for the Puyallup and Carbon Rivers to improve the resilience of the flood risk reduction infrastructure. These projects are in the preliminary planning stages and still require multiple elements and funding before they are ready for implementation, and their benefit can be realized. Please refer to the CFHMP for more information about the County's Carbon and Puyallup River projects. The County recommends coordination between the proposed County and City projects for concurrency in the design and construction. Figure NE-3 on page 48 of Packet 3 does not show the best available data of the potential risk. Please refer to "PC_NHC Verified DFF Floodway" layer on Pierce County's PublicGIS - snapshot below. Based on the County's CFHMP and County staff observations, Figure NE-3 appears to understate the potential hazard and does not include all the available data. We encourage the City of Orting to explore zoning solutions that accommodate the Growth Management Act and regional population growth and housing requirements and avoid the mapped flood hazard and areas of flood risk.</p>	<p>Kim sent a response via email on 10/1: "Confirming receipt, and responding to some of your email's content.</p> <p>We can certainly make an edit in our Natural Environment Element that refers to the County's 2023 Comprehensive Floor Hazard Management Plan as a source of local flood information – we can also edit the reference on page 9 of the third packet to refer to the County's plan as the "Pierce County Comprehensive Flood Hazard Management Plan" and will propose substituting Figure NE-3 with the more updated layer you've provided to our Planning Commission. Given your note about our agencies' continued coordination on flood-related concerns, I've cc'd JC Hungerford and Ryan McBee to this email so they're apprised of this communication.</p> <p>Particular to your note regarding our zoning solution considerations to accommodate growth projections, we have completed a Land Capacity Analysis as a component of our Comprehensive Plan Update and have found sufficient capacity for our assigned growth targets, much of which would occur outside the flood hazard areas. The LCA is appended to our draft Comprehensive Plan if you wish to review it, and it's also been sent to PSRC and Commerce for their review. Finally, I'd like to accept your offer to transmit a copy of the Corps' Draft Feasibility Evaluation study from June 2024 to me; Ryan McBee and JC Hungerford could be included in that email, too.</p> <p>We will regard the County as a party of record to this project and will provide your comments to our Planning Commission and City Council to consider as they continue moving through the adoption process of our Comprehensive Plan."</p>

City of Orting Comprehensive Plan Update Project
Comments and Responses

In June, the U.S. Army Corps of Engineers delivered the Final Draft Jones Levee Feasibility Study to Pierce County. The study looked at four alternatives, with the preferred option being a setback levee. The modeling identified possible flooding impacts on the river's left bank -- the opposite side of the Puyallup River from the Jones Setback Levee. The possible impacts resulted in the estimated project cost of \$45 million or more. Pierce County is reassessing its strategy to address the funding gap and how to deliver the Jones Setback Levee project successfully. Unfortunately, the study is not publicly available at this time. The County would be glad to provide the Draft Feasibility Evaluation study (dated June 2024), upon the City's specific request.

Finally, here are some recent sediment studies of the Puyallup River Basin that may provide some information and insight for future infrastructure planning:

- Channel Change and Sediment Transport in the Puyallup River Watershed | U.S. Geological Survey (usgs.gov)
- Mount Rainier Fluvial Geomorphology and River Sedimentation | U.S. Geological Survey (usgs.gov)

30	10/24/2024	Tricia R. Sears- Washington Geological Survey (WGS) Washington DNR	Natural Environment	<p>For this proposal submitted via Planview, I looked at the proposal and focused on areas related to WGS work. Of note, but not limited to, I look for language around the geologically hazardous areas, mineral resource lands, mining, climate change, and natural hazards mitigation plans.</p> <p>Specifically in this proposal, I reviewed the three documents 20240916 Packet CPU 1, 2, and 3.</p> <p>CPU Packet 1, on page 1-2, suggest adding a reference to critical areas in the Natural Environment category of the diagram of Elements.</p> <p>On page 1-12, the Natural Environment Element has new language proposed and old language with strikethrough. Why is that language being struck?</p> <p>Critical areas are mentioned multiple times in this packet, but geologic hazards are not mentioned. Perhaps add a statement that notes additional information is found in the Natural Environment Element.</p> <p>CPU Packet 2, has no mention of critical areas or geologic hazards.</p> <p>CPU Packet 3, contains the Natural Environment Element. There are two paragraphs to describe the geologic hazard areas. There is no map. Suggest adding a map.</p> <p>Climate and Climate Change is a section on page NE-9 and Hazard Mitigation Planning is a section on page NE -11. There are multiple climate change and hazard related sections included. Nice job on including hazards, hazard mitigation planning, and climate resilience in your comp plan .Suggest putting a description early in the Natural Environment Element that clearly states/summarizes all the hazards identified in the hazard mitigation plan and critical areas identified for Orting. Then notes they will be described in subsequent paragraphs. It could be helpful for the reader.</p> <p>Recognizing the limitations of the current proposals, I want to mention that it would be great for you to consider these in current or future work, be it in your comprehensive plan, development code, and SMP updates, and in your work in general:</p> <ul style="list-style-type: none"> •Consider adding a reference to WAC 365-190-120 geologically hazardous areas for definitions in other areas besides the CAO. In addition, consider adding a reference to WAC 365-196-480 for natural resource lands. •Consider adding a reference to the WGS Geologic Information Portal in other areas besides the CAO. If you have not checked our interactive database, the WGS Geologic Information Portal, lately, you may wish to do so. Geologic Information Portal WA - DNR •If you have not checked out our Geologic Planning page, you may wish to do so. Geologic Planning WA - DNR 	<p>Kim replied to Tricia on October 23, 2024. Response is summarized below:</p> <p>Thank you for your comment. Previous to this Comprehensive Plan update, Orting's Comprehensive Plan did not have a Natural Environment element; that element is an entirely new piece of work this year. The struck through language was previously associated with the discussion under the Land Use element. In place of that language, the Land Use element was discussed more succinctly and language was added as appropriate to describe the Natural Environment element. These comments will also be considered during our Critical Areas Ordinance update process that will be taking place next year. Additionally, no mentions of critical areas or geologic hazards are included in CPU Packet 2, as the packet only included the Land Use and Housing Elements. The discussion of critical areas and geologic hazards has been limited to the Natural Environment element.</p> <p>We will make the following changes in the Natural Environment Element:</p> <ul style="list-style-type: none"> - Incorporate critical areas into the diagram. -Expand the discussion on 1-12 to include mention of geologic hazards. - Add a statment in the introduction that summarizes all the hazards identified in the hazard mitigation plan and critical areas identified for Orting
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INTRODUCTION



Purpose and Intent

This Comprehensive Plan (Plan) for the City of Orting is the long-term vision and plan for managing the city's natural and built environment. This Plan was developed pursuant to provisions of the State of Washington Growth Management Act (Revised Code of Washington Chapter 36.70A). The plan includes policy direction for community and economic development, housing, protection of environmentally sensitive areas, public services, growth, physical design elements, and community character. Serving as the "blueprint" for the next twenty years, this replaces the previous versions of the City's Comprehensive Plan.

The city is required to update its plan periodically to address changing conditions; this plan is the product of the periodic update completed in 2024 and the next periodic update is expected by 2034. Until then, the document may be amended on a yearly basis, but not more than once per year.

Structure

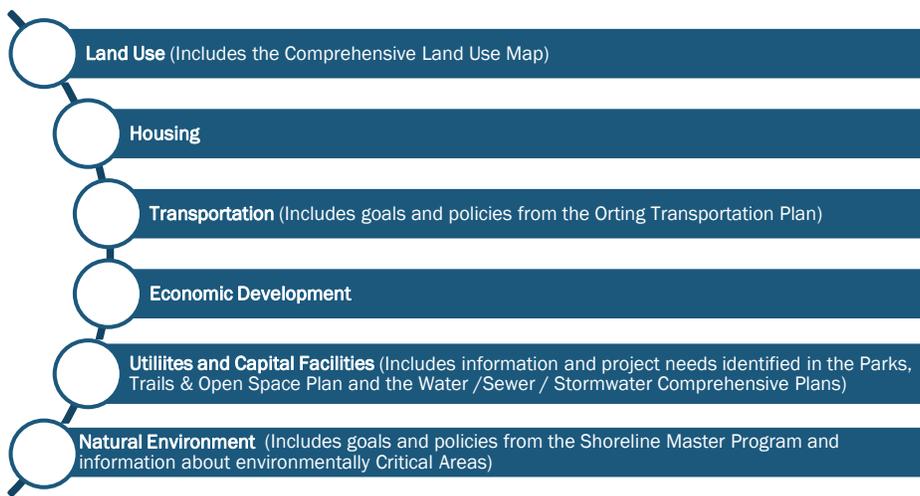
The Orting Comprehensive Plan (Plan) is composed of three basic parts:

1. Introduction, including implementation and amendment policies and procedures;
2. Comprehensive Plan Elements, including goals and policies; and
3. Appendices for each of the Comprehensive Plan elements.



This Introduction section includes a description of the requirements of the Growth Management Act (GMA) and the framework the Act established for planning in the State and Pierce County together with regional planning requirements as overseen by the Puget Sound Regional Council (PSRC). The Implementation and Amendments section describes how the City is to implement and amend existing policies contained in the Comprehensive Plan, and it also describes the requirements of the Land use Regulatory Reform Act (ESHB 1724 Chapter 36.70B RCW). This section also provides some important GMA language regarding concurrency.

The **Elements** provide goals and policies for the following:



Each element begins with a general discussion of its the purpose of the element, provides context with respect relationship to the GMA, and a summary of the issues identified through public involvement. The discussions also include current and forecast data, needs assessments or analyses and conclusions, and as appropriate, references to other source materials or policy documents. Goals and policies that address those issues follow.

The Comprehensive Land Use and Zoning Map gives geographic form to the Comprehensive Plan's land use policies by designating appropriate land use categories for the various areas within the city. on for assumptions in all other elements. The Comprehensive Land Use and Zoning Map gives geographic form to the Comprehensive Plan's land use policies by designating appropriate land use categories for the various areas within the City.

The Plan Element Appendices include current and forecast data, needs assessments or analyses, and conclusions and as appropriate, references to other source materials or policy documents.

What is a Comprehensive Plan?

In 1990, the Washington State Legislature adopted the Growth Management Act (GMA) to provide a basis for local, regional, and state solutions to growth pressures. Since 1990, the GMA has been

amended several times, ~~with many substantial changes occurring in 2021, 2022, and 2023 with myriad changes resulting from legislative work in Olympia. Orting is required to review its Plan and update for consistency with the GMA every eight years. More frequent annual reviews are allowed.~~

~~The GMA requires cities to develop Comprehensive Plans expressing A Comprehensive Plan indicates~~ how the community envisions the city's future, and ~~sets setting~~ forth strategies for achieving the desired vision. A plan has three characteristics.

1. It is **comprehensive**: the plan encompasses all the geographic and functional elements that have a bearing on the community's physical development.
2. It is **general**: The plan summarizes the major policies and proposals of the City, but does not usually indicate specific locations or establish detailed regulations.
3. It is **long range**: the plan looks beyond the current pressing issues confronting the community, to the community's future. Although the planning time frame for this plan is twenty years, many of its policies and actions will affect the City of Orting well beyond that horizon.

Why is a Comprehensive Plan Needed?

Many of the day-to-day decisions made by City officials can have a significant impact on how the community develops and functions. A comprehensive plan coordinates and guides individual decisions in a manner that moves the community towards its overall goals.

RCW 36.70A.020 outlines the GMA goals with which this plan must comply ~~which are. They are as follows:~~

1. **Urban growth.** Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
2. **Reduce sprawl.** Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
3. **Transportation.** Encourage efficient multi-modal transportation systems that ~~will reduce greenhouse gas emissions and per capita vehicle miles traveled and~~ are based on regional priorities and coordinated with county and city comprehensive plans.
4. **Housing.** Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
5. **Economic development** Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.
6. **Property rights.** Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.
7. **Permits.** Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.
8. **Natural resource industries.** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the

conservation of productive forest lands and productive agricultural [lands and](#) discourage incompatible uses.

9. **Open space and recreation.** Retain open space [and green space](#), enhance recreational opportunities, ~~conserve~~ [enhance](#) fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.
10. **Environment.** Protect [and enhance](#) the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
11. **Citizen participation and coordination.** Encourage the involvement of citizens in the planning process, [including the participation of vulnerable populations and overburdened communities](#), and ensure coordination between communities and jurisdictions to reconcile conflicts.
12. **Public facilities and services.** Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time of occupancy and use without decreasing current service levels below locally established minimum standards.
13. **Historic preservation.** Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.
14. **Climate change and resiliency¹.** [Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies under RCW 36.70A.210 and chapter 47.80 RCW adapt to and mitigate the effects of a changing climate: support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.](#)
15. **Shorelines of the state.** [For shorelines of the state, the goals and policies of the shoreline management act as set forth in RCW 90.58.020 shall be considered an element of the county's or city's Comprehensive Plan.](#)

~~In addition to the state goals, the~~The Comprehensive Plan must also be consistent with [regional planning policies as established by the Puget Sound Regional Council \(PSRC\) and with the Pierce County County-wide Planning Policies \(CPPs\)](#)~~2, another GMA mandate~~. The CPPs provide the regional framework for population forecasting and allocation; maintaining an inventory of buildable lands; coordinating level of service standards; and considering how urban growth areas are sized, located, and developed.

Functions of a Comprehensive Plan

A Comprehensive Plan serves many purposes, including policy determination, policy implementation, and communication and education.

Policy Determination - First, the Comprehensive Plan encourages City officials to look at the big picture and to step away from current pressing needs to develop ~~overriding-broad~~ [policy goals for their](#)the community. Second, it ~~creates an environment~~ [provides a setting](#) for the City Council to

¹ [Orting must add an additional element, addressing climate change and comprised of a Climate Resilience sub-element and a Greenhouse Gas Reduction sub-element before a deadline in 2029.](#)

² [Pierce County Ordinance Nos. 2022-46s and 2023-22s](#)

guide its decision-making openly and democratically. The plan serves to focus, direct, and coordinate the efforts of ~~the departments within City government~~ various city departments, by providing a general comprehensive statement of the City's goals and policies.

Policy Implementation – ~~The adoption of a Comprehensive Plan (and the process leading up to it) provides a pathway for a~~ A community can move more effectively toward its to agree to and formalize a set of goals and ~~implement its policies after they have been agreed to and formalized through the adoption of a Comprehensive Plan. After adoption occurs, the~~ The Comprehensive Plan ~~serves is a basic source of as a~~ reference for officials as they consider the enactment of ordinances or regulations affecting the community's physical development (such as a zoning ordinance or a particular rezoning), and when they make decisions pertaining to public facility investments (such as capital improvement programming or construction of a specific public facility). This ensures that the community's overall goals and policies are accomplished by those decisions. The Plan also provides a practical guide to City officials as they administer City codes, ordinances, and programs. This ensures that the day-to-day decisions of City staff are consistent with the overall policy direction established by the Council.

Communication and Education – ~~Because the~~ The Comprehensive Plan is a tool for communicating the City Council's policies, communicates to the public and to City staff the policy of the City Council. This allows the staff, the public, private developers, business people, financial institutions, and other interested parties ~~to~~ can better anticipate what the decisions of the City Council are likely to be ~~on any particular issue~~. As such, the Plan provides predictability. Everyone is better able to plan activities knowing the probable response to their proposals and to protect investments made on the basis of policy. In addition, the Comprehensive Plan ~~can~~ serves to educate ~~the public, the business community, the City staff, and the City Council itself~~ those groups on the workings, conditions, and issues within their City, ~~stimulating~~. ~~This can stimulate~~ interest about the community affairs and ~~potentially increasing~~ increase the citizen participation ~~in government~~.

Orting's Setting and Location

Orting is a vibrant and welcoming small city located near the geographic center of Pierce County, and on the southeast edge of the populated portion of the County, about 20 miles from Tacoma.

Orting was officially incorporated in 1889, the same year that Washington became a state. The original extent of the city was approximately less than a square mile, and annexations occurred in the years 1959 (to the south), 1977, 1988, 1990 and 1991 as shown in Figure I-1. The city is now approximately 2.71 square miles³ (about 1,730 acres) in land area.

³ Source: Washington State Office of Financial Management (OFM); land area excluding lakes and other water areas, based on the 2020 TIGER/Line Shapefiles places (cities) layer with adjustments made over time using OFM's boundary change submissions to the Census Bureau's Boundary and Annexation Survey program

The city is nestled between the Carbon and Puyallup Rivers, in a fertile valley with stunning views of Mt. Rainier. Washington State Route 162 runs through town and connects Orting to its neighbors including the cities of Puyallup and Sumner. Orting is on the outskirts of the Puget Sound region, and benefits from its close proximity to the larger urban area but also lies outside of the hustle and bustle of the larger cities, delighting residents who value the community's size and unique geographic location.

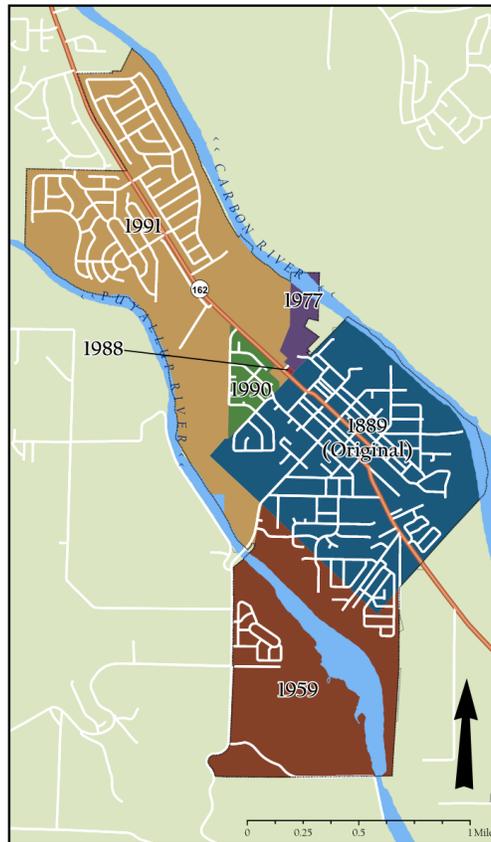


Figure I-1: Annexation History

Is Orting “rural”?

Previous Comprehensive Plans for the City⁴ frequently used the term “rural” to describe the character and feel of Orting. While “rural” can mean different things to different people, the term has a specific meaning under the GMA, and cities are not rural in that context, and so use of that term is now generally avoided.

Instead of using the term “rural” to describe the City of Orting, this plan substitutes other words or emotions that can invoke the community character that was traditionally known as “rural” including:

- Close-knit
- Not rushed or busy; friendly
- Self-Reliant
- Close to Nature
- Not intensively developed
- Rustic or traditional
- Having to do with the Countryside (gardening / farming)

Public Process and Visioning

Orting began planning under the GMA in 1990, one year after celebrating the city’s Centennial. The early process included a community workshop and survey that resulted in a vision statement. Then, as technical analyses were completed, the Planning Commission worked on goals and policies and incorporated implementation actions and strategies that came together in the Comprehensive Plan that was adopted January 11, 1996.

The Later, the first comprehensive GMA-mandated update was completed in 2004, the process of which included open houses and workshops to solicit public outreach and foster communication. Since then, annual updates have occurred in many years, and additional plans have been adopted and/or updated which relate to the Comprehensive Plan including in addition to the creation of a Downtown Orting Vision Plan, an update of the Parks, Trails and Open Space Plan and an updates to the Shoreline Master Program (SMP). The planning process behind each plan involved extensive public outreach.

The Downtown Orting Vision Plan is another plan that involved public outreach and relates to the Comprehensive Plan. In 2008, the community engaged in a downtown visioning process to create specific goals for increasing economic development opportunities and amenities. This was also intended to define public investment strategies for a new library, a new city hall, and a community center. In 2016, the City put these goals to work and formed a citizen committee that collaborated with staff to plan for a new multi-purpose city hall. The new facility was completed in 2020 without any debt and is located in Orting’s downtown.

In 2015, another periodic update process further built upon this existing foundation of public engagement with open houses and a public opinion survey. The City began the comprehensive plan update process (for the 2015-2035 plan) by creating an online public opinion survey to check in with the community on local issues, values, and strategies. Over 120 community members participated, and 86% found the existing vision statement was still relevant. While 63% of participants rated Orting’s quality of life as “excellent” or “above average”, participants shed light on local issues

⁴ Such as but not limited to: 2017 Orting Comprehensive Plan (Ord. No. 2017-1019 and as amended via Ord. No. 2019-1040); 2020 Orting Comprehensive Plan (Ord. No. 2020-1067 and as amended via Ord. No. 2023-1104). These plans additionally contained reference to agricultural activities and farming, including urban agriculture.

requiring attention, such as public safety, education, smart growth, and traffic. Strategies to mitigate these issues informed the 2015-2035 Plan update which included revisions to goals and policies.

Likewise, the 2024 update process continued this tradition of public engagement through a public workshop, "community conversation" booths at local events, and an online survey. The public feedback received during the most recent update consistently raised questions and concerns relating to two key growth constraints: transportation (mobility) problems and the looming lahar hazard.

The Orting Vision

Orting's original vision statement was formulated with public input in 1990. The following Vision statement, which is modified from its original form for the 2024-2044 update, describes what Orting will be at the end of the planning period:

Orting is a cohesive rural community nestled in the Orting valley. Its distinctive natural features include two river corridors and a spectacular view of Mount Rainier. Orting's downtown is its historic center. It should be enhanced as a vital center where all residents come to transact daily commerce and to meet for social activities. Orting should expand its employment base so that young people can choose to live and work in the community. Orting should preserve its pastoral heritage which is rooted in its open spaces, undisturbed ridges, and small scale agricultural establishments. It should preserve the distinctive qualities of its natural amenities, which should be linked through scenic corridors of green along its rivers. Foremost, Orting should preserve its small town character. It should remain a place that is free of urban pressures; where people know their neighbors, take time to tend a garden, and have mutual respect for their fellow citizens.

Orting is a cohesive, small community nestled in the Orting valley featuring two river corridors and a spectacular view of Mount Rainier. Orting's downtown is the historic center, which is enhanced as a thriving location that is popular for meeting daily commerce needs and serves as a gathering point for social activities. **Over the years the city has grown its economic base so that young people can choose to live and work in the community. The pastoral heritage, which is rooted in its open spaces, undisturbed ridges, and small-scale agricultural establishments is preserved. Orting should preserve the distinctive qualities of its natural amenities, which should be linked through scenic corridors of green along its rivers. Foremost, Orting embraces the benefits of a small city and has remained a place where people know their neighbors, enjoy the natural scenery and open spaces, and have mutual respect for their fellow community members.**

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Commented [A1]: Some suggested edits are made. For example, we changed this to not say "employment base"
Employment base = people (workers)
Economic base is broader, and can mean more businesses and working opportunities
Also we try to remove the word "citizens" where possible as citizenship can be a loaded term

Vision Goals

The vision statement is amplified with the following over-arching goals that direct the more specific goals and policies of the plan elements.

- PRESERVE SIGNIFICANT OPEN SPACE AND THE CHARACTER OF THE RURAL LANDSCAPE
- PRESERVE CRITICAL ENVIRONMENTAL RESOURCES
- PRESERVE IMPORTANT AGRICULTURAL LANDS FARMING PRACTICES (WASHINGTON STATE SOLDIERS HOME'S ORTING VETERANS FARM)

Commented [A2]: This wording change is important because preservation of agricultural lands generally runs counter to the roles of cities per the GMA; ag lands are supposed to be in Counties (unincorporated lands)

- ENCOURAGE THE RETENTION & ESTABLISHMENT OF VITAL BUSINESSES WITHIN THE DOWNTOWN
- PROVIDE A VARIETY OF HOUSING CHOICES FOR NEW RESIDENTS
- FOSTER A FINANCIALLY SOUND DEVELOPMENT PATTERN
- PRESERVE A REASONABLE USE OF THE LAND FOR ALL LANDOWNERS
- REDUCE RELIANCE ON THE AUTO & ENCOURAGE ESTABLISHMENT OF PEDESTRIAN AND BICYCLE-ORIENTED DEVELOPMENT
- PROVIDE AFFORDABLE HOUSING
- PROVIDE A PLACE WHERE CITIZENS COMMUNITY MEMBERS CAN BOTH LIVE, AND WORK, AND RECREATE

Commented [A3]: This is rather challenging for many communities like Orting. However, this has been listed in previous versions of the Comprehensive Plan and should be retained as it aligns with regional and state objectives/mandates.

Commented [A4]: This is rather challenging for many communities like Orting. However, this has been listed in previous versions of the Comprehensive Plan and should be retained as it aligns with regional and state objectives.

~~In 2008, the community engaged in a downtown visioning process to create more specific goals for increasing economic development opportunities and amenities. This was also intended to define public investment strategies for a new library, and possibly a new city hall and a community center. The vision also addresses future street improvements and other amenities that will help to make the downtown a destination. Goals include:~~

- ~~• Develop a downtown center with public facilities, gathering places, and private retail attractions~~
- ~~• Locate new downtown parking facilities to support public and business uses~~
- ~~• Increase safe, attractive pedestrian ways linked to the Foothills Trail and parks~~
- ~~• Facilitate the development of new housing in mixed-use projects~~
- ~~• Leverage Orting’s historic character and tourism attractions to create opportunities for business~~

~~In the fall of 2013, the City began the 2015 GMA update process (by creating an online public opinion survey to check in with the community on local issues, values, and strategies. Just over 120 community members participated, and 86 percent found the existing vision statement was still relevant. While 63 percent of participants would rate Orting’s quality of life as “excellent” or “above-average”, participants shed light on local issues requiring attention, such as public safety, education, smart growth, and traffic. Strategies to mitigate these issues have informed the current update, and the revision of goals and policies.~~

Plan Summary

The Comprehensive Plan is informed by the following major findings fundamental issues or facts:

- ~~The Plan is intended to guide Orting’s growth between 2015-2024 and 20352044, – although the Plan references a 2030 planning horizon. This is due to the fact that Pierce Countywide Planning Policies established population and employment targets for all jurisdictions for 2030.~~ The analyses and conclusions regarding land use, transportation and capital facilities capacities are consistent with the City’s view, particularly since it is likely that Orting will achieve substantial build out much earlier. As subsequent annual updates are prepared, more consistency will be provided with the evolving 20-year view.
- ~~City residents have voiced concerns over the existential threat posed by the potential eruption of Mt. Rainier, because Orting is located on the floor of a valley that could be inundated with material that would wash downstream; in the event of a volcanic event there would be a limited period of time to evacuate the community.~~
- Orting residents want the City to retain ~~its a small rural town atmosphere and “rural”~~ character as it grows. Residential development should remain predominantly single-family, with some multi-family development in the mixed-use town center and in close proximity to services.
- The Plan establishes the following development pattern: a central core of mixed-use development in the downtown commercial area of Orting, surrounded by ~~single-family~~ residential development at moderate densities. Other commercial uses and light industrial development may be allowed or encouraged along major arterials ~~(or and in future urban growth areas, if any are designated for Orting).~~
- The mix of land uses in the town center includes small scale retail, restaurants, offices, community facilities and housing in a pedestrian-friendly environment.
- Community health is very important to the City. The City employed the Tacoma-Pierce County’s Healthy Community Planning tools during the 2015 periodic update to increase the Plan’s focus on community health, particularly goals and policies related to physical activity and healthy food. ~~These efforts have been carried forward in the 2024 update.~~
- The Plan calls for a system of recreational trails and parks. A non-motorized system of trails is recommended which link the Foothills Trail in the center portion of the City with more local trails throughout town and along the Carbon and Puyallup Rivers.
- The Plan promotes the benefits of ~~urban agriculture, including maintaining~~ open spaces, ~~fostering the availability of locally-sourced food, providing a source of local food,~~ building social connections, providing recreation opportunities, establishing ~~rural-small-town~~ character, preserving view corridors, and providing employment opportunities for the residents of Orting.
- Transportation needs in Orting ~~range from center around three central themes: (1) adequately accommodating current and~~ potential future traffic volumes on the existing roadways, ~~(2) to the properly configuring~~ the future roadway system, ~~and (3) exploring to~~ the feasibility of ~~future transit services in the Orting area.~~ The Transportation Element addresses transportation issues and links them into a cohesive assessment of Orting’s transportation options and future.
- ~~To maintain the City’s existing small town character, the~~The Plan adopts a level of service standard C/D for its roadway facilities and services.
- The Plan promotes a ~~diversity-variety~~ of housing options within the community, including single-family homes, mixed use housing, ~~duplexes, and~~ manufactured homes, ~~moderate to~~

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high-priced homes at a variety of price levels. This diversity-range of housing types is intended to meet Orting's affordable housing needs, as well as needs of different individuals (such as people living alone or in small households, aging-in-place, etc.).

- The Plan recommends level of service standards for transportation, water, stormwater, sewer facilities, and parks, trails and open space. The Plan also recommends service goals for police and fire protection. New development must be served by adequate public facilities and cannot cause the level of service to be degraded below these adopted standards.
- The Plan directs growth for the next twenty years to areas within the City limits, to encourage the provision of adequate public facilities and services concurrent with development.
- The Plan is intended to work consistently with the City's critical areas ordinance for protection of environmentally sensitive areas. If a conflict should arise, the most restrictive provisions shall prevail will apply.

Plan Elements

Land Use Element



The Land Use Element contains demographic information for the City and includes the Land Use map.

The future land use policies establish the pattern of development in Orting for years to come. The City's overall planning goals provide guidance for the development of these policies. Specifically, the goals highlight preservation of open space and the character of the rural landscape, promotion of urban agriculture as a community resource, retention and expansion of the City's employment base, and protection of vital environmental resources.

By 2030, the City is projected to grow to 7,570. The Plan seeks to preserve the small town character of the City, while fostering the town center. In the areas within or adjacent to the town center, the Element promotes pedestrian oriented, mixed-use mixed-use development that allows for a diversity of land uses including housing, small-scale shopping, civic facilities, recreation, and employment.

Surrounding the town center, the Plan designates neighborhoods that allow for a mix of less-intense uses and accommodate a range of housing types and densities. They are predominantly composed of single-family single family homes of mixed densities, and designate a small portion of the City in proximity to commercial services and transportation facilities for multi-family development.

Expanding opportunities for residents to work and live in the community is another principle of the Land Use Element.

The Plan encourages Planned Unit Developments (PUDs), which use flexible lot sizes and development standards to encourage creativity and avoid cookie-cutter subdivisions that do not fit within the character of the landscape. With flexible lot sizes, common greens, community gardens and active recreation areas could be set aside for the benefit of the residents of the development.

Natural Environment Element



The Natural Environment element contains the discussion, goals, and policies related to shorelines, critical areas, environmental protection, and natural and geologic hazard mitigation. Given the position of the Puyallup and Carbon Rivers, issues affecting shorelines, wetlands, flood areas, and water quality are crucial to consider when planning in Orting.

The City has plans and programs in place to address future impacts of potential natural hazards. The City is a participant in the Pierce County Forum's development of the Region 5 All Hazard Mitigation Plan process. That plan contains an extensive City specific mitigation strategy for avoiding and/or addressing impacts of natural hazards including floods, lahars, storms and other events. The City has implemented some of these strategies through the completion of setback levees, and the on-going planning for the Carbon River Evacuation Bridge (Bridge for Kids). In addition, the City manages public education and involvement activities related to the strategies.

Maps showing areas subject to natural hazards are included in the Appendix.

Housing Element



As growth occurs within and around Orting, there will be an ever-increasing need for more housing that is affordable, desirable, and appropriate for a variety of residents. Remaining developable land within the City is slated for residential, mixed use, or public facilities development. The City's challenge will be to ensure that the pattern of development provides a diversity-variety of housing options and economic development opportunities while maintaining the desired character of the community that meet the needs and desires of all Orting residents.

Transportation Element



The Transportation Element uses a detailed assessment of current conditions, forecasts of future growth, and local and state standards to form a framework of policies and a determination of project needs. This complex picture includes facilities for which the City is responsible as well as county and state facilities. The analyses consider capacity, safety, and multi-modal performance as well as pedestrian, non-motorized, and public transportation. Orting's dependency upon SR 162 for regional connections is an over-riding problem that can only be solved by a coordinated partnership of the City, Pierce County and the state.

The Element seeks to maintain level of service (LOS) D. The community is accustomed to high-service standards, but the travel forecasts indicate that service levels could drop significantly, depending on how the growth patterns and the transportation facilities are developed. With a standard ranging from LOS C to LOS D, the City has flexibility in meeting the high standards that the community's expectations while changing from a rural community to a suburban community.

Economic Development Element



An economic "baseline" study prepared in 2014 (summarized in the Economic Development Appendix) assessed Orting's strengths, weaknesses, opportunities, and threats. Strengths include the recent strong population growth; Orting's physical setting; availability of underdeveloped land and utility capacity; and the established downtown. Weaknesses include Orting's isolation; and limited accessibility.

Opportunities include increasing the mix of local-serving business to recapture retail sales “leakage”; increasing leverage of tourism; and increase in demand for shopping and services as the surrounding area grows. Threats include strong retail competition from Bonney Lake and Puyallup’s South Hill as well as eventual economic development in Tehaleh that could weaken Orting’s ability to attract employers.

The Element contains goals and policies that provide a foundation for action to diminish the weaknesses and threats and take advantage of the strengths and opportunities.

Shoreline Element

In response to state Department of Ecology changes to the Shoreline Master Program (SMP) guidelines, and GMA direction to coordinate comprehensive plans and shoreline plans, the City conducted a comprehensive update of the SMP in 2007. The update included a significant inventory and characterization of the shoreline conditions along the Carbon and Puyallup Rivers. In particular, “opportunity sites” for potential shoreline restoration and increased public access were identified. A minor update of the SMP was adopted in 2013, and again in 2019.

The Shoreline Element includes the goals and policies of the SMP. There is no Shoreline Appendix, as the detailed analysis is found in the SMP. Shoreline development regulations are also included in the SMP. All of the shorelines within the City have been designated Urban Conservancy. No development except for limited public facilities is allowed within the first 150 feet of the shoreline jurisdiction along the Rivers.

Capital Facilities & Utilities Elements



The two major issues addressed in the Capital Facilities and Utilities Elements are the implementation of the “concurrency” requirement and the status of the City’s water, stormwater, and sewer facilities. In compliance with state law, the Orting Plan requires that adequate public facilities be in place concurrent with the impacts of new development. This concurrency requirement means that improvements or strategies must be in place at the time of the development or that a financial commitment must be in place to complete the improvements or strategies within six years.

In order to determine whether or not public services are adequate to serve the forecasted population growth for the City, the Capital Facilities Element establishes level of service standards for water, sewer, stormwater, police, fire, parks, trails and open space, and transportation. New development must demonstrate that its impact will not degrade these facilities below the level of service standards adopted in the plan.

Implementation of the Comprehensive Plan

Purpose & Relationship to the GMA

A Comprehensive Plan is implemented through the goals and policies it identifies to guide and coordinate local decision making. The plan’s policies shape the course of action taken by the community as [it begins to implement the plan implementing development regulations are adopted \(through revisions to the City’s zoning code, for example\) and decisions are made \(such as budgetary](#)

[approvals and capital project authorizations](#)). The GMA encourages innovative implementation methods that are both regulatory and non-regulatory. Regulatory actions may include the adoption of a zoning ordinance or other land use regulations, while non-regulatory actions include implementation of the capital facilities plan, [pursuit of](#) economic development strategies, and [the](#) promotion of affordable housing development. Some actions may involve a complicated series of related steps which themselves may need to be carefully planned (for example, improvements made to a major utility system). This section will describe these actions, plans, and measures necessary to implement this Plan.

Regulatory Measures

The GMA requires that local governments enact land development regulations that are consistent with and implement the Comprehensive Plan. In order to accomplish this, the development regulations ([comprised of the zoning code, the subdivision code, etc.](#)) should be regularly reviewed to ensure consistency with the comprehensive plan in order to identify the need for amendments.

In particular, the zoning code and zoning map must be consistent with the future land use map and policies established in the plan. The future land use map and land use policies in the Comprehensive Plan establish the use, density, and intensity of future development within the City.

~~As part of the update of the land use regulations, Orting is also obligated by ESHB 1724 adopted by the 1995 Legislature to combine project permitting and environmental reviews; consolidate appeals processes; and clarify the timing of the development of the review process.~~

Concurrency Management

~~Comprehensive plan policies also meet the GMA requirements for concurrency by establishing level of service (LOS) standards for capital facilities. The concurrency management system sets forth the procedures to be used to determine whether public facilities have adequate capacity to accommodate a proposed development. And, the concurrency management system also identifies the responses to be made by the City when it is determined that the proposal will exceed the level of service established, and therefore exceed the defined capacity, failing to maintain concurrency. The includes the criteria the City uses to determine whether development proposals are served by adequate public facilities, and establishes monitoring procedures to enable periodic updates of public facilities and services capacities.~~

~~Under the GMA, concurrency management must be established for transportation and capital facilities; however, jurisdictions may establish concurrency for any public facilities for which they have established level of service standards in their comprehensive plan. Level of service standards may be established for fire and emergency facilities, police, schools, sewer and water, transportation, and parks and recreational facilities and services.~~

Six-Year Capital Improvement Plan

Another major implementation tool of the Plan is the six-year schedule of capital improvements. The Capital Improvements Plan, or CIP, sets out the capital projects that the City must undertake within the next six years in order to implement the Plan. ~~The six-year schedule is updated annually, with the first year of the schedule acting as the capital budget for the fiscal year. During the annual updating,~~

~~of the six year schedule, the cost estimates and funding sources listed are updated and revised to reflect any additional information that the City has received. The CIP schedule is also be revised to include any additional capital projects that are needed to maintain the City's adopted level of service standards.~~

Coordination with Pierce County

~~Through the County-wide Planning Policies (CPPs), the City ~~is a partner~~partners with Pierce County and the other cities in shaping regional policies and actions. This includes updating the CPPs; discussing methods for maintaining the record of buildable lands; and evaluating ~~UGA issues~~Urban Growth Areas (UGAs) which are areas around cities that are eligible for annexation (however, Orting does not have a UGA that extends beyond the City limits). More specifically, Orting and the County have a discrete set of common interests including future land use controls in the rural portions of the Orting Valley; transportation; shoreline management; hazard mitigation and the provision of services. Orting's lack of annexation area and environmental growth constraints will limit the City's abilities to be a significant participant in county wide plans for accommodating future residential growth and low income housing.~~

~~The City of Orting is situated near the Alderton-McMillin community, an unincorporated area in Pierce County. The Pierce County Comprehensive Plan includes a "community plan" for the Alderton-McMillin area (Appendix A of the Piece County Comprehensive Plan). That document is quite detailed and contains useful information about many planning aspects that may also apply to Orting to some extent, such as local area history and agricultural practices as well as detailed information about the natural environment. The document sets out specific goals and policies that pertain to the unincorporated area, and additionally describes the process which cities adjacent to the area (including Orting) could follow to expand their UGAs.~~

Administrative Actions

~~The Plan includes a number of policies that should be carried out through administrative actions, such as interlocal agreements, revised development and review procedures, and public involvement programs. Development and review procedures must be revised to implement concurrency and to ensure that new development complies with the performance standards established.~~

Public Involvement

~~In order for the Plan to remain alive, the citizens of the community must remain in touch with its implementation. As the Plan is tested by development, there will be the need for ongoing amendments to respond to changing conditions. As the community matures, the vision of the future will change and new needs and priorities will emerge. The City is obligated to coordinate many aspects of the Plan with adjacent jurisdictions, which will also generate changes. Continued public involvement and communication is crucial to keeping the process fresh and engaging so that the planning "wheel" does not have to be reinvented every few years. In order for the Plan to remain relevant and be useful, community members must have an opportunity to remain in touch with its implementation. As the Plan is implemented with future development, there will be the need for ongoing amendments to respond to changing conditions. As the community matures and external factors shift (such as economic trends, new technologies emerge, and so forth) the vision of the~~

~~future may change, and new needs and priorities may emerge. Continued public involvement and communication is crucial to keeping the process fresh and engaging so that the planning "wheel" does not have to be reinvented every few years.~~

Amending the Comprehensive Plan

Purpose and Relationship to the GMA

For the Plan to function as an effective decision-making document, it must be flexible enough to accommodate changes in public attitudes, developmental technologies, economic forces, and legislative policy, yet focused enough to ensure consistent application of development principles. The Growth Management Act requires that the City establish a public participation program that identifies the procedures and schedules to be used to update or amend the Comprehensive Plan.

Type of Amendments

~~Other than the 7-year review and update process,~~ The GMA limits Comprehensive Plan amendment cycles to no more frequently than annually. In addition, ~~proposed amendments must be reviewed relative to the plans of adjacent jurisdictions, and all~~ proposed amendments ~~proposed in any one year~~ must be considered concurrently so that the cumulative effect of the various proposals can be determined. Under certain circumstances, the following types of amendments may be considered more frequently than once per year:

- The initial adoption of a subarea plan;
- The adoption or amendment of a shoreline master program;
- The amendment of the Capital Facilities Element of the plan that occurs concurrently with the adoption or amendment of the city budget; and
- To resolve an appeal of a comprehensive plan filed with a Growth Management Hearings Board or with the court.

Annual Review Amendment

~~This process addresses site-specific requests and minor policy changes. In some cases, amendments to the Plan may be necessitated by amendments to the GMA or Countywide Planning Policies or changes in federal or state legislation. These types of plan amendments or development regulations may be undertaken once a year, and may be recommended by the City Council, Planning Commission, City Staff, or any citizen.~~

~~The City requests that Comprehensive Plan amendment proponents provide the following information in their application for amendment:~~

~~A statement of what is proposed to be changed and why;~~

~~A statement of the anticipated impacts of the change, including geographic area affected and issues presented; and~~

~~A description of any changes to development regulations, modifications to capital improvement programs, subarea, neighborhood, and functional plans required for implementation so that regulations will be consistent with the Plan.~~

Review and Amendment Process

The annual review and plan amendment process provides an opportunity to refine and update the Comprehensive Plan and to monitor and evaluate the progress of the implementation strategies and policies incorporated therein. During the review and amendment process, the Planning Commission and City Council shall consider current development trends to determine the City's progress in achieving the economic, land use, and housing goals established in the Plan.

Information to be considered may include vacant land absorption, residential versus economic development, amounts and values of non-residential construction, number and types of housing units authorized by building permit, the effect of changes to adopted functional plans in the community, as well as activity levels in such processes as subdivision approvals, annexations, and building permits. Other information that may be relevant to consider includes the current capacity status of major infrastructure systems for which levels of service have been adopted in the Plan (transportation, and parks and trails) and the levels of police and fire services being provided by the City.

The process may also include monitoring of overall population growth and relative comparison with the forecast growth projections contained in the Plan (and the inclusion of updated projections where appropriate).

The annual review and amendment process requires public participation, both through community meetings to familiarize the public with the amendment proposals, as well as a formal public hearing before the City Council. Proposed plan amendments must be submitted to the State Department of Commerce for review at least 60 days prior to final City Council adoption.

Policies

The following policies guide the annual plan review and amendment process:

Policy I 1 ~~Except for years in which the city is processing a periodic update,~~ the City shall schedule an annual review of the Comprehensive Plan, to consider the need for amendments. At that time, both City-initiated, and private party or developer-initiated amendment requests will be considered.

Policy I 2 All Comprehensive Plan amendments shall be processed together with any necessary zoning, subdivision or other ordinance amendment, to ensure consistency.

Policy I 3 Amendment procedures ~~shall be fully are~~ outlined in the City's land development regulations [\(OMC 15-12-5\)](#).

Annual Plan Review and Amendment Schedule

The plan amendment process is designated to be flexible to accommodate unique conditions such as the nature, complexity, or amount of plan amendment requests in a single year. The annual "window" of plan amendment submittals from the public will be open throughout the year (that is, the public can submit requests for amendments at any time). However, they will only be "processed" in accordance with the adopted regulations. The timing of the annual update process is represented by the following ~~generalized-general~~ schedule:



All amendment proposals shall be considered concurrently by the Planning Commission and the City Council so that their cumulative impacts can be determined.

Emergency Plan Amendment Consideration

The Comprehensive Plan may be amended outside the normal schedule if findings are adopted (by City Council resolution) to show that the amendment was necessary, due to an emergency of a neighborhood or citywide significance in accordance with RCW 36.70A.130(2)(b). Plan and zoning amendments related to annexations may be considered during the normal annexation process and need not necessarily be coordinated with the annual plan amendment schedule. The nature of the emergency shall be explained to the City Council, which shall decide whether or not to allow the proposal to proceed ahead of the normal amendment schedule.

LAND USE ELEMENT



Purpose

This Land Use Element contains the goals and policies necessary to support the City's responsibility for managing land resources and guiding development. Maintained in accordance with the Growth Management Act (RCW 36.70A.070), this portion of the Comprehensive Plan is written to direct land use decisions in Orting over the next 20 years.

Considered the central component of the City's Comprehensive Plan, this element guides decisions that must be made for future growth and investments in the community in connection with the city's vision.



This element is organized into several sections and begins with a review of the population trends (historic growth) and assessment of the projected population that the city must plan for. Next the Land Use inventory is provided with an assessment of how the city's objectives and responsibilities can be balanced. Finally, the goals and policies are identified which set out the foundation for Orting's future.

Population Trends

Between 1999 and ~~2023~~ 2024 the population of the City of Orting more than doubled in size, increasing from 3,742 to ~~9,440~~ 9,125 people¹. (See Figure LU-1). The average annual growth rate for the same period was ~~3.7~~ 3.6 percent.

The rapid expansion of the city has transformed the physical layout of the city, while the central core of the community largely retains its unique appeal and function. Recently developed neighborhoods have various sizes and layouts and have replaced some lands that were previously farmed (such as the land southeast of the High Cedars Golf club). Prior to 2000 only a few homes were scattered in the area lying between SR-162 and the Carbon River and north of the school complex; now that area of the city is fully developed with residences and parks. Similarly, neighborhoods have been developed in the southern portion of the city toward the edge of the city limits.

¹ The most recent annexation occurred in 1991; none of the growth since then is attributable to annexation.

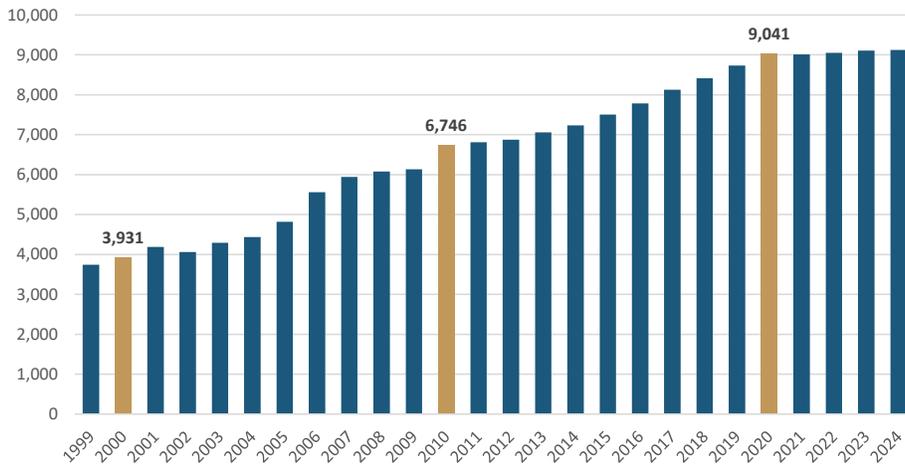


Figure LU-1: Orting Population (1999-2024)
 Source: Washington State Office of Financial Management

Population & Employment Targets

Pierce County and the City of Orting work together to determine the projected 20-year population and employment growth targets for the city. The growth targets are documented in the County-Wide Planning Policies (Pierce County Ordinance No. 2022-46s and No. 2023-22s) which established the 2044 population and employment targets for each jurisdiction, including Orting. The ordinance details how the figures are generated; in general, the state’s Office of Financial Management frequently provides population forecasts within three different ranges (high, medium and low) for each County throughout the state, and then the County and its cities and towns divide up the projected growth to specific areas.

In advance of the County’s work the Puget Sound Regional Council (PSRC), an organization that provides a wide range of services to jurisdictions within a five-county region, also publishes population forecasts for jurisdictions in the region. Through the VISION 2050 Plan, the PSRC provided a basis for which target growth allocations were made. In general, VISION 2050 is intended to support job growth throughout the region and concentrate population and job growth in centers (and near transit) through its Regional Growth Strategy (RGS). The RGS describes a preferred method for urban growth to advance social equity, promote affordable housing choices, support economic prosperity, improve mobility, and make the best, most efficient use of new and existing infrastructure all while protecting a healthy environment.

This Comprehensive Plan covers a 20-year period from 2024 through 2044 and at the end of that time period, Orting’s population is targeted to grow to 9,590 persons (and 3,167 housing units²). Likewise, employment (which is estimated to account for 1,473 jobs in 2044²⁰²⁴) is targeted to

² Exhibit A to Ord. No. 2023-22s shows that the 2020 estimated housing supply in Orting is 2,998 units and the growth allocation is 223 units, to arrive at 3,221 total housing units targeted by 2044. Those figures are based on Commerce’s Housing for All Planning Tool (HAPT) which was formal guidance given following the passage of HB 1220.

grow to 1,669 jobs by 2044. The projection figures for Orting are shown in Table LU-1, shown in 5-year increments.

Commented [NS1]: June 25, 2024 note:
 We have updated the table to show the total forecasted population counts which includes the population residing in Group Quarters (previously we had inadvertently only listed the population residing in households which is slightly lower) and we also updated the table heading to show the year 2044 (the target year) not 2045.

Table LU-1: City of Orting Population and Household Projections (2025 through 2050)

	2025	2030	2035	2040	2044	2050
Population	9,109	9,222	9,334	9,450	9,595	9,679
Households	2,986	3,055	3,124	3,194	3,250	3,333

Source: VISION 2050 City Summaries (2023 LUV-It Model)

Figure LU-2 shows Orting’s actual growth (estimated population) at five-year intervals as well as the projected growth for the future. The City of Orting is expected to grow in population; however, that growth is projected to occur at a much slower rate than the growth that has occurred over the past two decades. Orting has recently experienced rapid growth that should ideally be slowed in the years ahead, given the city’s constraints to accommodate additional expansion (such as the geographic location and transportation access challenges) as discussed throughout this Plan.

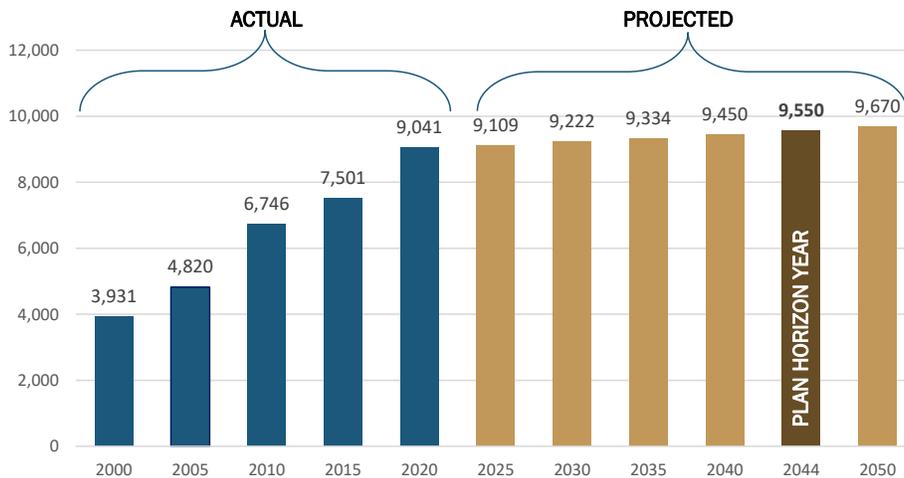


Figure LU-1: Population Projections (2025 through 2050)

Source: Washington State Office of Financial Management; VISION 2050 City Summaries (2023 LUV-it model)

The 2017 housing data shows 2,684 units including single family, multifamily, and manufactured housing. The housing data for 2021 was an estimated 2,927 units for a net gain of 243 units. The average household size now is about 3 persons.

- Growth in Orting has well exceeded what was previously planned for.

- An ordinance passed by the Pierce County Council in the year 2011 "allocated growth" to the City of Orting for planning purposes and set out that the city's population would grow to 8,000 people by the year 2030³. Later, the Pierce County council re-visited the topic, as these numbers are meant to be periodically reviewed and revised, and maintained Orting's population target was set to be 8,000 by the year 2030⁴. Instead, that figure was surpassed by the year 2017.
- The Pierce County Council took legislative action⁵ in 2022 to set the 2044 population target for Orting at 9,590. (This value is slightly different from the 2044 population target of 9,550 as listed by PSRC in the VISION 2050 plan).
- It should be recognized that these figures aren't meant to be "hard numbers" and instead they are targets for policy-making decisions and reporting purposes. The purposes of the growth allocations are to align communities with the regional growth strategies and to concentrate growth where infrastructure systems exist and away from rural areas, while preventing "sprawl."

Existing Land Use Inventory

Most of the city's land designated for residential uses has been largely built out or entitled (which means there is a time-limited approval given for development via a preliminary subdivision approval), however, development at "infill sites" is attainable in some locations and the City is fulfilling designated population goals.

Figure LU-4-3 shows a representation of Orting's Built Environment (building footprints and parcel lines are depicted, together with the road network).

Examination and tabulation of the assessor's parcel records⁶ reveals that less than 2% of the city's land by area is currently in various commercial or industrial uses which includes retail services, restaurants, medical services, merchandise, and so forth. The most prevalent use of land in the City is residential (approximately 43%), while the distribution of land given to school is also quite significant (the value is 12% which, for this calculation, includes all land owned by the school district or other educational providers, even if vacant or unused).

Next, there are lands owned and managed by Pierce County Public Works Storm Water Management division used for flood hazard management and storm drainage, along the Puyallup River and in the southern part of the City, accounting for around 120 acres in total (and corresponding to a share of around 8% of the land within the city and measured in parcels as described earlier). Measures to reduce pollution from storm-water runoff is discussed in the Natural Environment element of this Plan.

Around 80 acres (or 5% of all the land within the city and measured in parcels) of land is for government or public purposes and not counting schools or parks. The remaining lands are in use for parks, open space or other less-intensive uses.

³ Pierce County Ord. No. 2011-36s

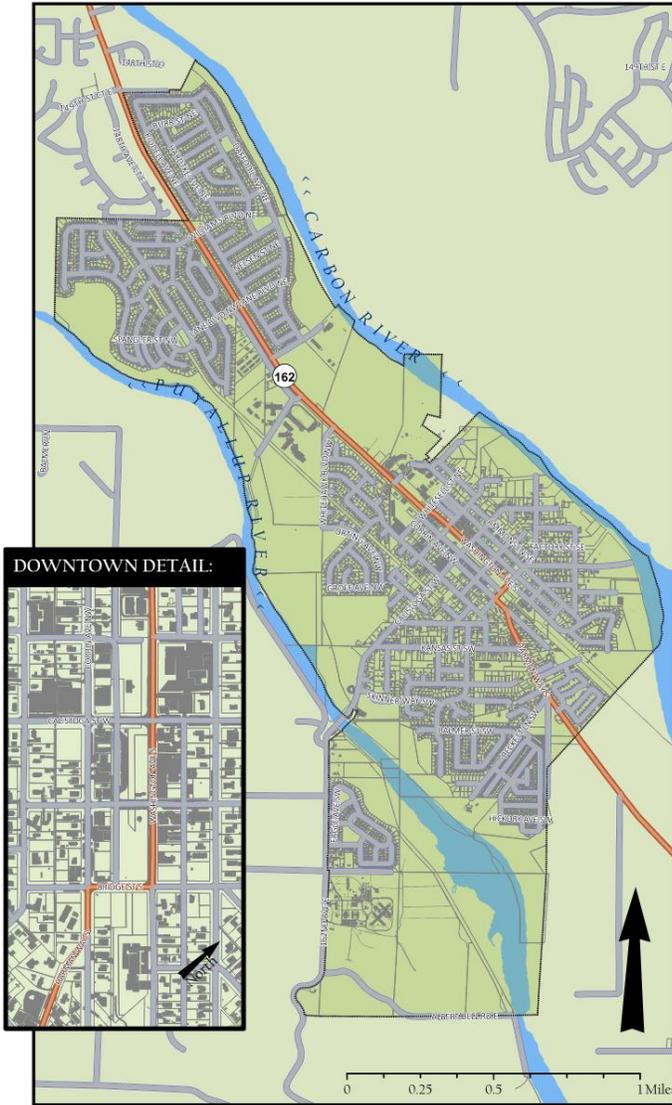
⁴ Pierce County Ord. No. 2017-24s

⁵ Pierce County Ord. No. 2022-46s

⁶ This assessor's records used do not reflect the assigned zoning but rather what type of activity is observed to be primarily conducted on site. In addition, almost all public right-of-way was excluded from the land use total when arriving at percentages given.

The Land Use inventory in Orting does not include any urban or community forests. Several decades ago, Orting's fertile valley floor was cultivated in various crops and used for agricultural production. Today, farming chiefly occurs outside of the city limits, with the exception of the Orting Veterans Farm which is situated at the State Department of Veterans Affairs' Soldiers Home campus, at the southern part of the City.

Commented [A2]: This information is now required per RCW 36.70A.070 (1) as amended in 2023



Orting City Limits

Zoning data supplied by the City. Parcel data supplied by Pierce County, and may not reflect actual or current conditions. This map is a geographic representation based on information available. It does not represent survey data. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map. 1/8/2024



Figure LU-3: Representation of Orting's Built Environment

Land Capacity Analysis

The Pierce County 2021 Buildable Lands Report (Fourth Edition, Revised Version, published in 2022) provided an assessment of Orting's progress toward meeting the population and employment targets previously set by the County. The report showed that housing production in Orting between 2010 and 2020 was within the target ranges to support future population needs, indicating that the data supports the conclusion in the report that the city is on pace to meet the number of housing units needed by 2030. The report also reveals that during the same time period, only three new multi-family housing units were added to the housing inventory, compared to 621 single-family housing units, clearly indicating that single-family housing construction is far outpacing multi-family housing development. The report also details that between 2013 and 2020 approximately 106 acres were platted (subdivided) in the city, resulting in 417 new residential lots.

The Buildable Lands Report is retrospective, but also looks to the future and accounts for anticipated future capacity. The report indicated that there appears to be sufficient land capacity for up to 346 new residential units to potentially be built between 2020 and 2044, based on zoning designations while adjusting for certain factors (i.e., land reductions for critical areas, reductions for public facilities, adjustments for market factors, etc.).

However, these figures must now be reassessed for the purposes of this Comprehensive Plan. This is because the report's analysis was based on a previous Land Use map for the city which featured a large area of land with the Mixed Use Town Center North (MUTCN) zoning designation—a location where residential units are permitted to be built. However, in January of 2023 (subsequent to the Buildable Lands Report publication), the City Council adopted amendments to the Comprehensive Plan⁷ changing the land use and zoning designation of approximately 65 acres from the MUTCN designation to Public Facilities (PF). The change was made to grant the request by the school district because the district had acquired the property for planned capital projects. While residential units were permitted in the MUTCN designation, they are not permitted in the PF zoning district. Therefore, if the land capacity analysis for residential units is adjusted to account for these changes, it appears that must be adjusted to account for only about 176 housing units to potentially be added between 2000 and 2044.

While 176 units (capacity) is lower than the target increase of 223 units, the difference is small considering the time frame of 20 years. The city will continue to participate in the County's buildable lands program which provides the opportunity to periodically assess and monitor capacity. A land capacity analysis at Appendix I provides this assessment. The analysis shows that Therefore, it appears that the City of Orting does not have any barriers in achieving the housing capacity targets. Further analysis of the city's ability to and the city is able to accommodate housing according to specific household income brackets (as required by state law) is provided in the Housing Element.

Orting's Downtown Core

Orting's downtown serves as a focal point for the community, embodying its historical roots, cultural vibrancy, and economic vitality.

Downtown Orting is characterized by its compact layout, with streets lined by a mix of historic buildings and modern structures. Washington Avenue S. serves as the central artery and the primary commercial thoroughfare. Corrin Avenue and Van Scoyoc Avenue both run parallel to Washington

⁷Orting Ordinance No. 2023-1104

Ave and together the three streets form a central core along a traditional “village green,” featuring a varied array of shops, restaurants, and services. These tree-lined corridors are flanked by one- or two-story buildings exhibiting a blend of architectural styles, including buildings which reflect Western or Victorian styles from the turn of the century era (1889 through World War I).

Green spaces such as parks and tree-lined streets are enhanced with monuments, public art and amenities reminiscent of times gone by, offering residents and visitors opportunities for recreation and relaxation. Mt. Rainier majestically provides an impressive backdrop to the area, enhancing the natural charm of the area while providing scenic vistas and recreational amenities from which Orting is the perfect spot to launch an adventure from.

The Downtown often serves as a hub of social interaction and community engagement. Local events, such as farmers' markets, festivals, and parades, draw residents from across the town and surrounding areas, fostering a sense of belonging and camaraderie. The presence of the City Hall, a Pierce County library, and other civic institutions further strengthens social cohesion, providing spaces for gatherings, meetings, and cultural activities.

Anchored by a mix of small businesses, ranging from boutique shops and family-owned eateries to professional services and artisanal studios, local enterprises form the backbone of the town's economy, providing employment opportunities and contributing to its unique identity and character.

However, challenges such as retail vacancies and competition from nearby commercial centers warrant attention and strategic interventions to ensure the long-term viability and vitality of the downtown area. Initiatives aimed at promoting entrepreneurship, enhancing infrastructure, and fostering partnerships between public and private stakeholders can help stimulate economic growth and revitalization.

Despite its many strengths, downtown Orting faces several challenges that require thoughtful planning and proactive solutions. These include issues related to transportation, affordable housing, and sustainability. Addressing these challenges presents an opportunity to reimagine the downtown area as a more accessible, livable, and resilient urban environment.

Strategic investments in transportation infrastructure, such as improved pedestrian and cycling facilities and enhanced streetscape amenities can enhance mobility and connectivity within the downtown area and beyond. Moreover, initiatives aimed at promoting mixed-use development, affordable housing, and green building practices can foster a more equitable and sustainable urban landscape and ensure the downtown area remains a thriving community center.



Goals & Policies

General

Goal LU 1 *Be true to the vision for Orting by encouraging the expansion of its economic base while ~~preserving-retaining elements of its agricultural heritage~~ and enhancing its future potential for urban farming.*

LU 1.1 Encourage higher residential density and more intensive commercial development and human activity within Orting's downtown core to create a vibrant city center, reduce reliance on the automobile, and to provide opportunities for affordable housing priced for individuals across various earning levels.

LU 1.2 Provide ~~for~~ adequate land for commercial and light manufacturing uses to meet the employment and services / commerce needs of the City of Orting.

LU 1.3 Protect local historic, archeological, and cultural sites and structures through designation and incentives for the preservation of such properties.

LU 1.4 The Future Land Use Map adopted in this plan (see **Figure LU-4**) ~~shall establish~~ establishes the future distribution, extent, and location of generalized land uses based on the intent of the goals and policies of this plan.

Discussion: The Land Use map is a central and vital component of the City's Land Use policies.

LU 1.5 Strive to assure that basic community values and aspirations are reflected in the City, while recognizing the rights of individuals to use and develop private property in a manner that is consistent with City regulations. Private property shall not be taken for public use without just compensation having been made.

LU 1.6 Establish and maintain a vision-strategy that effectively attracts enterprises and economic activities which best meet the needs and desires of the community.

LU 1.7 The Orting Downtown Vision Map (adopted by reference in this plan) (see **Figure LU-5**) ~~shall establish~~ establishes the primary elements of the 2008 Vision Plan to maximize the potential of the downtown core as the Orting Valley Town Center.

LU 1.8 ~~Designate the~~ The Center of Local Importance (COLI) feature of the Future Land Use Map designates including the downtown area, school campus, and Gratzner Park as Orting's core for future major transportation improvements.

~~LU 1.9 Recognize and promote the benefits of agricultural land, for maintaining open space, establishing rural character, preserving view corridors, enhancing wildlife habitat, and providing employment opportunities for residents of Orting.~~

LU 1.9 Review proposed commercial and public developments (including new construction or major renovation and alteration) according to the Architectural Design Review process to ensure consistency with the adopted Orting theme of "Turn of the Century

Commented [NS3]: June 25, 2024 note: Figure LU-4 will be the updated Land Use / Zoning map and is still under development (there is a placeholder in this document showing the currently approved map)

Commented [A4]: AHBL suggests adjusting this because the word "vision" doesn't quite fit here and could be confused with the city's vision statement which this is not referring to

Commented [NS5]: While there are gardens and some growing activities in Orting this policy should be removed as there are no "agricultural lands" within city limits

Commented [A6]: Its important to consider having have this included in the Comp Plan to form as a basis for the regulations or requirements for development. FYI, The state legislature passed HB 1293 in 2023 which limits how cities can do these things. Compliance with RCW 36.70A.630: Local design review-Requirements and restrictions. (wa.gov) is required in Orting by June 30, 2025.

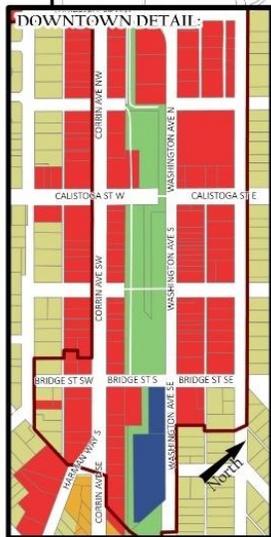
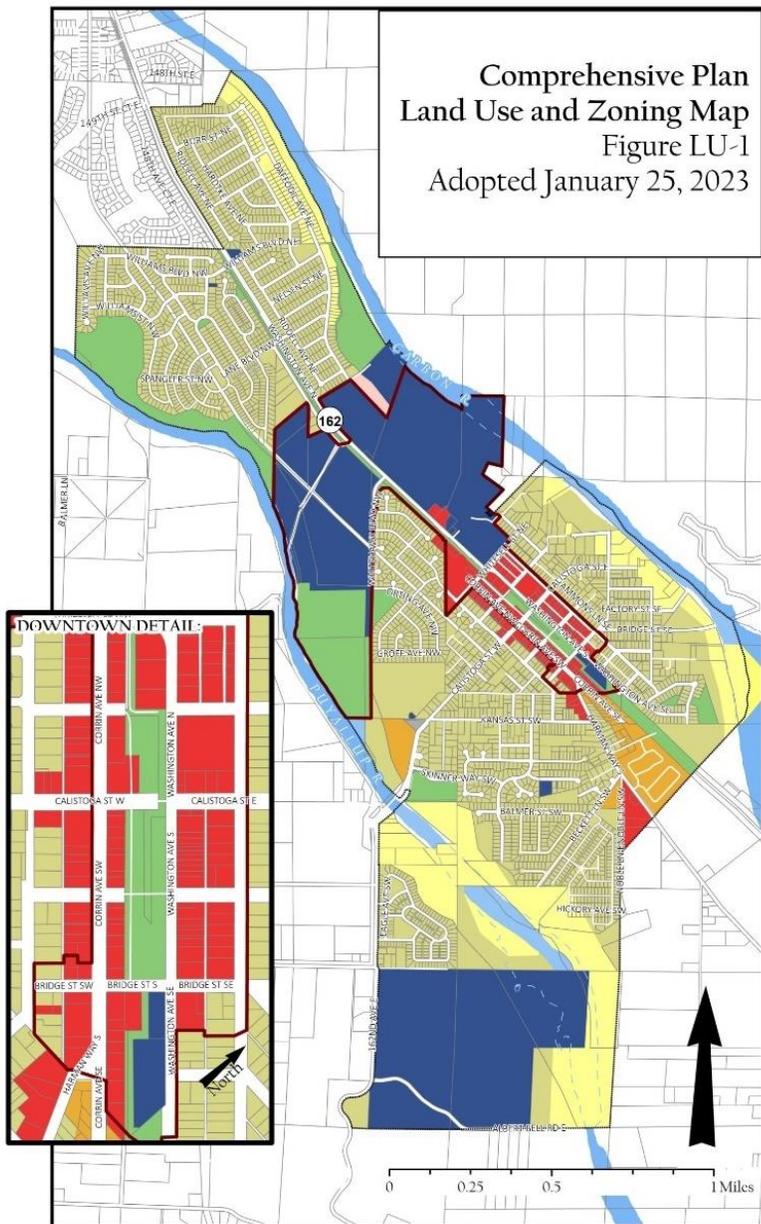
Western and Victorian," a style of building, architecture, and exterior lighting used in Orting and the area from statehood in 1889 through World War I. Evaluation of a project will be based on the quality of its design and its relationship to the natural setting of the valley and mountain settings.

Comprehensive Plan
Land Use and Zoning Map
Figure LU-1
Adopted January 25, 2023



Commented [A7]: This is a placeholder as we will propose a new map

The new map will be Figure LU-4



- Orting City Limits
- Center of Local Importance (COLI)
- LM Light Manufacturing
- MUTC Mixed Use - Town Center
- MUTCN Mixed Use - Town Center North
- OS Open Space & Recreation
- PF Public Facilities
- RMF Residential - Multi-family
- RU Residential - Urban
- RC Residential - Conservation

Per Ord. 2023-1104

Zoning data supplied by the City. Parcel data supplied by Pierce County, and may not reflect actual or current conditions. This map is a geographic representation based on information available. It does not represent survey data. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map. 1/8/2024



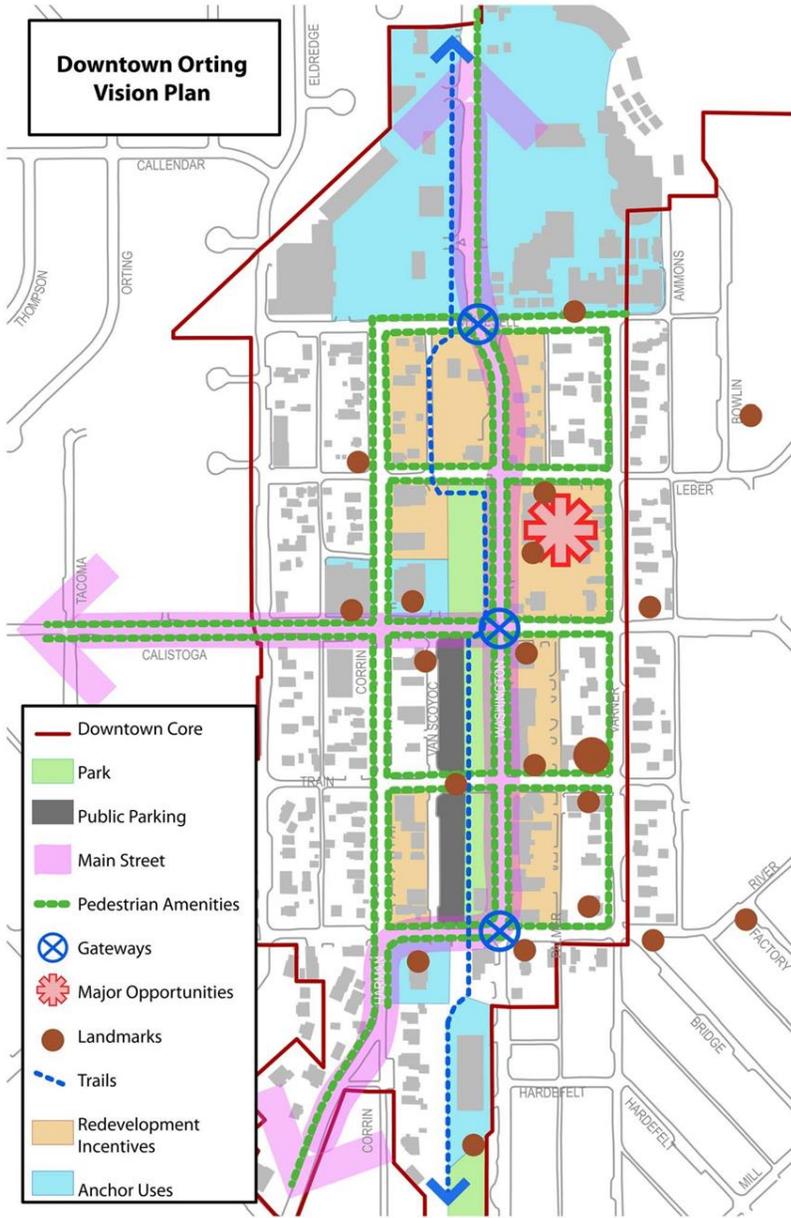


FIGURE LU-52

Commented [A8]: Scott. Please confirm that this should be retained? It seems bit dated.

Commented [AT9R8]: From Scott - this should be updated to incorporate Orting's Main Park Master Plan. [Main Parks Master Plan | City of Orting \(govaccess.org\)](https://www.govaccess.org/)



FIGURE LU-6

Goal LU 2 *Preserve and enhance the small-town ~~rural~~ service center function and character of Orting.*

- LU 2.1 Require new development to be sited so as to have the least avoid negative visual and environmental impact on the landscape.
- LU 2.2 Support inter-jurisdictional programs to address problems or issues that affect the City and larger geographic areas.
- LU 2.3 Promote the siting of higher-intensity development in areas with existing higher densities, and reduce impacts on low-intensity development areas. Protect single-family neighborhoods from intrusion of incompatible land uses.
- LU 2.4 Provide incentives for land uses that promote Support agricultural uses occurring outside the city and promote food security by encouraging locally-based food and other farm products, allowing home and community gardens within the City, allowing farmers' or public markets or other small-scale collaborative initiatives, including adding value to farm products.

Goal LU 3 *Promote equity and community health in land use decisions and development patterns.*

- LU 3.1 Support and create processes for inclusive planning and public participation efforts and utilize inclusive public engagement to ensure land use decisions do not negatively impact historically marginalized communities.
- LU 3.2 Reduce disparities in access to opportunity and encourage development that expands a variety of employment opportunities. Promote strategies and policies that

Commented [A10]: This goal and the following four policies are proposed to be added per the PSRC requirements (as listed on their checklist)

expand access to opportunity and remove barriers for economically disconnected communities.

LU 3.3 Evaluate future redevelopment efforts for potential residential and commercial displacement and use a range of strategies to mitigate displacement impacts.

LU 3.4 Prioritize services and access to opportunity for people of color, people with low incomes, and historically underserved communities to ensure all people can attain the resources and opportunities to improve quality of life and address past inequities.

LU 3.5 Consider impacts to community health when reviewing land use decisions and development proposals.

LU 3.6 Coordinate with other agencies, such as service providers and school districts, to promote development patterns, amenities, and services that promote the health of the community.

Commented [A11]: Proposed policy LU 3.5 and LU 3.6 are proposed to be added per the Pierce County CPPs

Urban Growth Area

Goal LU 4 Encourage urban growth in areas that can be served by adequate public facilities and services ~~and protect while protecting~~ natural resources and critical (environmentally sensitive) lands, within the urban growth area.

LU 4.1 Monitor growth in conjunction with adopted Pierce County and PSRC population projections and cooperative planning with Pierce County to anticipate future urban growth area needs.

LU 4.2 Coordinate with Pierce County to consider future Urban Growth Area expansion based on the Pierce County Countywide policies. However, any residential expansion should only be considered, but only after highway congestion conditions (in travel to and from Orting) significantly improve and consider the traffic impacts as a key factor in any analysis.

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LU 4.3 Urban growth areas must be of sufficient size to accommodate the urban growth projected to occur over the succeeding 20-year planning period taking into account critical (environmentally sensitive) areas; agricultural land; opportunities to pursue economic development objectives (i.e. expansion for commercial or industrial purposes); open space; fully contained communities; existing proposed development; existing land use patterns and development character; traffic impacts; and existing parcel boundaries.

LU 4.4 Encourage infill development within the city limits ~~and existing urbanized unincorporated areas.~~

LU 4.5 ~~Development shall take place only if it does not cause the public facility level of service to degrade below the City's adopted level of service standards. Orting shall~~ Encourage the following techniques to achieve community goals for growth.

development and /or preservation of open space and protection of environmentally critical areas, within the context of the GMA;

- Conservation Easements;
- Transfer of Development Rights;
- Purchase of Development Rights; and
- Cluster Development

- LU 4.6 The boundary of the urban growth area (UGA) shall should be evaluated during periodic updates (as required by the mandated GMA updates) and in conjunction with coordinated planning with Pierce County based on the following criteria:
- Expansion of the service area or demand for municipal facilities and services;
 - Maintaining land supply sufficient to allow market forces to operate; and precluding the possibility of a land monopoly, but no more than is essential to achieve this purpose;
 - Accommodation of essential public facilities or unique opportunities for economic development;
 - Designation of the UGA expansion as a receiving area for development rights transfer from agricultural resource lands in the Orting Valley.

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Residential Land Use

Goal LU 5 Provide a variety of housing choices for new residents.

- LU 5.1 Promote residential areas that offer a variety of housing densities, types, sizes, costs, and locations to meet future demand.
- LU 5.2 Encourage development that provides affordable housing through incentives.
- LU 5.3 Conserve the City's existing housing stock through code enforcement, appropriate zoning, and participation in rehabilitation programs.

Goal LU 6 Residential development shall should be of high-quality design and shall should be consistent with the character of Orting.

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Discussion: The land use plan establishes a variety of residential land use categories to accommodate growth within the urban growth area. The **Residential Multi-Family (RMF)** land use category is intended to provide for moderate to high density residential development which may include a mix of office and governmental uses. The **Residential- Urban (RU)** category is intended to provide for vital residential neighborhoods in a moderate to low-density single-family setting. The **Residential-Conservation (RC)** land use category is intended for areas that are suited for low-density residential development that is compatible with critical area constraints along the Puyallup and Carbon River shorelands.

- LU 6.1 Residential development within the **Residential Multi-Family (RMF)** land use district shall should be served by community improvements and facilities normally associated with urban area development. The maximum density of development in the RMF district shall be is eight units per acre.

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LU 6.2 The **Residential-Urban (RU)** land use category is intended for areas that are suitable for residential development ~~with the provision of full services and that benefit from the variety of services provided in the town center, including a grocery store and restaurants, commercial uses, fuel stations, etc.~~ It includes existing exclusively residential subdivisions that have been platted ~~at an average density of six units per acre.~~ The maximum density of development in the RU district ~~shall be is~~ six units per acre except that one additional unit may be allowed on a lot that is at least 150% larger than the minimum lot area, ~~and accessory dwelling units (ADUs) may be added in accordance with state legal requirements.~~

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LU 6.3 The **Residential-Conservation (RC)** district is located in areas that are within the Carbon and Puyallup Rivers' shoreline management jurisdictions. Within the RC district, the maximum gross density shall not exceed one dwelling unit per 2 acres ~~(except that ADUs may be added in accordance with state legal requirements).~~ Development should be clustered outside the floodway and above the 100-year floodplain, if possible.

LU 6.4 Planned Unit Development (PUD) is encouraged in areas conducive to densities greater than otherwise provided for if those units are ~~properly~~ planned, designed, serviced, and reviewed in a public forum.

Discussion: The PUD approach provides the City with an alternative form of residential development which would promote flexibility and creativity in the layout and design of new residential development.

LU 6.5 Approved PUDs should ~~implement features that reflect the goals of the Comprehensive Plan, including open space, natural features, excellent site design, and pedestrian-oriented elements. As with any other type of development, PUDs should assure the provision of appropriate public amenities and compatibility with surrounding development.~~
~~result in:~~
~~Adequate active open space;~~
~~Protection of natural features and sensitive areas;~~
~~Appropriate site design including, relative placement of structures, circulation systems, landscaping, and utilities that minimize land alteration or degradation; provisions for a variety of dwelling unit types, including multi-family; scale and design to reduce the bulk of structures; and innovation in design including, features such as clustering and zero lot line;~~
~~Pedestrian orientation;~~
~~Adequate provision of public facilities and amenities;~~
~~Compatibility with surrounding uses.~~

LU 6.6 Ensure that the City's development regulations require new development to be in the best interest of the surrounding property, the neighborhood, or the ~~City~~ city as a whole, and generally in harmony with the surrounding area.

LU 6.7 Planning Commission review of residential developments should be focused on the height of structures, noise and lighting impacts, and ~~providing the provision of~~ adequate open space.

Mixed Use

Goal LU 7 Provide attractive, conveniently located economic development that creates employment, retail, and service ~~opportunities~~ business opportunities and higher density residential ~~opportunities~~ development options within the city.

LU 7.1 New commercial and office development ~~shall be~~ limited to the mixed-use land use districts, except that home occupations may be located in all residential land use districts, in accordance with the ~~Orting Zoning Ordinance~~ Orting Municipal Code.

LU 7.2 Orient nonresidential uses toward the pedestrian. Encourage retail uses on the ground floor to prevent blank walls with little visual interest for the pedestrian. Locate parking lots behind retail uses to allow for pedestrian window shopping. Encourage offices and/or residential units above ground floor retail.

Goal LU 8 The Mixed Use-Town Center Land Use ~~Categories~~ Category (MUTC and MUTCN) ~~are~~ is intended to foster vibrant, pedestrian-oriented centers for Orting's commercial and high-density residential activity.

~~Discussion: Two MUTC areas are established: MUTC, and MUTC North.~~

LU 8.1 The **Mixed Use-Town Center (MUTC)** land use category is intended for areas that are suitable for pedestrian-oriented development. In recognition of the growing need for a downtown that provides goods and services for the community; serves tourists and travelers; and maintains a strong sense of history, the City is committed to promoting development and re-development through partnerships with the business community that will leverage existing public and private assets into an active center featuring public facilities and spaces and ~~more intensive~~ vibrant private development.

~~LU 8.2 The Mixed Use-Town Center (MUTC) land use district includes a diversity of housing types, shopping, civic facilities, recreation, and employment. A variety of land uses are allowed, including:~~

- ~~Residential~~
- ~~Office~~
- ~~Retail and food sales~~
- ~~Personal, Professional and Business Services~~
- ~~Bed and breakfast establishments~~
- ~~Cultural facilities~~
- ~~Park~~
- ~~Churches~~
- ~~Schools~~
- ~~Restaurants~~
- ~~Shared parking~~
- ~~Day care facilities~~

LU 8.2 To ensure the visual appeal and pedestrian-orientation of the land uses, the land development regulations will include performance standards for:

- | | |
|------------------------------|--|
| 1. Signage | 8. Impact on adjacent properties |
| 2. Open space | 9. Streetscape improvements |
| 3. Land coverage | 10. Placement of parking to the rear or side of buildings, or on lots developed or improved to provide shared parking for all downtown uses. |
| 4. Building placement | |
| 5. Setback or build-to lines | |
| 6. Landscaping | |
| 7. Building height and bulk | |

LU 8.3 Development strategies and generalized locations for improvements within the MUTC zone are included in the Downtown Vision Plan map, addressing the following elements:

- | | |
|-------------------------------------|--------------------------------|
| 1. Principal routes through town | 3. Gateway locations and ideas |
| 2. Streets for pedestrian amenities | 4. Redevelopment opportunities |
| | 5. Existing trails & landmarks |
| | 6. Existing anchor uses |

~~Goal LU 8 — Mixed Use — Town Center North is intended to take advantage of the large lots and land area between Orting High School and Rocky Road NE for development of new economic, residential, and recreational opportunities that support a sustainable community by providing jobs and increasing the tax base.~~

~~Discussion: — The MUTCN is a 65.6 acre area located east of Washington Ave N, south of Rocky Road NE, west of the Carbon River, and north of the Orting High School property. Development in this area is expected to include a mix of commercial, residential, light industrial, and recreational uses.~~

~~LU 8.1 Development in the MUTCN shall be planned according to the following principles: Access should be consistent with adopted City policies and strategies. Access from SR 162/Washington Ave North should be limited to locations where intersections can be designed to handle increased traffic and turning movements. Internal vehicular and pedestrian circulation throughout the area should be organized by a street grid that connects with the highway intersections and the residential neighborhood to the north, and also enables connections between different development projects and phases. This will also provide corridors for utilities. Development project approvals will include dedication of new public street rights of way in the MUTCN. Blocks created by the street grid can simplify planning and permitting for development, particularly when phasing is anticipated. Park areas within the MUTCN shall provide for community uses consistent with the Orting Parks, Trails, and Open Space Plan. Pedestrian amenities can be located and designed within the blocks and coordinated throughout the area as development plans are drafted.~~

~~LU 8.2 All development in the MUTCN shall be approved through a Master Development Plan per Policy LU 5.6, and Titles 12, 13, and 15 OMC and shall be subject to Architectural Design Review.~~

Manufacturing

Goal LU 9 *The Light Manufacturing (LM) land use district is intended to Provide for an area where low impact manufacturing and industrial activities can be concentrated and where traffic congestion, visual, and other impacts on the surrounding neighborhood can be minimized, in the Light Manufacturing (LM) land use district.*

LU 9.1 The **Light Manufacturing (LM)** district is for areas devoted exclusively to light industrial development, including non-objectionable manufacturing, processing or storage of products including manufacturing, processing, canning or bottling of food or beverages; production of goods from materials that are already refined or from raw materials that do not need refining; and other uses that do not involve the use of materials, processes or machinery likely to cause undesirable noise, air quality or other impacts on nearby residential or commercial property.

LU 9.2 **Light Manufacturing (LM)** uses ~~shall must provide include~~ a vegetated buffer to screen the development from adjacent non-industrial properties and from adjacent roadways and include features and measures per the land development regulations containing performance standards for industrial uses such as lighting, signage and curb cuts.

~~LU 9.3 The land development regulations will include performance standards for industrial uses. Lighting from light manufacturing uses will not interfere or conflict with adjacent properties. Signage shall be controlled and limited to informational types. Curb cuts should be minimized and sharing of access encouraged.~~

Commented [AT12]: Scott comment - is this still feasible?

Commented [AT13R12]: Note for Nicole: suggest an alternative.

Commented [A14]: This specific language typically belongs in the codes, not the Comp Plan.

Open Space and Recreation

Goal LU 10 *The Recreation/Open Space Land Use Category is intended to Acknowledge and protect the City's public parks and open spaces through public and private initiatives including incentives, transfer of development rights, public land acquisition, greenways, conservation easements, and other techniques. Such lands may be designated with the Recreation / Open Space Land Use Category.*

Discussion: The adopted Parks, Trails, and Open Space Plan provides direction for the establishment of strategies, standards, and actions to ensure that adequate recreation space and facilities are available to the citizens of Orting in concert with growth.

LU 10.1 The Recreation/Open Space district is for areas devoted to public recreational facilities such as parks and trails and areas that have been preserved as open spaces ~~through a variety of open space programs.~~

LU 10.2 Recognize the important recreational and transportation roles played by regional bicycle trail systems, and support efforts to develop a coordinated system of greenway trails throughout the region.

~~LU 10.3 Promote the use of property tax reductions as an incentive to preserve desirable lands as a public benefit and encourage and support the participation of community based non-profit organizations offering options and alternatives to development in the interest of preserving desirable lands as a public benefit.~~

Critical Areas

~~Goal LU 11 Protect the City's critical areas:~~

~~LU 11.1 All development activities shall be located, designed, constructed and managed to avoid disturbance of and minimize adverse impacts to fish and wildlife resources, including spawning, nesting, rearing and habitat areas and migratory routes.~~

~~LU 11.2 Prohibit the unnecessary disturbance of natural vegetation in new development, in accordance with the Critical Areas Ordinance.~~

~~LU 11.3 Where there is a high probability of erosion, grading should be kept to a minimum and disturbed vegetation should be restored as soon as feasible. In all cases, appropriate measures to control erosion and sedimentation shall be required.~~

~~LU 11.4 Seek to retain as open space wetlands, river and stream banks, ravines, and any other areas that provide essential habitat for endangered or threatened plant or wildlife species.~~

~~LU 11.5 Protect wetlands to enable them to fulfill their natural functions as recipients of floodwaters and as habitat for wildlife through the critical areas ordinance.~~

~~LU 11.6 Alternative domestic waste systems are discouraged, and must meet Pierce County Department of Health standards for soil suitability and location.~~

~~LU 11.7 Agricultural land uses within the Carbon and Puyallup River floodplains shall use Best Management Practices as recommended by the U.S.D.A. Soil Conservation Service to minimize the use of chemicals that may later be released into surface waters and to minimize erosion of soil into surface waters.~~

~~LU 11.8 The City shall consider the impacts of new development on water quality as part of its review process and require any appropriate mitigating measures. Impacts on fish resources shall be a priority concern in such reviews.~~

~~LU 11.9 The City Shoreline Master Program shall govern the development of all designated Shorelines of the State within Orting. Lands adjacent to these areas shall be managed in a manner consistent with that program.~~

~~Permit existing small scale farming, horticulture and other agricultural uses to continue when appropriate critical area protections are employed. Maps showing Critical Areas including flood-prone and lahar areas are included in the Land Use Appendix.~~

Commented [A15]: Moved to Natural Environment Element

Public Facilities and Services

Goal LU 11 *The Public Facility Land Use Category is intended to acknowledge Areas devoted to public uses may be designated with the Public Facility Land Use category.*

- LU 11.1 The Public Facility district is for areas devoted to public facilities such as schools, water and wastewater facilities, city buildings, state and federal properties, city-owned parking lots and to acknowledge and reserve sites that have been planned for public purposes (however these uses may also be allowed in other areas per the city's municipal code and therefore the district designation is not mandatory).

~~Goal LU 13~~ ~~Ensure that those public facilities and services necessary to support development shall be adequate to serve the development without decreasing current service levels below adopted level of service standards.~~

Commented [A16]: Moved this (and following items) to Capital Facilities Element

~~LU 13.1~~ ~~Coordinate new development with the provision of an adequate level of services and facilities, such as schools, water, transportation and parks, as established in the capital facilities element.~~

~~LU 13.2~~ ~~Ensure that new development does not outpace the City's ability to provide and maintain adequate public facilities and services, by allowing new development to occur only when and where adequate facilities exist or will be provided.~~

~~LU 13.3~~ ~~The City will coordinate concurrency review. Developers shall provide information relating to impacts that the proposed development will have on public facilities and services. The City shall evaluate the impact analysis and determine whether the development will be served by adequate public facilities.~~

~~LU 13.4~~ ~~The City shall permit the development of essential public facilities in accordance with the provisions of the County Wide Planning Policies.~~

Urban Agriculture

Goal LU 12 ~~Preserve prime agricultural land and Promote farming and related agricultural activities that support the local food industry and tourism, such as increasing access to healthy foods and food products.~~

Commented [A17]: "Prime agricultural land" is a "loaded term" with specific meaning under the GMA. In short, this term should not be used as only lands outside cities can be so designated.

~~LU 12.1~~ ~~Work with Pierce County to engage in joint planning for future UGA expansions that include farms and agricultural activities.~~

In addition we have removed this section which does not address activities that are occurring within the city limits.

~~LU 12.2~~ ~~Work with surrounding property owners to engage in planning that supports economic benefits to both parties including increasing merchandising farm products, promoting value added production of food and nursery items, and home businesses that are located on farms.~~

Please note that revisions to LU 2.4 are included to capture ways to support local ag production.

— LU 12.3 — Seek federal, state, and foundation grant funding that can support the formation of farm cooperative organizations, community-based marketing programs, and local educational and tourism activities.



HOUSING ELEMENT



Purpose

This Housing Element provides the policy basis for neighborhood preservation and directing the development of new housing that is compatible with the character of the City of Orting.

The Growth Management Act states that the Housing Element of the Comprehensive Plan must recognize "the vitality and character of established neighborhoods" and must:

1. Include an inventory and analysis of existing and projected housing needs.
2. Include a statement of Orting housing goals, and policies for the preservation, improvement, and development of housing.
3. Identify sufficient land for housing, including, but not limited to government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, and group homes and foster care facilities.
4. Make adequate provisions for existing and projected needs of all economic segments of the community.

New Requirements

In 2021, the State Legislature amended the Growth Management Act through the passage of House Bill 1220 (HB 1220). The GMA now requires Housing Elements to include consideration of capacity to meet housing needs for extremely-low to moderately low-income households¹, permanent supportive housing (PSH), emergency housing and shelters, and duplexes, triplexes and townhomes. In doing so cities must also address displacement risk, racially disparate impacts, and programs for affordable housing.

Meeting the Needs

The City of Orting is not directly responsible for the development of housing and there are countless forces involved in the housing market. Nonetheless it is helpful to ensure the right policies and systems are in place locally to facilitate positive outcomes. Additionally, it is also useful to acknowledge the important work of partners in the region that provide direct or indirect support meeting the housing needs of people in Orting.

¹ [See the Land Capacity Analysis in Appendix I for this information.](#)

As Orting grows, and new residents arrive, new neighborhoods are created and existing neighborhoods change. This results in different expectations for the character of the city. In addition, the demand and supply of housing types and styles broadens as the market adapts to the demographics of the population. In order to address these factors, the Comprehensive Plan provides the basis for monitoring development trends and assessing the city's capacity to accommodate future growth.

The supply of vacant land that is suitable for residential development within the City is limited. Critical areas such as the floodways, wetlands and the shoreline areas inhibit development capacity along the rivers. Development of the remaining vacant land and former farmland inside the city will provide needed housing for residents. Some future growth within the city will depend upon infill development and redevelopment of parcels that are not built to their full capacities. This type of development usually results in higher residential densities.



Major Issues

A fundamental human need is access to adequate, safe, and reasonably priced housing. Ensuring Orting residents (current and in the future), have many options and choices is an important part of planning for the future. Having broad housing choices and alternatives also impact the city's economic growth potential and job creation capabilities because many firms look to hire and retain workers in areas where housing options aren't prohibitively expensive.

Professionals who are essential to the community but may have comparatively lower incomes or household budgets for housing are important to consider. Examples of these professionals include teachers, police officers, firefighters, other municipal employees, and service employees (such as restaurant workers). Too often people may be forced to commute out of a location where they work in order to reside elsewhere where they can afford the kind of housing they seek.

Moreover, in many localities across the United States, some populations have been historically underserved and have not had equal access to housing options, particularly before adoption of the Fair Housing Act and Community Reinvestment Act (which ended redlining). Historical patterns of racial and ethnic segregation leave a legacy of disparate impacts both in homeownership rates and housing values².

Commented [A1]: This text relates to Pierce County County-Wide Planning Policy (CPP) AH-3

("AH" denotes affordable housing)

In formulating the Housing Element, the following major issues have been considered:

1. Balancing the local character and community vision with the satellite town center role (a relatively small municipality within proximity to a larger municipality).
2. Providing a balanced range of housing types, styles, and affordability.
3. Providing housing opportunities for residents with special needs.
4. Addressing the conservation of existing housing and preventing displacement.

² For more information see "Understanding Racial Restrictive Covenants and their Legacy" by James Gregory at <https://depts.washington.edu/covenants/segregation.shtml>

5. Compliance with state and regional mandates to address various topics and plan for housing to accomplish state and regional policy measures.

The PSRC VISION 2050 document is a regional plan which sets out a Regional Growth Strategy, focusing growth in “centers” and near transit, and addresses how jurisdictions should work together to increase housing choices and affordability on a regional level. VISION 2050 stresses that strategies and actions to promote distributional equity, cross-generational equity, process equity and reparative policies are needed to equitably meet housing needs.

Data Limitations

This Housing Element is distinct from earlier versions adopted by the City. One of the chief differences is that much more information must now be compiled and analyzed, addressing housing affordability and statistics per the state law and regional mandates.

However, compiling and presenting this data presents significant difficulties. First, as a consequence of the City's small size, there are few or no data sources available. For instance, RCW 36.70A.610 directs the Washington Center for Real Estate Research (WCER) to furnish data resources to jurisdictions for addressing housing issues; however, the majority of that data collection and compilation is restricted to cities with a population of 10,000 or more, meaning Orting is excluded. Similarly, when certain characteristics of very small population group are to be taken into account, in order to serve as indicators (for example, *to what extent do the rates of severely cost-burdened households differ according to race?*) we often find that the lesser percentages or (small share of percentages) are not statistically significant.

Implementation Challenges

Orting lacks transit services and proximity to some amenities and programs (both commercial- and government-based) which can help low-income populations. Likewise, the development and infrastructure capacity in Orting is somewhat constrained and a sudden surge in development that isn't properly planned or timed for could cause increased transportation challenges, school crowding, etc. Further, the City is not located in a job center. Nonetheless, as the city changes and as additional employment, services, and transportation choices become available, the community can continue to position itself to best make accommodations for people who are in need.

Existing Housing Characteristics

The existing housing stock in Orting consists primarily of single-family detached homes; in 2023 89.4% of all the housing stock was this type. Mobile/ manufactured homes comprise 6% of the city's housing stock and duplexes, other housing types, and apartments make up the balance.

The 2010 Census reported a total of 2,361 units, an increase of 979 units (or 71%) over 2000. A decade later, the US Census determined there were just under 3,000 units in the city corresponding to a 27% increase over the ten-year period from 2000 to 2010. Housing production has leveled off in the past several years. Figure H-1 shows the number of Housing Units in Orting between the years 1999 and 2023 and, not surprisingly, the figures trend similarly to the city's population growth.

Homeownership in Orting

The homeownership rate is relatively high in Orting. The US Census data shows that the owner-occupied housing rate in Orting was 79.2% for the time period of 2018-2022 which is much higher than the rate of 64.6% throughout Pierce County and of 63.8% state-wide for the same time period.

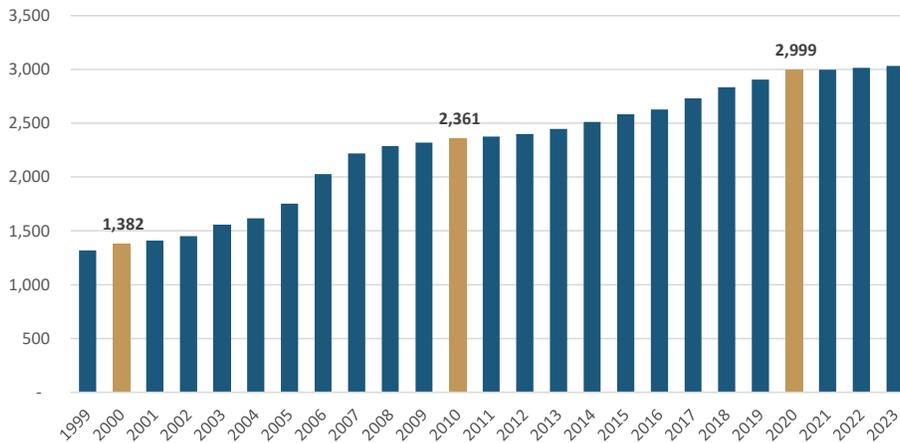


Figure H-1: Orting Housing Units (1999-2023)

Source: Washington State Office of Financial Management

Housing Stock

The age of the housing stock impacts characteristics like housing size, quality, and value. Considering the housing stock age also helps to understand the development patterns and timelines in a community. In Orting, 82% of housing units were constructed after 1980 (see Figure H-2). That is an advantage for locals since older homes may be of lower quality because of wear (if not routinely upgraded), they could contain contaminants or hazards (i.e., lead-based paints, volatile organic compounds like asbestos, mold caused by leaking windows), and may feature outdated building materials assembled with outdated construction practices. Further, newer homes typically are more energy efficient and are often built with more modern methods. There are always exceptions to these broad characterizations, but in general the housing stock in Orting can be considered quite healthy and efficient.



As for the older homes in the community, particularly those in the downtown core, they help shape the unique historic character of the City.

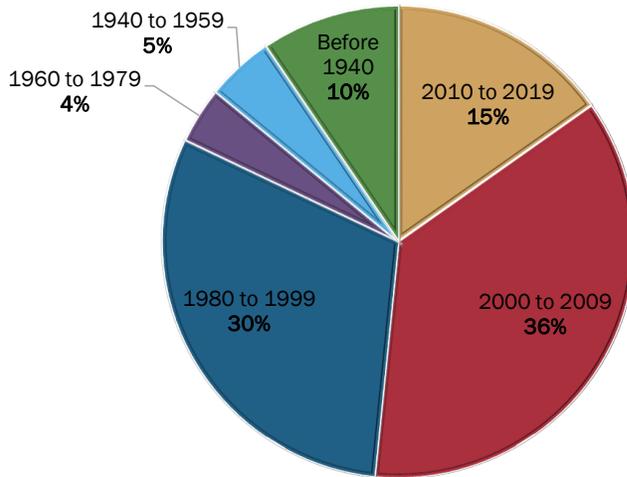


Figure H-2: Housing Stock by Year Built

Source: US Census American Community Survey

Table H-1 Housing Units by Tenure, 2010, 2015 and 2021

Total Units			Owner Occupied			Renter Occupied			Vacant		
2010	2015	2021	2010	2015	2021	2010	2015	2021	2010	2015	2021
2,361	2,492	2,927	73.6%	72.0%	75.7%	18.9%	20.5%	21.3%	7.5%	7.5%	2.9%

Source: U.S. Bureau of the Census, 2010, American Community Survey, 2015 and 2021

Figure H-2 shows the composition of housing types in Orting, based on the US Census and American Community Survey (ACS) figures.

In 2017, single-family homes accounted for approximately 88% of the housing in the city and the surrounding area. Mobile/manufactured homes made up approximately 7% of the city housing stock and 15% of the surrounding areas, and multi-family housing accounted for approximately 6% of the city inventory.

Age Restricted Neighborhoods

Orting has two age-restricted neighborhoods:

- Majestic View Estates features 171 single-family detached homes which comprise a community for residents aged 55 and older. The homes in the gated community range in size from about 1,200 to 2,600 square feet with two or three bedrooms and attached two-car garages. There is an outdoor community pool and a multi-purpose room in a clubhouse.
- The Mountain View Estates community is a manufactured home park at 836 Harmon Way S. over about 20 acres. There are no permanent structures, and the age-restricted community (for 55 and older) has 96 sites.

Washington Soldier's Home - Orting

According to the state Office of Financial Management, the population of persons housed in “group quarters” in the city typically ranged between 100 and 130 people between the years 2010 and 2020. This figure corresponds to the population domiciled at the Washington Soldiers' Home on the Orting-Kapowsin Highway, which was established in 1891 and built specifically for Washington state veterans, originally for veterans of the Civil War.

Orting Veteran's Village

The Orting Veteran's Village, established in 2021, is a tiny home community offering 35 units (six of which are ADA-accessible cottages) for homeless veterans in Pierce County. At the site, Permanent Supportive Housing is provided and each home is approximately 176 square feet, built to be economically and environmentally efficient, with individual lawns and porches. This village is located on the Washington State Department of Veteran's Affairs Soldiers Home campus, yet the housing is not provided by the DVA as the DVA's role is to lease the land. Quixote Communities is a non-profit organization that operates the site. There is a central community center that residents use to gather and share communal space.

Group Homes

The zoning code in the city allows for licensed adult family homes to locate in all residential and mixed-use zoning districts. These are homes where personal care plus room and board is provided to up to six adults not related to the person providing the services.

The code does not contain any development regulations treating a residential structure occupied by persons with handicaps differently than a similar residential structure occupied by a family or other unrelated individuals.

Orting's zoning code also allows group residences to locate in the Residential Urban (RU), Residential Multi-family (RMF), and Mixed Use Town Center (MUTC) zoning districts with an approved conditional use permit (and subject to architectural design review) and also in the Public Facilities (PF) zoning district (subject to site plan and architectural design review approval). Orting's code further allows other group housing that provides housing to more than 12 unrelated individuals in the Residential Multi-family (RMF) zoning district and with a conditional use permit in the Residential Urban (RU) zone and Mixed Use Town Center (MUTC).



As of March 2024, the Washington State Department of Social and Health Services database showed there were five licensed family homes with Orting addresses, supplying 24 beds

Pierce County's Countywide Planning Policies document recorded the estimated supply of housing units in Orting according to various income levels, shown in **Table H-2**. Washington State (through the GMA) and Pierce County (in the Countywide Planning Policies) require cities to study housing demand for certain household groups earning less than the Area Median Income³ (AMI).

³ Area Median Income (AMI): This refers to HUD Area Median Family Household Income. Orting is part of HUD's Seattle-Tacoma-Bellevue Metro Area, which includes all of Pierce County. AMI changes every year and varies by household size.

Table H-2 Housing Unit Estimated Supply (2020) by Income Level according to Area Median Income (AMI)

Income Level	0-30% AMI (Non-PSH)	0-30% AMI (PSH)*	30-50% AMI	50-80% AMI	80-100% AMI	100-120% AMI	>120% AMI	Total
Number of Units	41	0	232	965	937	345	478	2,998 Plus 40 beds (Emergency Housing)

Source: Pierce County Ordinance No. 2023-22s Exhibit B

*PSH = Permanent Supportive Housing

Permanent Supportive Housing and Emergency Housing must also be addressed⁴:

- Permanent Supportive Housing (PSH) is subsidized, leased housing with no limit on length of stay that prioritizes people who need comprehensive support services to retain tenancy and utilizes admissions practices designed to use lower barriers to entry than would be typical for other subsidized or unsubsidized rental housing. Permanent supportive housing is paired with on-site or off-site voluntary services.
- Emergency Housing is temporary indoor accommodations for individuals or families who are homeless or at imminent risk of becoming homeless.

Housing Values and Costs

Housing costs have risen dramatically. In 2000, nearly 60% of the owner-occupied homes in Orting were valued between \$100,000 and \$149,999 (1999 dollars, 2010 Census). In 2015, only 8% of the owner-occupied homes were valued in that range, dropping further to 1.9% in 2021 and dropping to 0% in 2022 (2015, 2021, 2022 5-Year American Community Survey).

Approximately 1.9% of owner-occupied homes in Orting were valued below \$100,000 in 2022. The largest value bracket was the \$300,000 to \$499,999 range, with approximately 64% of homes valued in this range. The second highest bracket was the \$500,000 to \$999,999 range, making up 18% of homes. The median 2022 value of owner-occupied homes in Orting was \$413,400, a substantial increase from \$199,000 in 2015.

Commented [NS2]: Perhaps leave this out? I don't think describing "brackets" and the percentages of homes lying within each is particularly useful.

Next, the median monthly 2015 gross rent in Orting was \$1,438, and this figure increased in 2022 to \$2,156.

Household Characteristics

The 2022 census reports 2,869 households in Orting, an increase from 2,038 in 2010. The average number people per household in 2010 was 3.04 persons but increased to 3.05 persons by

⁴ HB 1220

2022. Recent nationwide trends have demonstrated slowed population growth and shrinking household sizes, however Orting’s average household size has remained the same. Still, multigenerational living (where multiple generations of adults live together) is also becoming more commonplace. These nationwide trends may be related to housing affordability and cost of living issues, and they may suggest an even greater need for more affordable and attainable housing options. However, Orting’s average household size has remained the same which may be attributed to the large number of households that include children under 18 years old and the high composition of household types that are made up of a family household (see Table H-3 below).

The following data presented in **Table H-3** help to explain the characteristics of households in the City. According to the US Census Bureau the Median Household Income of Orting was \$114,458 in 2022.

Table H-3 Orting and Pierce County Household Attributes (2022 Estimates)

		Orting	Pierce County
Household Income	Median	\$114,458	\$91,486
	Mean	\$126,201	\$116,431
Household Size	One-Person	13.8%	24.2%
	Two-Person	25.7%	35.8%
	Three-person	26.1%	16.4%
	Four or more person	34.4%	23.7%
Household types	Family households (one or more related or married persons)	80.5%	67.6%
	Multiple person households with no children	5.7%	8.3%
	Single-person households	13.8%	24.2%
Presence of children in households	No related children under 18 years of age	55.3%	68.0%
	With related children under 18 years of age	44.7%	32.0%

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates

Orting has a high proportion of children, with 25.5% of the total population aged under eighteen years old (compared with 77.3% in Pierce County). The median age is 34.1 years of age (compared with 37.0 in Pierce County). Orting therefore has more families living in the community rather than single or individual households, as compared to Pierce County averages. The census data also reveals:



- Approximately **10.4%** of Orting residents aged over 18 are veterans
- Approximately **3.19%** of Orting residents are foreign born
- Approximately **13.7%** of Orting residents have a disability

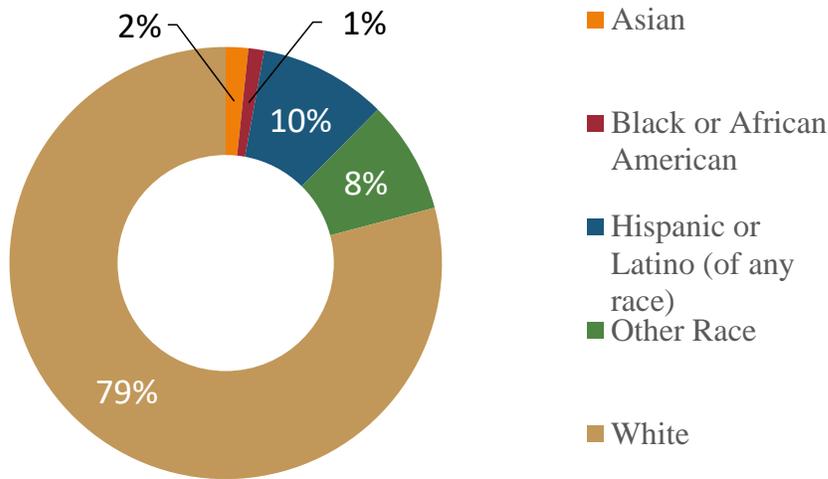


Figure H-2: Orting Population by Race and Hispanic or Latino Ethnicity, 2020

Source: US Census Bureau, 2011-2015 and 2016-2020 American Community Survey 5-Year Estimates (Table DP05); Washington Department of Commerce, 2023

Orting’s population is less diverse by race and ethnicity when compared to that of Pierce County. In 2020, 79% of the population was White, 11% of the population was Persons of Color, and 10% was Hispanic or Latino (of any race), This compares to 66% of the population of the Pierce County population being White, 11% being Hispanic or Latino (of any race), and 23% being Persons of Color.

Future Housing Needs

As noted in the Land Use Element, the 2044 population target for Orting is 9,590, signaling that the rapid growth and expansion that has occurred in Orting will subside. Still, this modest increase will impact the city in several ways, including future housing demand to accommodate growth and associated demand for services, community facilities, and other features necessary to sustain the community.

Population growth and housing development are functions of the demographics of the community (household size and age and economic status), as well as the marketability of the area. The population projections give a general indication of the number of new dwelling units needed to accommodate the target population. While this factor may change in the future, for the next 5-10 years it represents a reasonable basis for calculating housing demand.



The projected 2044 housing need is 3,221 units, indicating that 223 additional units need to be constructed by that year to meet the population forecast

Recently approved subdivisions and expected future development at “infill” sites should be sufficient to accommodate the projected population forecast. There is very little additional opportunity for new housing to be developed in the current city limits. With this in mind, Orting has adopted provisions for cottage housing, accessory dwelling units, and increased density in planned unit developments.

Increased flexibility in new housing types will help Orting to provide the appropriate number of new housing units for each level of household income, as prescribed by Pierce County in **Table H-4**.

Table H-4: Orting New Housing Unit Needs by 2044 by Income Level according to Area Median Income (AMI)

Income Level	0-30% AMI (Non-PSH)	0-30% AMI (PSH)*	30-50% AMI	50-80% AMI	80-100% AMI	100-120% AMI	>120% AMI	Total
Units	29	39	41	33	14	13	54	223
								Plus 14 beds (Emergency Housing)

Source: Pierce County Ordinance No. 2023-22s Exhibit B

*PSH = Permanent Supportive Housing

Nevertheless, any forecasted new growth could be slowed or halted if market or economic pressures prevent the process of land development. For example, financial or other obstacles to the construction of new homes could include economic recession, rising mortgage and lending rates, changes to lending guidelines, or high costs of building supplies and/ or construction workers to build homes.

Expanding Orting’s affordable housing stock will likely be the most challenging in introducing new housing for households having incomes below 80% of AMI. Consequently, the City should prioritize steps taken to foster and encourage low-income housing fulfilling those needs. Subsidies or other programs will be likely required to provide housing at those deepest levels of affordability and a range of housing types will need to be produced to fit the broad spectrum of needs.

Affordable Housing

The Growth Management Act requires each county and city to identify sufficient land for housing, including but not limited to, government-assisted housing, housing for low-income families, manufactured housing, multifamily housing, group homes, and foster care facilities. These types of housing are often grouped under the term "affordable housing."

Pierce County and the municipalities must collectively accommodate the housing demand for all economic segments of the population.

In addition, every Comprehensive Plan, in its Housing Element, must address the following or accomplish the following while ensuring there are adequate provisions made for all economic segments of the population:

- Incorporating consideration for low, very low, extremely low, and moderate-income households;
- Documenting programs and actions needed to achieve housing availability including gaps in local funding, barriers such as development regulations, and other limitations;
- Consideration of housing locations in relation to employment location; and
- Consideration of the role of accessory dwelling units in meeting housing needs;
- Identifies local policies and regulations that result in racially disparate impacts, displacement, and exclusion in housing, including: zoning that may have a discriminatory effect; disinvestment; and infrastructure availability;
- Identifies and implements policies and regulations to address and begin to undo racially disparate impacts, displacement, and exclusion in housing caused by local policies, plans, and actions;
- Identifies areas that may be at higher risk of displacement from market forces that occur with changes to zoning development regulations and capital investments; and
- Establishes anti-displacement policies, with consideration given to the preservation of historical and cultural communities as well as investments in low, very low, extremely low, and moderate income housing; equitable development initiatives; inclusionary zoning; community planning requirements; tenant protections; land disposition policies; and consideration of land that may be used for affordable housing.

Commented [NS3]: Although the existing Comprehensive Plan doesn't have anything specific to racially disparate impacts the following policies are already in the plan:

Policy H1.5 - Maintain non-discriminatory zoning regulations for group homes, consistent with the Federal Fair Housing Act.

Policy H2.4, 2.6, 2.7 - affordable housing, assistance programs, avoiding inequitable housing cost increases.

The private housing market does not typically meet affordable housing needs across all income spectrums. As a result, the Pierce County County-Wide Planning Policies state that “All jurisdictions should explore the expansion of existing non-profit partnerships, increased coordination with local public housing authorities, a county-wide land trust, as well as future involvement of larger County employers, in the provision of housing assistance for their workers.”

Definitions

The term Affordable Housing is often interchanged with the term “Low-income housing” (referred to as “subsidized housing in this element”) but should not be confused. Below are definitions:

- **Affordable housing:** Housing is typically considered to be affordable if total housing costs (rent, mortgage payments, utilities, etc.) do not exceed 30% of a household’s gross income.
- **Cost-burdened household:** A household that spends more than 30% of their gross income on housing costs. (A household that spends more than 50% of their gross income on housing costs is called “Severely cost-burdened.”)
- **Subsidized housing:** Public housing, rental assistance vouchers like Section 8, and developments that use Low-Income Housing Tax Credits are examples of subsidized housing. Subsidized housing lowers overall housing costs for people who live in it.

The percentage of income paid by moderate-, low-, and very low-income earners toward their monthly housing expenses is a measure of housing affordability. According to the US Department of Housing and Urban Development (HUD), “families who pay more than 30% of their income for housing [including utilities] are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation, and medical care.”

Estimates regarding households experiencing cost-burden use the following terms:

- Households paying less than 30% of their household income on housing costs are not considered **non cost-burdened**.
- **Cost-burdened (30-50%)** includes households paying between 30% and 50% of their household income on housing.
- **Severely cost-burdened (>50%)** includes households paying more than 50% of their income on housing costs.

The following data is sourced from the American Communities Survey unless otherwise noted.

The median 2021 household income in Orting was \$97,614. Households earning 80% of this median earned \$78,091. About 80% of Orting’s owner-occupied housing units and 55% of the renter-occupied units were affordable for the residents, with monthly housing costs less than 30% of household income. Many young families have recently chosen Orting as an alternative to higher-priced communities that are closer to major employment centers. Approximately 638 housing units would be considered affordable to households making 50% of the median household income in Orting. Three-hundred and seventy-eight of these units (about 60%) are occupied by owners without a mortgage. Housing values have increased substantially in recent years. The median home value in Orting as of 2022 is estimated to be \$416,400, while in 2015, it was \$207,300. The median income for owner-occupied housing in 2022 was \$119,716. An estimated 5.7% of the population was living below the poverty line as of 2022.

An Orting household with an income of \$73,000 could afford housing valued in the range of \$200,000-\$250,000. “Low Income” households would be limited to housing priced under \$150,000 and “Very Low Income” households would be limited to housing priced under \$100,000. For these two latter income categories, rental housing is likely to be all they can afford. Rents would have to be in the \$700-1,100 range. Orting has a small inventory of rental housing.

Per Pierce County’s GMA housing targets, Orting will need 109 new housing units that will be affordable to those making less than 50% of the median household income. Of these units, 29 will need to be permanent supportive housing. (See **Table H-3**).

Table H-5: Orting households by housing cost burden, 2019

	Owner Households		Renter Households	
Not Cost Burdened	1,539	78.0%	309	52.5%
Cost-Burdened (30-50%)	265	13.4%	205	34.8%
Severely Cost-Burdened (>50%)	169	8.6%	75	12.7%
Total	1,973	100%	589	100%

Source: US HUD, 2015-2019 Comprehensive Housing Affordability Strategy (CHAS) (Table 9); Washington Department of Commerce, 2023

Accessory Dwelling Units

There are a number of other ways that Orting could encourage the development of affordable housing that do not directly involve public financing for the development of housing. These options include apartments above commercial businesses, especially in the downtown area. Accessory apartments within existing single-family homes or as separate structures on existing single-family lots, known as Accessory Dwelling Units or ADUs, provide another alternative. This not only provides an affordable place to live, but it offers additional income to homeowners.

Group Care Homes & Foster Care Facilities

The Growth Management Act requires that the housing element of the plan address special housing needs, such as group care homes and foster care facilities. Group homes and foster care facilities are permitted in all Orting residential zones subject to the provisions of the Public Facilities Permit for publicly sponsored projects and Conditional Use Permits for privately sponsored projects.

Expanded Housing Options

In 2019 the Washington Legislature passed house bill 1923 (HB 1923) to provide funds to Washington communities to support a housing action plan or code amendments related to residential building capacity, production of a greater variety of housing types, and/or increase regulatory streamlining.

In 2020 the City of Orting applied for and received a grant from the Department of Commerce through the Washington State Legislature. Through this grant, code amendments were developed for the Orting Municipal Code related to:

- Authorizing at least one duplex on each parcel in one zoning district
- Authorizing lot size averaging in all zoning districts that permit single-family residences
- Authorizing attached accessory dwelling units (ADUs) in compliance with HB 1923 requirements found in RCW 36.70A.600
- Authorizing a duplex on each corner lot within all zoning districts that permit single-family residences
- Allowing for the division or redivision of land into the maximum number of lots through the short subdivision process provided in chapter 58.17 RCW

Council took action in Spring 2021. The code changes could result in duplexes being developed on lots that previously would have only permitted single family homes, and the construction of additional ADUs being built⁵.

The new codes are not expected to increase density rapidly or excessively but will aid the city in its ability to accommodate the anticipated population growth in the next 20 years. The increase in housing will result in an associated increase in demands on transportation and public services. This increase in demands on services is anticipated to occur in incremental increases over the long-term in conjunction with population increases. Impacts associated with the traffic impacts will be mitigated at the time of development through the payment of traffic impact fees. In addition to traffic

⁵ Pierce County CPP AH-2.1 states jurisdictions "should consider adopting reasonable measures and innovative techniques (e.g., moderate density housing, clustering, accessory dwelling units, cottage housing, small lots, planned urban developments, and mixed use) to stimulate new higher- density affordable and moderate-income housing stock on residentially zoned vacant and underutilized parcels" which has already been completed by Orting. [emphasis added]

impact fees, proposals would not be permitted to develop if transportation infrastructure is not provided concurrent with development. Other public services and utilities such as water and sewer are considered adequate to accommodate the planned housing that would be created as a result of the amendments.

Due to its size and location, the City of Orting is not subject to the requirements of HB 1110⁶ which was passed in 2023 requiring many jurisdictions across the state to adopt development regulations allowing for “middle housing” (buildings that are compatible in scale, form, and character with single-family houses and contain two or more attached, stacked, or clustered homes including duplexes, triplexes, fourplexes, fiveplexes, sixplexes, townhouses, stacked flats, courtyard apartments, and cottage housing). Nonetheless, there are development regulations in place that can support future middle housing options in the city to some extent.

Commented [NS4]: FYI: The city could, if desired, create a zoning district with multiple units required per parcel or also do a "minimum density" regulation.

Emergency Housing, Shelters, and Transitional Housing

In 2022 the city adopted code amendments to comply with HB 1220 which directed that “a city shall not prohibit transitional housing or permanent supportive housing in any zones in which residential dwelling units or hotels are allowed” as well as “a code city shall not prohibit indoor emergency shelters and indoor emergency housing in any zones in which hotels are allowed.” Through the code amendments the city adopted definitions for emergency shelters, emergency housing, transitional housing, and permanent supportive housing and identified zoning districts where the various uses would be allowed.

Displacement Risk

The City must assess and identify areas that may be at higher risk of displacement from market forces that occur with changes to zoning development regulations and capital investments. Fortunately, tools provided by both the PSRC and by Commerce (Risk of Displacement maps⁷) show Orting in an area of low displacement risk. Nonetheless, this concern should be monitored over time as market conditions and other factors change.

Programs for Affordable Housing

There are a number of local, state, and federal grant and loan programs that are aimed at fulfilling basic housing needs and expanding homeownership opportunities for low- and moderate-income citizens. The city will support initiatives of project sponsors to gain access to these resources and broaden the housing opportunities consistent with the goals and policies of the Comprehensive Plan and the development regulations.

The City of Orting is not eligible to directly receive Community Development Block Grant (CDBG) funds from HUD as it is not an "entitlement community" (which would require a population count of 50,000 persons). As a result, the city and the Pierce County Community Development Corporation (CDC) can collaborate on CDBG and programs through the “Urban County Consortium” that deal with housing, emergency repair, or rehabilitation for citizens who meet certain income requirements.

HUD's Section 8 program, locally run by the Pierce County Housing Authority, may be available to supply Housing Choice Vouchers to very low-income families, the disabled, and the elderly in Orting who meet the requirements. Participants in the program are free to select any housing that satisfies

⁶ E2SHB 1110, Chapter 332, Laws of 2023: Growth Management Act – Minimum Development Densities in Residential Zones

⁷ Displacement Map tool by the Washington State Department of Commerce at https://experience.arcgis.com/experience/d26f4383cab3411cb45f39ddfc666b74/?data_id=83713d4b3ea34743bed49d3d61be4fb3-187dd75e9f2-layer-27-187dcfb6357-layer-4%3A499 [Accessed March 5, 2024]

program standards and a housing subsidy is paid directly to the property owner. There is often a long waiting list associated with the program.

The United States Department of Agriculture (USDA) funds rural housing programs. Like Section 8 programs, there are income guidelines; however, it is a separate federal funding source and only utilized in designated rural areas. The USDA offers loan programs for both single family and multi-family housing (under the “Guaranteed Rental Housing” program) and also provides rental assistance to those citizens which meet its income guidelines (similar to the Section 8 program). This assistance may be utilized while living in a USDA housing facility. Alternatively, HUD Section 8 rental assistance may also be accepted by USDA housing facilities.



The Orting Senior facility at 307 Harmon Way offers 20 apartments available to disabled people or persons aged 62 and older who qualify.

Another USDA program that could be of interest locally is the Housing Preservation Grant (HPG) program which provides grants to sponsoring organizations for the repair or rehabilitation of housing for low and very low incomes households who are homeowners.

Orting could incentivize affordable housing through a multifamily tax exemption (MFTE), which is a waiver of property taxes to encourage affordable housing production and redevelopment in “residential targeted areas” designated by cities as authorized by the State of Washington. These programs can be used to address a financial feasibility gap for desired development types in a target areas, specifically to develop sufficient available, desirable, and convenient residential housing to meet the needs of the public.

Commented [NS5]: FYI - the city could specify areas for this type of focus through zoning and other controls

The Washington State Department of Revenue offers programs for property tax exemptions or deferrals for qualified low-income households, senior citizens, and disabled persons. The City should also continue focusing outreach efforts within these groups to connect those who may qualify for assistance, particularly in an effort to alleviate economic pressures on longtime homeowners facing escalating costs and in danger of displacement pressures. The City currently offers assistance for residents such as reduced costs for utilities. Additionally, Pierce County offers a Property Tax Exemption Program for people with disabilities and low-income senior citizens. In addition, the Pierce County Human Services Department partners with the Pierce County Community Development Corporation to provide financing for the development and preservation of affordable rental housing and the development of homeownership opportunities all to benefit low-income households in Pierce County. The following activities are supported: acquisition of rental and for-sale housing; new Construction of rental and for-sale housing; rehabilitation & preservation of rental and for-sale housing; ongoing operations and maintenance of rental housing; and support for developers and buyers of for-sale housing. Funding is allocated at least once per year through a competitive Notice of Funding Availability (NOFA).

Additional Programs

Many of these programs and other lesser-known options are outlined in the Pierce County Community Services Department – Housing Division publication⁸, “Strategies for Housing

⁸ Available online at <https://www.piercecountywa.gov/DocumentCenter/View/5331/Strategies-for-Housing-Affordability>

Affordability in Pierce County Washington: A Toolkit Developed for Pierce County Stakeholders.” Another helpful resource is the “Pierce County Affordable Housing Regulation Recommendations” which was prepared by AHBL and ECONorthwest as a part of the Buildable Lands Report process⁹.

Goals & Policies

Goal H 1 Ensure adequate housing for all current and future residents of Orting by achieving and maintaining high quality housing and neighborhoods.

- H 1.1 Provide for a variety of housing types and densities in appropriate areas.
- H 1.2 Conserve the existing housing stock through code enforcement, appropriate zoning, participation in rehabilitation programs, and protection of neighborhood integrity.
- H 1.3 Ensure appropriate levels of service for public facilities in areas that are designated for higher densities.
- H 1.4 Support private sector efforts to fund, plan and develop housing for the elderly and other citizens with special needs.
- H 1.5 Maintain non-discriminatory zoning regulations to allow for group homes for persons with disabilities, consistent with the Federal Fair Housing Act.
- H 1.6 Encourage the protection of historically significant housing sites, neighborhoods, and structures, including those that represent the design themes important to Orting’s history.
- H 1.7 Accommodate Orting’s fair share assigned values of the County’s housing needs through the designation of adequate residential land for development and the achievement of the city’s housing policies.

H 1.8 To the extent feasible, consider identifying potential physical, economic, and cultural displacement of low-income households and marginalized populations that may result from planning, public investments, private redevelopment, and market pressure, and use a range of strategies to prevent and minimize the cultural and physical displacement and mitigate its impacts.

Goal H 2 Encourage the availability of a wide range of affordable housing to meet the needs of households with varying economic status.

- H 2.1 Ensure that development regulations provide opportunity for a variety of housing densities and types, including mixed use in the downtown.
- H 2.2 Encourage creative design and development of denser, urban housing in and near the downtown.

⁹ Available online at <https://www.piercecountywa.gov/DocumentCenter/View/103169/AHBL-Affordable-Housing-Report-2019>

Commented [A6]: This is from AH-8, we moved the phrase "to the extent feasible" to the first part (from the last) and added "consider"
This is a "SHOULD" item

H 2.3 Guide-sensitive Continue to allow development of accessory dwelling units in all residential zoning classifications.

H 2.4 Provide information to assist both low- and moderate-income families in finding adequate housing and to assist non-profit developers in locating suitable sites for affordable housing.

H 2.5 Encourage public agencies, private and non-profit associations, and joint public-private partnerships to provide low- and moderate-income housing .

H 2.6 Encourage project proponents' participation in housing assistance programs that provide home ownership opportunities to low- and moderate-income families and recognize historic inequities in access to homeownership opportunities for communities of color.

Commented [A7]: Added per AH-7

H 2.7 Continue to monitor the progress in implementing the Housing Element and evaluate new ways of providing affordable housing to support the City's jobs-housing balance

Commented [A8]: Moved here from the ED element, with some edits (was Goal ED 7 and Policy ED 7.1)

H 2.8 Ensure permitting and utility facility charges are equitable.

Commented [A9]: Moved here from the ED element (was Policy ED 7.2)

~~H 2.7 Maintain development standards and regulations, permit processing procedures, and concurrency management that do not result in inequitable housing cost-increases.~~

~~H 2.8 Monitor housing demand and the achievement of these housing policies in-conjunction with the Pierce County buildable lands program.~~

H 2.9 Increase housing supply, diversity, and densities to meet the City's current and projected needs for all income levels and demographic groups, consistent with the VISION 2050 Regional Growth Strategy.

H 2.10 Take reasonable action within the City's power to reduce barriers to developing the types of housing that could meet growth targets, such as considering the adoption of a Multifamily Tax Exemption (MFTE) program and considering the creation of an affordable housing incentive program.

Commented [A10]: This supports AH-2.1 in the Pierce County CWPPs

Goal H 3 Support the development of affordable housing partnerships, programs, and regional policies.

Commented [A11]: This section supports AH4 items in Pierce County CWPPs plus AH5.1

H3.1 Seek to participate in regional solutions for housing affordability issues that may be challenging for the City alone to address due to geographic constraints or other barriers.

H 3.2 Work with other Pierce County jurisdictions to jointly explore opportunities to develop a countywide funding mechanism and the potential for both voter-approved measures (bond or levy), and nonvoter approved sources of revenue to support the development of housing affordable to all economic segments.

- H3.2 Consider working with other Pierce County jurisdictions to jointly pursue state legislative changes to give local jurisdictions the authority to provide tax relief to developers of affordable housing.
- H3.3 Explore opportunities to dedicate revenues from sales of publicly -owned properties, including tax title sales, to affordable housing projects.
- H3.4 Explore the expansion of existing non-profit partnerships, increased coordination with local public housing authorities, a county-wide land trust, as well as future involvement of larger County employers, in the provision of housing assistance for their workers.
- H3.5 Investigate the feasibility of inclusionary or incentive zoning measures which could be introduced as a condition of major rezones and development.

Goal H 4 *Maintain excellent governmental performance and accountability.*

- H4.1 Review and streamline development standards and regulations to advance their public benefit, provide flexibility, and minimize costs to housing.
- H4.2 Monitor housing demand and the achievement of these housing policies in conjunction with the Pierce County buildable lands program Provide permitting data to state and local agencies to monitor progress in meeting housing demand and GMA mandates.
- H4.3 Maintain development standards and regulations, permit processing procedures, and concurrency management that do not result in inequitable housing cost increases.

Commented [A12]: PC CWPP AH 5.2

Commented [A13]: Relocated here (former policy H2.8)

Commented [A14]: This covers AH-6

Commented [A15]: Relocated here (former policy H2.7)

TRANSPORTATION ELEMENT



Purpose

~~The This~~ Orting ~~2040-2044~~ Transportation ~~Plan Element~~ defines the existing and future transportation vision for Orting ~~and will replace the 2015 Transportation Element and Appendix from the Orting Comprehensive Plan published in June 2015.~~ This ~~transportation plan Element~~ contains a description of existing transportation conditions, travel forecasts, service standards and analysis, and transportation recommendations. The ~~following~~ analysis and conclusions ~~will inform the City of Orting 2040-2044 Comprehensive Plan~~ provide an important basis for Goals, Policies and for strategies to fund and complete specific projects.

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The City of Orting has a unique configuration with respect to transportation. The community lies in the Orting Valley between the Carbon and Puyallup Rivers. State Route (SR) 162 runs between the two rivers and links Orting with Sumner and Buckley. Orting is a small community of just ~~under 8,000~~ over 9,100 residents—more than twice the population from 20 years ago. Many of the local city streets are quiet, tree lined, with low traffic volumes. The older portion of the City is laid out on a traditional grid system and some recent developments feature a curvilinear circulation pattern.

Existing Conditions

This section summarizes the existing ~~(2017)~~ transportation system for all modes of travel in Orting. This information supports the city's comprehensive planning process, which must, among other things, contain travel forecasts, a level of service standard, be regionally coordinated, and meet concurrency requirements. ~~The This~~ transportation element for the City of Orting must meet the requirements of the GMA and will be certified by the Puget Sound Regional Council. The element will contain a description of existing transportation conditions, travel forecasts, service standards and analysis, and transportation recommendations, all of which will be coordinated with the county and the state.

Transportation Network Overview

The roadway network in Orting consists of corridors serving different travel needs. The main thoroughfare is SR 162, which runs northwest/southeast through the center of Orting. Calistoga Street W ~~and Kansas St SW are~~ is the other significant arterials in the city that provides an east/west link across the Puyallup River and to the Orting-Kapowsin Highway. There are minimal east/west regional connections into and out of Orting.

Roadway Functional Classification

As Orting continues to grow, the internal street network will continue to be developed. City streets are classified into different categories to guide development and define the degree to which they provide through movement and land access functions. Roadway classification is based upon guidelines prepared by the Federal Highway Administration (FHWA) and administered by the Washington State Department of Transportation (WSDOT). City streets in Orting are classified into four functional classifications that are accompanied by different land use policies and street standards. The four classifications are:

- **Principal Arterials**, which are streets and highways that carry the greatest portion of through or long-distance traffic. Such facilities serve the high-volume travel corridors that connect major generators of traffic. The selected routes provide an integrated system for complete circulation of traffic, including ties to the major rural highways entering urban areas.
- **Minor Arterials**, which are streets and highways that connect with remaining arterial and collector roads that extend into the urban area. Minor arterial streets and highways serve less concentrated traffic-generating areas, serve as boundaries to neighborhoods, and collect traffic from collector streets. Although the predominant function of minor streets is the movement of through traffic, they also provide for considerable local traffic that originates or is destined for points along the corridor.
- **Collectors**, which are streets that provide direct services to residential areas, local parks, churches, and areas with similar land uses. To preserve the amenities of neighborhoods, they are usually spaced at about 0.5-mile intervals in order to collect traffic from local access streets and convey it to major and minor arterial streets and highways. Collector streets are typically 1 to 2 miles in length. Direct access to abutting land is essential.
- **Local Access Streets**, which are the remaining streets that allow access to individual homes, shops, and similar destinations. They provide direct access to abutting land and to the higher classification of roadways. Through traffic is discouraged.

The City of Orting is responsible for maintaining approximately 62 lane-miles of roadways consisting of asphalt concrete pavement (ACP), Portland Cement concrete (PCC) and gravel roadways.

Figure T-1 shows the functional classification of the roadways within the City.



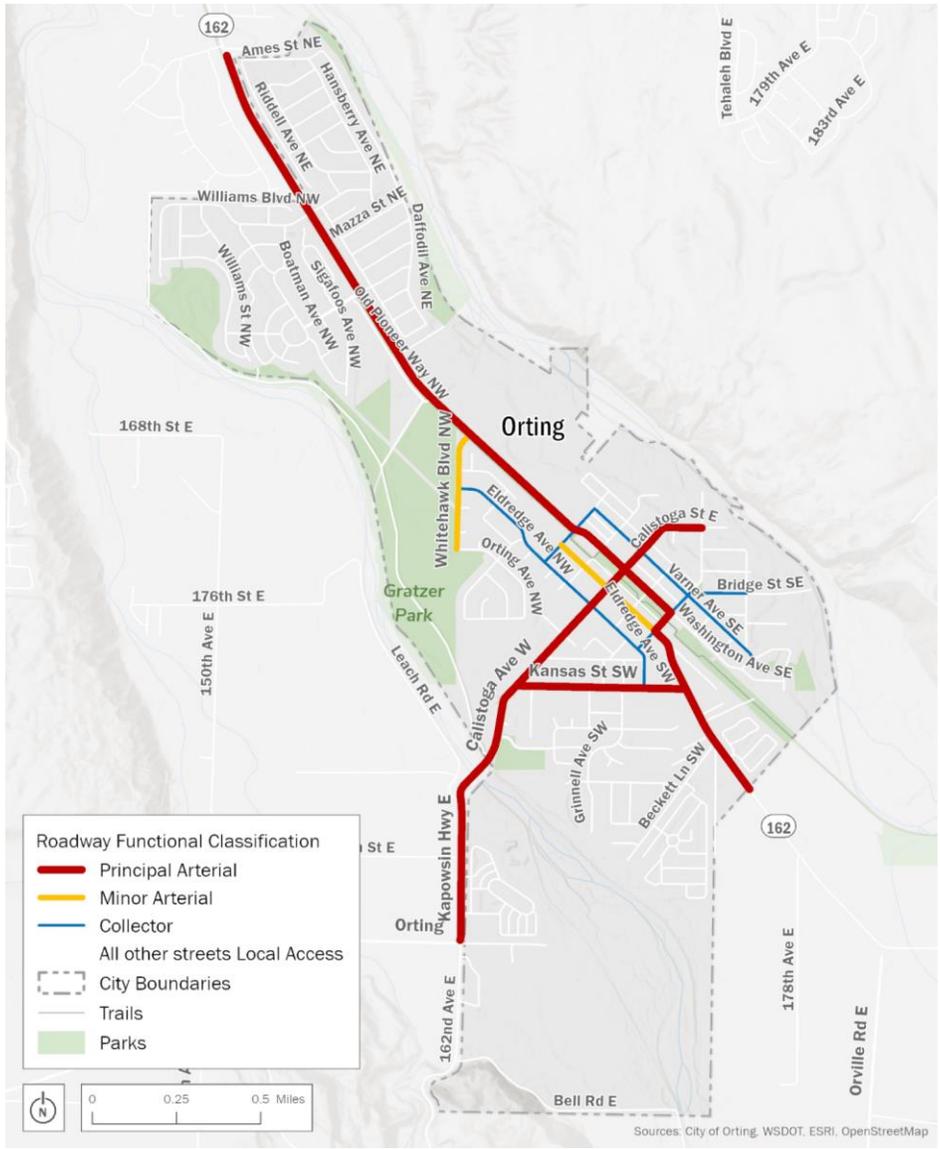


Figure T-1. Orting Roadway Functional Classification

State-owned Transportation Facilities & Highways of Statewide Significance

In 1998, the Washington State Legislature enacted the "Level of Service Bill" (House Bill 1487) that amended the GMA requires cities to identify the "Level of Service" to include additional detail regarding state-owned transportation facilities in the transportation element of comprehensive plans. PSRC, in 2003, adopted The Puget Sound Regional Council (PSRC) additionally sets level of service standards for regionally significant state highways. Regionally significant state highways are state transportation facilities that are not designated as highways of statewide significance. Within Orting, no roadways have been designated as a Highway of Statewide Significance in WSDOT's Highway System Plan.

SR 162, which links Orting with Sumner and Buckley, is the only state-owned facility within the planning area and is designated as a Regionally Significant State Highway. WSDOT completed a study of SR 162 in June 2017 to identify strategies to increase mobility and improve safety in the corridor. Although the scope of the study was outside of the Orting City limits, potential improvement options could improve traffic flow and safety for vehicles entering and exiting Orting. [These improvements include consideration of Intelligent Transportation System Improvements \(ITS\) at intersections, access management, and Commute Trip Reduction strategies such as park and ride and a Sound Transit extension to 136th Street. Locally within Orting, Corridor Sketch recommends the Orting Southwest Connector \(Whitehawk Blvd Extension\), and the Orting Emergency Evaluation Bridge, also known as the Pedestrian Bridge for Kids.](#)

Improvement strategies identified in the study will be incorporated in WSDOT's Corridor Sketch Phase II for SR 162 and prioritized for funding on a statewide basis.

[Additionally, multiple studies of SR 162 have been conducted related to proposed development outside of Orting, including development at Tehaleh, and there are anticipated projects for mitigation that will be done for development impacts.](#)

Roadway Network

The primary roadway network in Orting comprises the following:

- **State Routes** - SR 162 runs northwest/southeast through Orting, providing the primary connection to SR 512 and Interstate 5. Outside of the city limits, SR 162 is a two-lane principal arterial with limited shoulders and a posted speed limit of 50 miles per hour (mph). Within the city limits, the roadway is known as Washington Avenue N and is a two-lane principal arterial with a narrow painted median and paved shoulders and has parking on both sides of the road in the downtown core. The posted speed limit is 35 mph and reduces to 25 mph near Orting High School.
- **Pierce County Roadways** - Orting-Kapowsin Highway is a two-lane major arterial, with a posted speed limit of 35 mph along most of its length. Shoulders have a gravel surface, with a walking path along the east side of the road in some areas. It runs adjacent to the city limit line for a short distance south of the Puyallup River before turning into Calistoga Street W.
- **Local Transportation System** - Calistoga Street W is the primary local street that provides east/west travel. Calistoga Street W is a two-lane roadway with intermittently paved or graveled shoulders and sidewalks on the north side. Other local streets in the city provide access to the downtown area of Orting, and commercial and residential areas.

Table T-1 provides an existing conditions inventory of many of the roadways in the area, including functional classification, shoulder type, parking, sidewalks, bicycle lanes, and posted speed limits.

Table T-1. Roadway Inventory – Existing Conditions

ROADWAY	FUNCTIONAL CLASSIFICATION	SHOULDER	PARKING	SIDEWALKS	BICYCLE LANE	SPEED LIMIT (MPH)
SR-162/ Pioneer Way	Principal arterial	Paved	No	Interrupted	No	50/35/25
Washington Avenue N	Principal arterial	Paved	Yes	Both	No	25
Orting-Kapowsin Highway	Principal arterial	Gravel	No	No	No	35
Varner Avenue NE	Collector	Gravel/grass	Yes	Both	No	Not posted
Calistoga Street W	Principal arterial	Paved/gravel	Yes	Both	No	25
Whitehawk Boulevard	Collector	Paved	Yes	Both	No	25
Eldredge Avenue	Collector	Gravel/grass	Yes	Whitesell north – both sides; Safeway south – one side	No	Not posted
Whitesell Street	Collector	None	No	One side	No	Not posted
Corrin Avenue	Minor arterial	Paved	Yes (angle parking downtown)	Both	No	Not posted
Bridge Street	Collector	Gravel/grass	Yes	Both	No	Not posted
Kansas Street SW	Principal arterial	Paved	Yes	Both	No	Not posted
Harman Way	Principal arterial	Paved	Yes	Yes	No	Not posted

General Purpose Traffic

General purpose traffic volumes during the PM peak hour were collected at 19 intersections throughout Orting in April 2017 [as follows](#)¹:

- Intersection A: Washington Avenue N and Williams Boulevard NW
- Intersection B: Washington Avenue N and Lane Boulevard NW
- Intersection C: Washington Avenue N and Rocky Road NE
- Intersection D: Washington Avenue N and Old Pioneer Way NW
- Intersection E: Washington Avenue N and Whitehawk Boulevard NW
- Intersection F: Washington Avenue N and Ammons Lane NE
- Intersection G: Washington Avenue N and Cardinal Lane
- Intersection H: Washington Avenue N and Whitesell Street S
- Intersection I: Washington Avenue S and Calistoga Avenue W
- Intersection J: Washington Avenue S and Train Avenue S
- Intersection K: Washington Avenue SE and Bridge Street S
- Intersection L: Bridge Street S and Harman Way S and Corrin Avenue E
- Intersection M: Harman Way S and Kansas Street SW
- Intersection N: Calistoga Avenue W and Corrin Avenue SW

¹ [Recent publicly available traffic counts were evaluated and while a slight increase was identified at select intersections, it had negligible effects on the existing and future demand models.](#)

- Intersection O: Calistoga Avenue W and Eldredge Avenue SW
- Intersection P: Calistoga Street W and Kansas Street SW
- Intersection Q: Train Street SW and Van Scoyoc Avenue East
- Intersection R: River Avenue SE and Varner Avenue SE and Bridge Street SE
- Intersection S: Eldredge Avenue NW and Whitesell Street S

Figure T-2 summarizes the intersection counts. Traffic volumes during the PM peak hour represent the highest hourly volume of vehicles passing through an intersection during the 4:00 to 6:00 PM peak period. Because the PM peak hour volumes represent the highest volumes of the average day, these traffic volumes were used for the base year operations analysis, and as the basis for future year traffic volume projections.

Intersection Level of Service

Intersection level of service (LOS) is a term used to describe the operating conditions and amount of delay a driver will experience while traveling through an intersection or along a roadway. LOS ranges from A (very little delay) to F (long delays and congestion). Table T-2 summarizes the amount of delay in seconds associated with each LOS designation. The LOS/delay criteria for stop-sign-controlled intersections are different than for signalized intersections because driver expectation is that a signalized intersection is designed to carry higher traffic volumes and experience greater delay. For signalized intersections, the LOS ranges from A with a delay of less-fewer than 10 seconds to F with a delay of more than 80 seconds. For stop-sign- controlled intersections, LOS A also has a delay of less-fewer than 10 seconds, while LOS F has a delay of more than 50 seconds.

Table T-2: Vehicle Level of Service and Delay

Level of Service	Description	Signalized Intersection Delay (sec/veh)	Unsignalized Intersection Delay (sec/veh)
A	Free flowing	<10	<10
B	Little delay	>10 and ≤20	>10 and ≤15
C	Some delay	>20 and ≤35	>15 and ≤25
D	Some driver frustration; moderate delay	>35 and ≤55	>25 and ≤35
E	High level of frustration; high levels of delay	>55 and ≤80	>35 and ≤50
F	Severe congestion; excessive delays	>80	>50

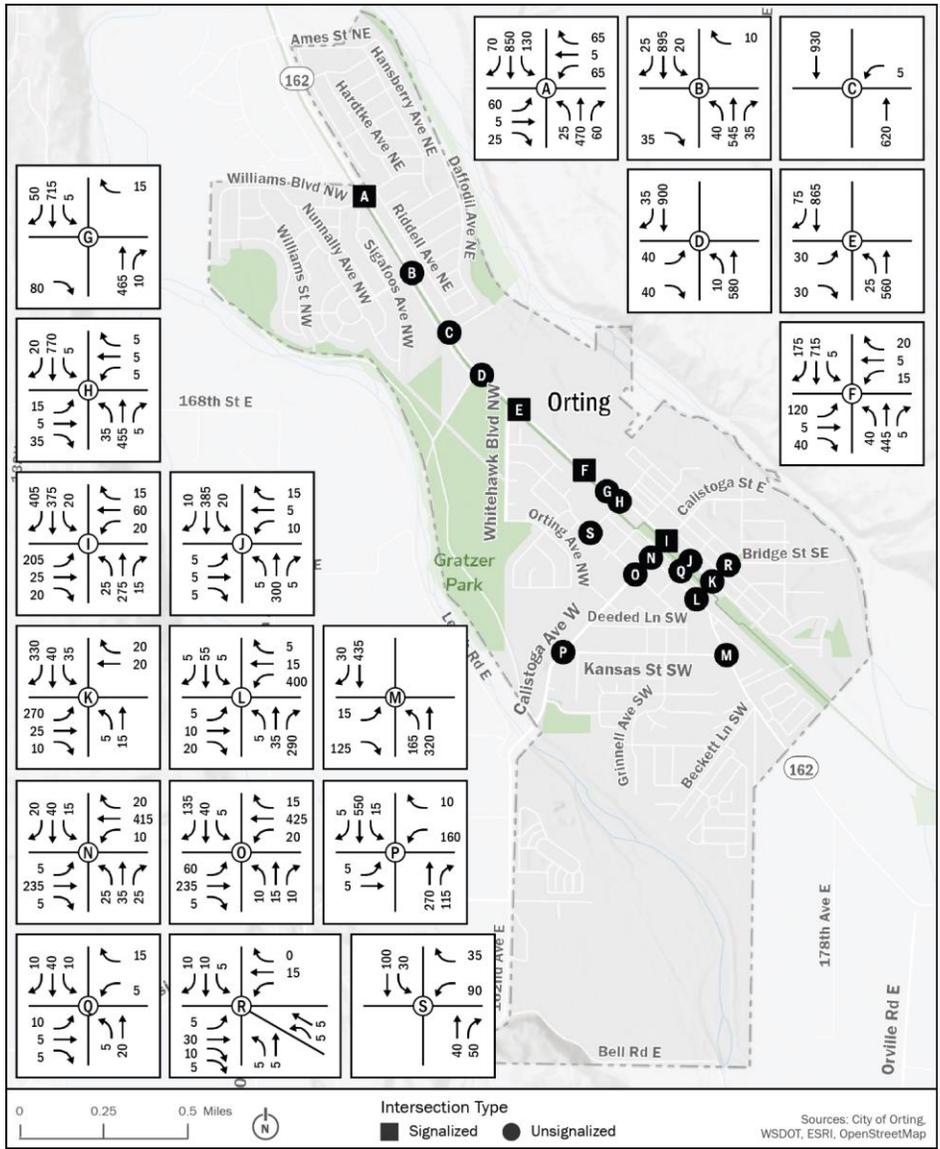


Figure T-2. Existing (2017) PM Peak Hour Intersection Traffic Counts

For unsignalized intersections, delay is reported for the worst-operating approach (typically, the minor street left turn). For signalized intersections, the average delay is reported for all vehicles. LOS D is the concurrency standard adopted by the City of Orting. **Figure T-3** shows the overall existing intersection LOS at the study intersections in Orting during the PM peak hour. [For the purpose of this update, 2017 data was utilized as traffic counts were collected in that year.](#) Most of the intersections in the City meet the concurrency standard adopted by the City of Orting. However, Washington Avenue N and Rocky Road NE (intersection C) and Calistoga Street W and Kansas Street SW (intersection P) exceed the threshold and operate at LOS E [and F, respectively](#). E. At Washington Avenue N and Rocky Road NE (intersection C), the delay is experienced by very few vehicles, approximately five vehicles during the PM peak hour as summarized in **Figure T-2**. The Washington Avenue N and Whitehawk Boulevard NW intersection (intersection E) operates acceptably but at the City's concurrency threshold of LOS D.



Collision History

WSDOT provided a history of reported collisions that occurred within the city limits of Orting for the period of January 1, 2012, through December 31, 2016. **Figure T-4** summarizes the locations where the collisions occurred in Orting. Total accidents averaged approximately 37 per year with a total of 186 over the 5-year collision period. Nearly 70 percent of collisions were property damage only. There were no fatal collisions and only three collisions were serious injury collisions. Five collisions involved non-motorized users. Most accidents (approximately 60 percent) were at intersections or driveways.

Table T-3 summarizes collisions by severity in the entire street network. As shown, most of the collisions along the roadways resulted in property damage only (135 of 186 total collisions). The remaining 51 collisions resulted in an injury.

Table T-3. Summary of Collisions by Severity for Entire Street Network
(January 2012 to December 2016)

LOCATION	COLLISION SEVERITY			TOTAL
	FATALITY	INJURIES	PROPERTY DAMAGE ONLY	
SR 162 (Washington Avenue N)	0	34	58	92
SR 162 (Bridge Street S and Harman Way S)	0	4	17	21
Calistoga Street W	0	5	22	27
Kansas Street SW	0	1	1	2
Other (minor, collector, local access streets)	0	7	37	44
Total	0	51	135	186

Source: WSDOT Transportation Data and GIS Office

In addition to summarizing the collision data by severity, the 51 injury collisions were summarized by type in **Table T-4**. For the entire roadway network, the majority of the injury collisions were rear end. Rear-end collisions often occur in congested locations. The other collision types along the entire network were entering at angle, fixed object, pedestrian and/or cyclist involvement, sideswipe, and turning (opposite direction) and none of these had more than five collisions over the 5-year period.

The following disclaimer applies to Tables T-3 through T-6: Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

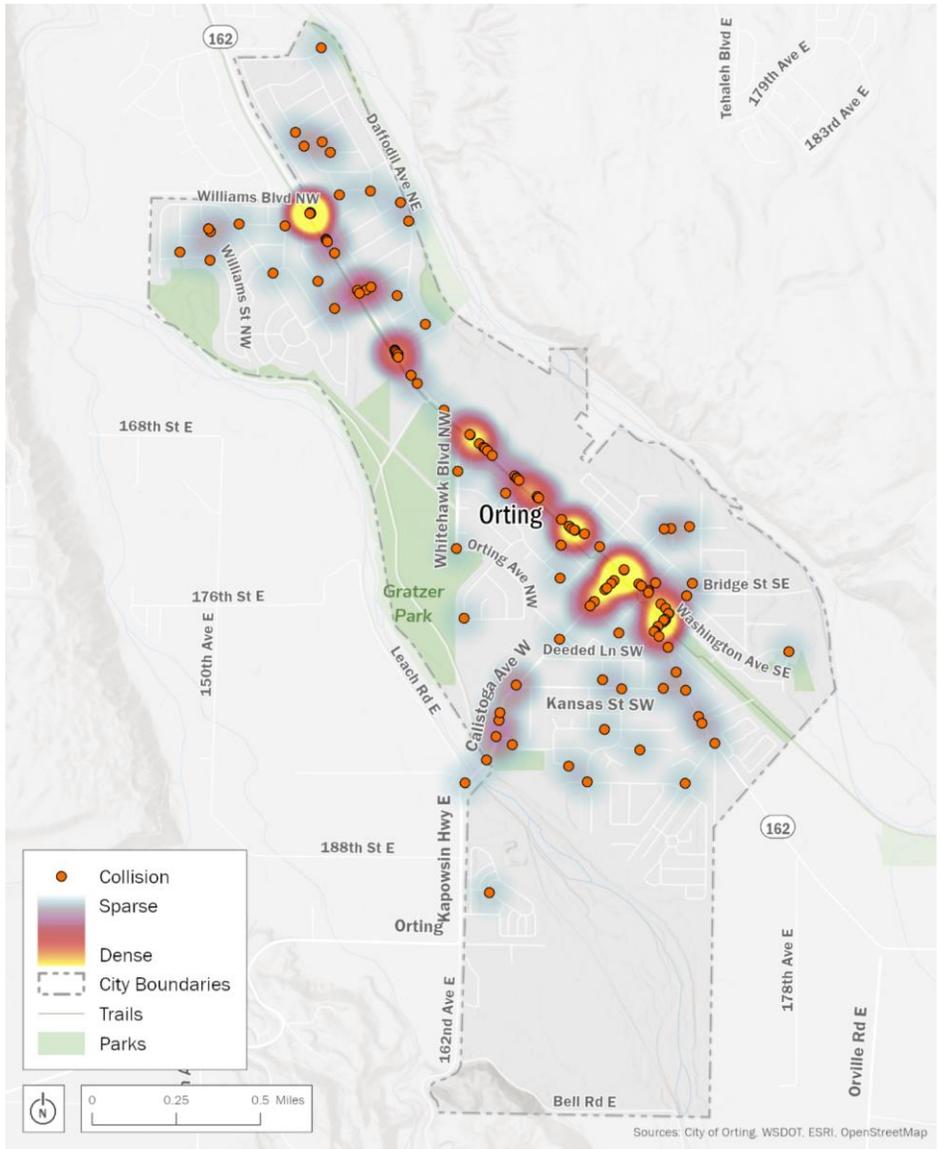


Figure T-4. All Collisions in the City of Orting (January 2012 to December 2016)

Table T-4. Summary of Injury Collisions by Type for Entire Street Network
(January 2012 to December 2016)

LOCATION	COLLISION TYPE									Total
	Entering at Angle	Fixed Object	Other	Parking	Pedestrian/ Cyclist Involved	Rear End	Sideswipe	Turning (Opposite Direction)	Vehicle Overturned	
SR 162 (Washington Avenue N)	3	3	2	1	2	20	2	1	0	34
SR 162 (Bridge Street S and Harman Way S)	0	0	1	0	1	2	0	0	0	4
Calistoga Street W	1	0	0	0	1	1	1	1	0	5
Kansas Street SW	0	1	0	0	0	0	0	0	0	1
Other (minor, collector, local access streets)	1	0	0	2	1	1	1	0	1	7
Total	5	4	3	3	5	24	4	2	1	51

Source: WSDOT Transportation Data and GIS Office

Additionally, the collision history was reviewed for the study area intersections by severity and type. **Table T-5** summarizes the study area intersection collisions by severity. As shown, most of the collisions at the study intersections resulted in property damage only (75 of 107 total collisions). The remaining 32 collisions at study area intersections resulted in an injury.

Table T-5. Summary of Collisions by Severity at Study Intersections
(January 2012 to December 2016)

LOCATION	COLLISION SEVERITY			Total
	Fatality	Injuries	Property Damage Only	
A Washington Avenue N and Williams Boulevard NW	0	6	12	18
B Washington Avenue N and Lane Boulevard NW	0	0	5	5
C Washington Avenue N and Rocky Road NE	0	3	5	8
D Washington Avenue N and Old Pioneer Way NW	0	0	0	0
E Washington Avenue N and Whitehawk Boulevard NW	0	3	5	8
F Washington Avenue N and Ammons Lane NE/Driveway	0	5	2	7
G Washington Avenue N and Cardinal Lane	0	0	1	1
H Washington Avenue N and Whitesell Street S	0	3	7	10
I Washington Avenue S and Calistoga Avenue W	0	3	10	13
J Washington Avenue S and Train Avenue S	0	1	2	3
K Washington Avenue SE and Bridge Street S	0	3	4	7
L Bridge Street S and Harman Way S and Corrin Avenue E	0	2	4	6
M Harman Way S and Kansas Street SW	0	0	1	1
N Calistoga Avenue W and Corrin Avenue SW	0	2	4	6
O Calistoga Avenue W and Eldredge Avenue SW	0	1	5	6
P Calistoga Street W and Kansas Street SW	0	0	6	6
Q Train Street SW/Train Avenue S and Van Scoyoc E	0	0	0	0
R River Avenue SE/Verner Avenue SE and Bridge Street SE	0	0	2	2
S Eldredge Avenue NW and Whitesell Street S	0	0	0	0
Total	0	32	75	107

Source: WSDOT Transportation Data and GIS Office

The 32 injury collisions that occurred at study intersections were summarized by type in **Table T-6**. The majority of the injury collisions were rear end, specifically on the main arterial, Washington Avenue N/Bridge Street/Harman Way (SR 162). Rear-end collisions often occur at congested locations. The other collision types at study intersections were entering at angle, fixed object, pedestrian and/or cyclist involvement, sideswipe, and turning (opposite direction). Other than rear-end collisions, there were no more than five collisions of any type over the 5-year period.

Table T-6. Summary of Injury Collisions by Type at Study Intersections
(January 2012 to December 2016)

LOCATION		COLLISION TYPE									
		Entering at Angle	Fixed Object	Other	Parking	Pedestrian/ Cyclist Involved	Rear End	Sideswipe	Turning (Opposite Direction)	Vehicle Overturned	Total
A	Washington Avenue N and Williams Boulevard NW	0	1	1	0	1	2	0	1	0	6
B	Washington Avenue N and Lane Boulevard NW	0	0	0	0	0	0	0	0	0	0
C	Washington Avenue N and Rocky Road NE	0	0	0	0	1	2	0	0	0	3
D	Washington Avenue N and Old Pioneer Way NW	0	0	0	0	0	0	0	0	0	0
E	Washington Avenue N and Whitehawk Boulevard NW	2	0	0	0	0	0	1	0	0	3
F	Washington Avenue N/Ammons Lane NE and Driveway	0	0	0	0	0	5	0	0	0	5
G	Washington Avenue N/ Cardinal Lane	0	0	0	0	0	0	0	0	0	0
H	Washington Avenue N and Whitesell Street S	0	1	0	0	0	2	0	0	0	3
I	Washington Avenue S and Calistoga Avenue W	0	1	0	0	0	2	0	0	0	3
J	Washington Avenue S and Train Avenue S	1	0	0	0	0	0	0	0	0	1
K	Washington Avenue SE and Bridge Street S	0	0	0	0	0	3	0	0	0	3
L	Bridge Street S/Harman Way S and Corrin Avenue E	0	0	1	0	1	0	0	0	0	2
M	Harman Way S and Kansas Street W	0	0	0	0	0	0	0	0	0	0
N	Calistoga Avenue W and Corrin Avenue SW	0	0	0	0	0	1	1	0	0	2
O	Calistoga Avenue W and Eldredge Avenue SW	0	0	0	0	0	0	0	1	0	1
P	Calistoga Street W and Kansas Street SW	0	0	0	0	0	0	0	0	0	0
Q	Train Street SW/Train Avenue S and Van Scoyoc E	0	0	0	0	0	0	0	0	0	0
R	River Avenue SE/Verner Avenue SE and Bridge Street SE	0	0	0	0	0	0	0	0	0	0
S	Eldredge Avenue NW and Whitesell Street S	0	0	0	0	0	0	0	0	0	0
TOTAL:		3	3	2	0	3	17	2	2	0	32

Source: WSDOT Transportation Data and GIS Office

Freight Traffic and Network

Providing freight access to and through Orting is important in supporting economic activity and providing goods to residents. In Orting, the primary freight routes are along SR 162 and Calistoga Street to the Orting-Kapowsin Highway. WSDOT uses the County Road Freight and Goods Transportation System (FGTS) to classify state highways, county roads, and city streets according to the tons of freight that are carried on them each year. SR 162, between the northern city limits and Calistoga Street, is classified as a T-2 Route, carrying 4 million to 10 million tons per year. To the southeast of Calistoga Street, SR 162 is a T-3 Route, carrying 300,000 to 4 million tons per year. Calistoga Street W and the Orting-Kapowsin Highway are classified as T-3 Routes.

Non-Motorized Travel

In June 2017, the City of Orting adopted the Non-Motorized Transportation Plan (NMTP), which includes detailed information on non-motorized facilities, volumes, and policies for the City of Orting. For additional information on non-motorized travel in Orting, please see the NMTP. The City adopts by reference the NMTP (Parametrix, 2017 or as amended) which identifies non-motorized projects the City has planned to meet the growing demands on its transportation network. Table 6-1 in the NMTP succinctly describes planned non-motorized projects and their potential funding sources.

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Transit

There is no public fixed-route transit service in Orting. Pierce County Transit does provide vanpool services that serve groups traveling to and from work, whose trip origin or destination is within Pierce County. Sound Transit Sounder commuter rail service is provided nearby in Puyallup and Sumner with service south to Lakewood and north to Seattle and Everett. Fixed-route bus transit is also provided in nearby Sumner and Puyallup to other destinations.

Air and Rail Service

There are no public or private airports or rail lines within the city of Orting. The Meeker Southern Railroad, which is a Class III, private rail line, travels near Orting between Puyallup and McMillan.

Planned Transportation Improvements

This section summarizes the planned transportation improvements that would affect travel in Orting.

Pierce County Six-Year Transportation Improvement Program

The prioritization process for transportation projects in unincorporated Pierce County is implemented through the Pierce County Transportation Improvement Program (TIP). The County's 2017-2022 2024-2029 TIP does not include projects within Orting. However, the following projects are included in the TIP and are located near the city of Orting²:

- Orting-Kapowsin Highway E/200th Street E Intersection: Construct a traffic signal and provide turn lanes (Engineering in 2024; Right-of-Way acquisition and Construction is TBD).
- Tehaleh Blvd Extension: McCutcheon Rd E. to Falling Water Blvd E. Public/private partnership to construct a new arterial roadway.
- Falling Water Blvd. E (Tehaleh Blvd E to 181 Ave E) Public/private partnership to construct a new arterial roadway.

² There are additional projects for fish passage improvements / culvert replacements which are not included here.

- Military Road E / 122 ST E (Shaw Rd E to SR-162): Widen and reconstruct roadway to provide additional lane(s). Alternative alignments will be evaluated.
- 128th Street E (SR 162 to Puyallup River Bridge) Public/private partnership to widen and connect to a new arterial roadway.

Orting Six-Year Transportation Improvement Program

The City of Orting’s Six-Year Transportation Improvement Program (2025-2030) includes regrading, paving, parking, curb/gutter, and sidewalks, and water, sewer, and storm improvements in the city of Orting³. The following projects, listed in order of priority, are included in the TIP:

- SR 162 (Washington Avenue) Two Way Left Turn Lane: Provide a two way left turn lane and complete minor widening on SR 162 between Cardinal Lane and Leber Street beginning in 2017.
- Kansas Street SW Regrade: Complete regrading, and storm, sewer, and sidewalk improvements on Kansas Street between Harman Way S and Calistoga Street W beginning in 2019.
- Calistoga Street W: Complete regrading, curb and gutter, parking, and sewer, storm, and water improvements, and provide sidewalks and planter strips between Corrin Avenue NW and the Puyallup River Bridge, beginning in 2020.
- Eldredge Avenue NW Regrade: Complete regrading, paving, parking, storm, sewer, and sidewalk improvements between Whitesell Street NW and Calistoga Street W beginning January 2019.
- Whitehawk Boulevard/SR 162 Intersection Improvement: Signalize intersection with existing lane configurations beginning in 2020.
- Bridge Street Regrade: Complete regrading, paving, parking, and curb and gutter improvements; provide sidewalks; and replace water main between Washington Avenue S and the River Avenue SE curve beginning in 2022.
- River Avenue SE Regrade: Complete regrading, paving, parking, sewer, and storm improvements; provide sidewalks; and replace the water main beginning in 2023.
- Orting Emergency Evacuation Bridge System at Gratzner Avenue NW: Construct pedestrian bridge over SR 162/Washington Avenue beginning in 2020.
- Whitehawk Extension: Construct two to three lane arterial from Orting Avenue NW to Calistoga Street at Kansas Street SW including water, sewer, storm, curb and gutter, and sidewalks beginning in 2028.
- The remaining projects included in the TIP are chip seal projects on various streets in Orting
- Kansas Street SW Reconstruction: Complete replacement of roadway surface and rebuilding of the subgrade, water line and storm collection system replacements, ADA compliant sidewalks with ramp improvements (with curb and gutter), and streetlighting upgrades on Kansas Street between Coe Lane SW and Harman Way S beginning construction in 2025.
- Calistoga Street W: Complete regrading, curb and gutter, parking, and sewer, storm, and water improvements, and provide sidewalks and planter strips between Corrin Avenue NW and the Puyallup River Bridge. Date TBD.
- Whitehawk Boulevard/SR 162 Intersection Improvement: Signalize intersection

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³ Res. No. 2024-13 passed June 26, 2024: The TIP (and as amended) is adopted into the Comprehensive Plan by reference. Some projects may also involve improvements to the water, sewer or stormwater systems.

with existing lane configurations beginning in 2026.

- Orting Emergency Evacuation Bridge System at Rocky Road NE across Hwy 162: Construct pedestrian bridge over SR 162 begins in the 4th Quarter of 2024 with a projected completion in 1st Quarter of 2026. This will improve evacuation, ADA pedestrian access, and traffic over the highway while improving the safe routes to schools. This is state funded.
- Whitehawk Boulevard Extension: Construct two- to three-lane arterial from Orting Avenue NW to Calistoga Street at Kansas Street SW including water, sewer, storm, curb and gutter, and ADA sidewalks beginning in 2028.
- ADA Compliance Program: ADA Transition Plan was completed in 2024 and deficiencies will be addressed annually until completed as stand-alone projects or bundled into other projects.
- Annual Pavement Preservation Program: The remaining projects included in the TIP are chip seal or mill and overlay projects on various streets, with one reconstruction on Skinner Way between Calistoga St and Belfair Ave through 2028 currently.

Statewide Transportation Improvement Program

The following projects in or near Orting are included in WSDOT's Statewide Transportation Improvement Program (STIP) during the ~~2018~~2024-2024-2030 planning timeframe:

- Whitehawk Boulevard Extension: This project will construct a new connector roadway, extending Whitehawk Boulevard NW from the intersection of Whitehawk Blvd NW/Orting Avenue NW to the intersection of Calistoga St W/Kansas Street SW. New roadway is a single, asphalt-paved travel lane in each direction, curb and gutter, planter strips, and sidewalks on one side with a shared use path on the other side along the length of the roadway. The project includes water, sewer, stormwater facilities and mitigation, wetland mitigation facilities offsite, flood compensatory storage, and permitting. Single lane roundabouts will be constructed at the intersections of SR 162/Whitehawk Boulevard NW and Whitehawk Boulevard NW/Calistoga St W/Kansas St SW. *This is the same project that is included in the City's TIP and both Orting and WSDOT are awaiting NEPA approval before continuing with the project.*
- Kansas Street SW Reconstruct: This project will completely reconstruct Kansas Street between Coe Lane SW and Harman Way S. Improvements will include new subgrade, roadway, curb and gutter, stormwater improvements, sidewalks, and lighting upgrades. *This is the same project that is included in the City's TIP.*
- Orting Foothills Trail Realignment and Safety Enhancement: Realign trail from west to east side of the park, install traffic control measures, enhanced wayfinding system that includes signage and maps, and improve landscaping. *This project is included in the TIP and Capital Facilities Plan under the Parks Capital Improvement Program, to be started in 2025.*
- Orting Pedestrian Bridge : This is a City of Orting lead project to construct a Non-Motorized Bridge Crossing SR 162. Project scope is for Final design, environmental, right of way acquisition, permitting, and construction includes: A new elevated bridge structure crossing SR 162 for non-motorized access by stairs and ramps that are ADA compliant, realignment and paving of Rocky Road Rd NE intersection with SR 162, utility relocations, illumination upgrades, stormwater mitigation, remove and replace signage, remove pavements markings, landscape repair, and tie in

access to and from the Orting Foothills Trail. *This is the same project that is included in the City's TIP.*

- SR 162/Orville Rd E Intersection – Roundabout: This intersection has been identified as an Intersection Analysis Location. Constructing a compact roundabout has the potential to reduce the frequency and severity of collisions and improve motorist safety. Construct compact roundabout. This is a multi-year project.

Rhodes Lake Road East

The Rhodes Lake Road East project would widen 128th Street East from SR 162, north of Orting, and would construct a new arterial roadway from the Puyallup River to Falling Water Boulevard East. A roundabout will be constructed at the intersection of 128th Street East and SR 162. The purpose of the project is to improve east-west mobility in the plateau area of Bonney Lake and east of the Puyallup River. The new roadway will accommodate travel to and from the planned community called the Cascadia Employment-Based Planned Community, which calls for nearly 10,000 jobs and over 6,000 homes. It is possible that some of the traffic traveling to and from the Bonney Lake Plateau will also travel through Orting. It is anticipated that the project will be complete in 2030.

Orting Emergency Evacuation Bridge System

Founded in 2002, the Bridge for Kids non-profit organization was awarded grant money from the State and Federal Government of nearly \$2.4 million to do a feasibility study and eventually design a more effective evacuation route off the valley floor. Pierce County Public Works administered the design process and funds. The engineering firm, Berger-Abam was contracted to design the evacuation route and structures needed to meet ADA compliance and the 40-minute criteria. In 2023, Parametrix finalized the design of Phase 1, the pedestrian overcrossing of SR 162 at Rocky Road.

Phase 1 of the proposed three-component Emergency Evacuation Bridge System as presented in October, 2014, was adopted by the City Council. The project is now identified as the "Orting Emergency Evacuation Bridge System." It consists of a bridge over the state highway at Rocky Road NE, an evacuation designation of Rocky Road NE, and an ADA compliant Bridge over the Carbon River. Through a stewardship agreement with the Federal Highway Administration (FHWA), the Washington State Department of Transportation (WSDOT) retained the approval authority for the final Bridge for Kids Alternative Analysis Report, which the Bridge for Kids Committee played a central role in developing. WSDOT determined that Pierce County had delivered a product meeting the intent of the federal grant funds, project is currently under construction with an anticipated completion date of mid-2025 in the first quarter of 2026 and a cost of \$9 million. The project is funded by State grant funds allocated through the Department of Commerce and administered by WSDOT.

Phase 2 of the project consists of a pedestrian overcrossing of the Carbon River near the City Water Resource Recovery Facility (WRRF). Detailed design is not funded and has not started.

NEXT STEPS

The Bridge for Kids Alternative Analysis Report is the first report of a total of three consultant based efforts to successfully bring this project to 30-percent design, meeting the functional, aesthetic, and environmental requirements. The next project steps will be to proceed towards final design and construction. The City will assume the lead agency role working in joint collaboration with Federal, State, and County and Federal agencies, seeking out sources of funding to proceed towards the

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successful completion of the project including: environmental documentation, finalizing design, preparing right of way plans, right of way estimates, and construction of the Bridge System.

Concurrency

The City of Orting requires that the capacity of public facilities and services is equal to or greater than the capacity required to maintain the LOS standards established by the City. The test for concurrency is not passed and a proposed project may be denied if the capacity of the public services or facilities is below the capacity required to maintain the adopted LOS D standards after the impacts associated with the requested permit are added to the existing capacity utilization. The City will prohibit approval of any development that causes the LOS to fall below adopted standards, unless necessary improvements are made concurrently with the development. This concurrency requirement means that improvements or strategies must be in place at the time of the development or that a financial commitment must be in place to complete the improvements or strategies within 6 years. Methods for the City to monitor these commitments include:

- Annual monitoring of transportation facilities within updates to the Six-Year TIP
- Assessing level of service
- Reviewing the comprehensive transportation plan and other related studies for necessary improvements
- Making appropriate revisions to the Six-Year TIP

Future Transportation Conditions

This section summarizes the future year (~~2040~~2044) transportation system for all modes of travel in Orting.

General Purpose Traffic

Traffic forecasting is a means of estimating future traffic volumes based on the expected growth in population and employment within an area. To estimate future traffic volumes resulting from growth, forecasts were prepared using ~~current existing~~ traffic counts and review of publicly available updated counts, regional traffic growth described in the 2015 Orting Comprehensive Plan provided by PSRC's LUV-it model, and estimates of population and employment developed for the City's Comprehensive Land Use Plan. Future transportation conditions were evaluated for the year ~~2040~~2044. The projected ~~2040-2044~~ PM peak hour traffic volumes are provided in **Figure T-5**.

Intersection Level of Service

Most intersections within the city are unsignalized (controlled by a stop sign). As traffic increases in Orting, turning onto the major streets from a side street will become increasingly difficult. As described earlier, the LOS criteria for stop-controlled intersections is typically determined by the minor street left-turn movement.

The LOS results for the study intersections are provided for the year ~~2040~~2044. Similar to existing conditions, LOS is described for the worst approach for unsignalized intersections. For signalized intersections, the average delay for all vehicles is reported.

Figure T-6 shows the ~~2040-2044~~ PM peak hour traffic operations for the study intersections in Orting. Three intersections are projected to exceed the threshold in 2044. Two of these intersections, which already surpass the threshold under existing conditions, are also expected to do so in 2044. The intersections are Washington Avenue N and Rocky Road NE (Intersection C), Calistoga Ave W & Eldredge Ave SW (Intersection O), and Calistoga Street W and Kansas Street SW (Intersection P), all of which are forecasted to operate at Level of Service E and/or F by 2044. The same two study intersections that surpass the threshold under existing conditions are forecast to exceed the threshold in 2040. Washington Avenue N and Rocky Road NE (intersection C) and Calistoga Street W and Kansas Street SW (intersection P) are forecast to operate at LOS F in 2040. Similar to existing conditions, the side street delay at Washington Avenue N and Rocky Road NE (intersection C) would be experienced by very few vehicles as summarized in **Figure T-5**. Four other study intersections (D, H, M, and ~~Q~~N) are expected to operate acceptably but at the LOS threshold in ~~2040~~2044. It should also be noted that traffic operations at Washington Avenue N and Whitehawk Boulevard NW (intersection E) would improve because of the planned signal (see Section 4.3).

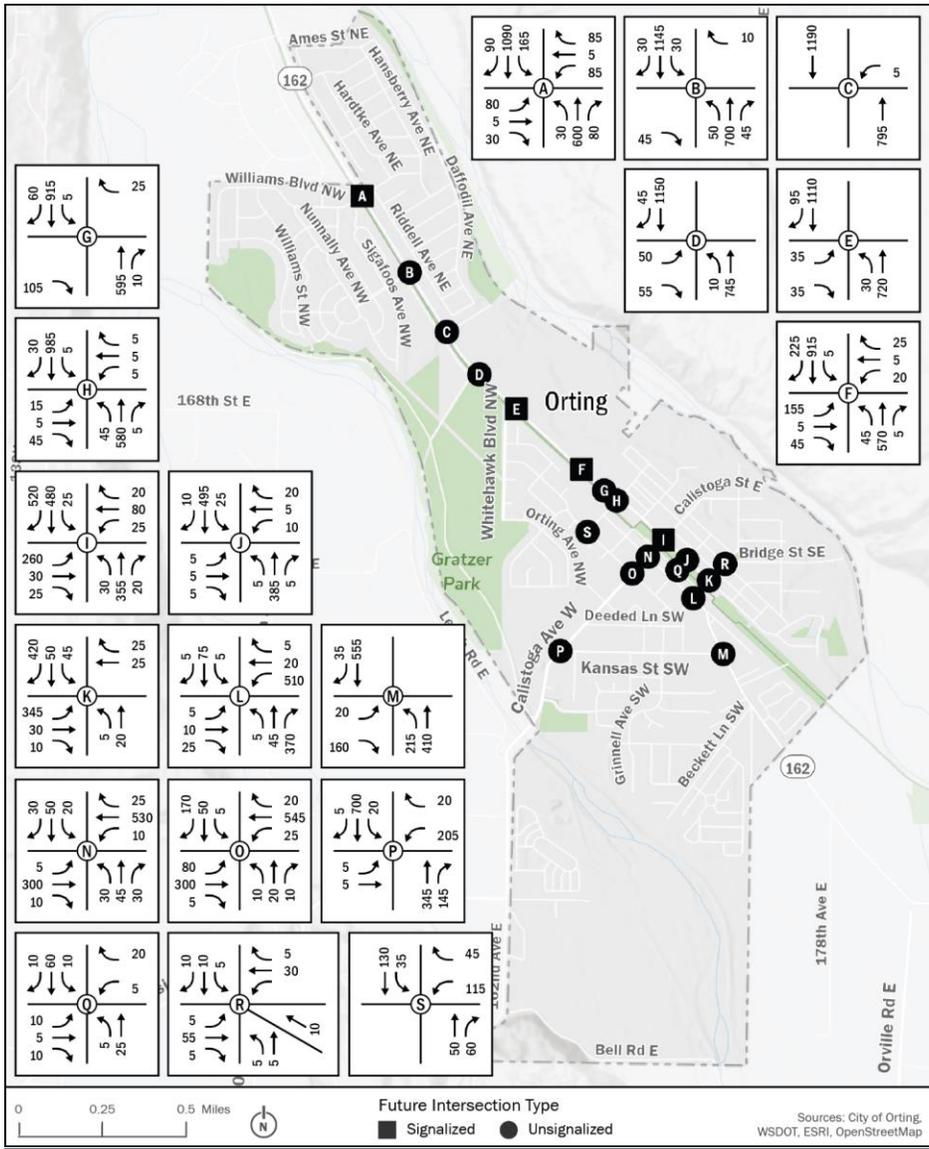


Figure T-5. 2040-2044 PM Peak Hour Intersection Traffic Volumes

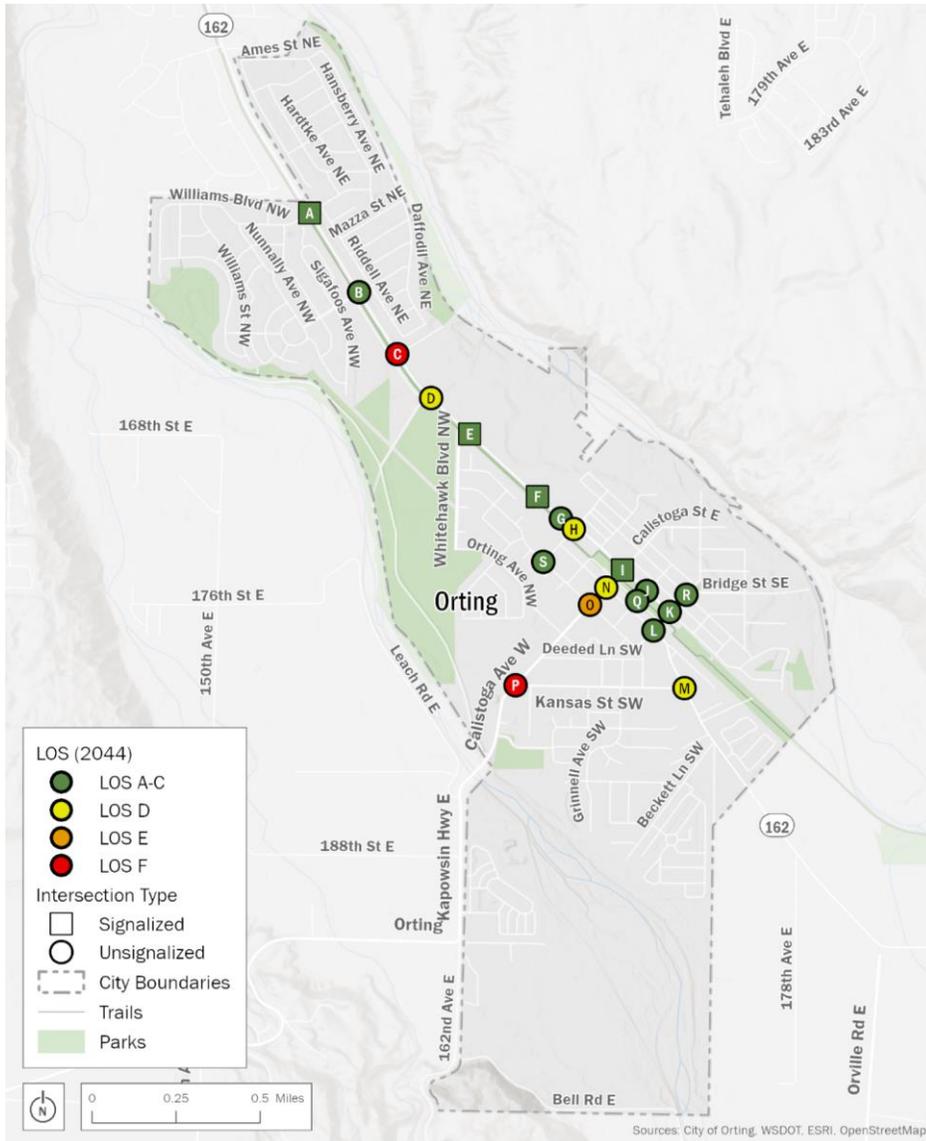


Figure T-6. 2040-2044 PM Peak Hour Intersection LOS

Freight

Freight travel corridors would be expected to remain similar in ~~2040-2044 compared to existing conditions~~. SR 162 and Calistoga Avenue W ~~would be~~ are expected to carry most freight traffic through Orting. Intersection operations in ~~2040-2044~~ along both major freight routes would operate at LOS D or better except for Calistoga Street W and Kansas Street SW (intersection P). Although the intersection at Washington Avenue N and Rocky Road (intersection C) is located along a freight corridor and is expected to operate at LOS F, the delay would not be experienced by freight traffic traveling on SR 162/Washington Avenue N.

Non-Motorized Travel

The future non-motorized transportation network is described in the 2017 Non-Motorized Transportation Plan (NMTP). It is anticipated that non-motorized facilities would be similar to existing conditions except in locations where there are planned improvements to the sidewalk system, as identified ~~in Section 4.3 in this plan, the Orting TIP, the State TIP,~~ and the NMTP.

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Transit

Transit is expected to be similar in Orting in ~~2040~~2044. No public fixed-route transit service would likely be provided within Orting. Vanpool services would continue to be provided by Pierce Transit.

Pierce Transit and Sound Transit would continue to provide nearby transit service, including higher frequency transit to Puyallup and Sumner. Both agencies have developed long-range plans that describe future transit growth in Pierce County, which could include additional service for fixed-route bus service as well as commuter rail in nearby communities, such as Sumner and Puyallup.

Air and Rail Service

There would continue to be no public or private airports or rail lines within the city of Orting. The Meeker Southern Railroad would continue to operate near Orting between Puyallup and McMillan.

Sound Transit is currently examining a potential commuter rail connection between Orting and the Sounder south line service in Sumner. The study is a future investment study and any potential commuter rail connections between Orting and Sumner are not included in the current funding package.

Future Transportation Vision

To address the identified deficiencies in ~~2040~~2044, a list of potential improvements have been identified. Improvements are summarized by transportation mode.

General Purpose Traffic

Deficiencies for general purpose traffic were identified at intersections that would fail to meet the City of Orting's level of service goal of LOS D. Constructing a traffic signal is a common method for improving the LOS at a stop-controlled intersection. However, traffic signals should not be constructed unless certain factors are present, such as sufficient traffic volumes over long periods of the day, high levels of pedestrian traffic, or preventable accident history.

As summarized in Section 6.2, Washington Avenue N and Rocky Road NE (intersection C), Calistoga Ave W & Eldredge Ave SW (intersection O), and Calistoga Street W and Kansas Street SW (intersection P) are forecast to exceed LOS D in ~~2040~~2044. No improvements are recommended for Washington Avenue N and Rocky Road NE (intersection C), or at Calistoga Ave W & Eldredge Ave SW

(Intersection O) because this delay would be experienced by very few vehicles (approximately five, and 40 respectively) on the stop approach.

At Calistoga Street W and Kansas Street SW (intersection P), a roundabout intersection control is recommended and should be considered during design will be incorporated into the design of the Whitehawk Blvd Extension Project. The roundabout would improve traffic operations from LOS F to LOS A in 2040-2044 conditions. Calistoga Street W and Kansas Street SW (intersection P) will also become the eastern terminus of the Whitehawk Boulevard Extension. It is estimated that a roundabout at Calistoga Street W and Kansas Street SW (intersection P) would be approximately \$1.72 million to construct.

Although Harman Way S and Kansas Street SW (intersection M) is forecast to operate acceptably at the City's LOS D threshold, it is recommended that an eastbound left-turn lane be constructed on Kansas Street SW to improve intersection operations on the stop-controlled approach. This improvement would improve intersection operations from LOS D to LOS C in 2040-2044 conditions. This improvement would cost approximately \$450-800,000 thousand to construct and would require WSDOT assistance on SR 162.

The school district has also indicated that Ammons Lane NE and Washington Avenue N (intersection F), the entrance to the Orting High School and Orting Primary School, gets congested during pick up and drop off times. Congestion in the school property can create traffic queues on SR 162/ Washington Avenue N for vehicles attempting to turn right and left into the school property. To address this issue, the City could convert Ammons Lane NE (intersection F) to an exit only. Vehicles entering the school property could use Whitesell Street S or other neighborhood streets to then access the schools. This improvement would reduce queuing onto SR 162/Washington Avenue N and potentially improve safety along SR 162/Washington Avenue N. This improvement would cost approximately \$530-925,000 thousand to construct and likely would be funded primarily by Orting School District. The district is also looking to construct an additional school buildings off of SR 162 across from the Whitehawk Blvd. intersection, which may result in the elementary school being relocated, which would reduce the pick-up/drop off traffic at the high school. This is awaiting the school district bond measure passing.

Figure T-7 shows the LOS at study intersections following these proposed improvements to the study intersections.

Freight Traffic

Deficiencies for freight traffic were identified at intersections along freight corridors that would fail to meet the City of Orting's level of service goal of LOS D. The improvements described in Section 7.1 would improve operations for freight traffic traveling through Orting.

Non-Motorized Travel

Deficiencies in the non-motorized transportation system have been identified using Pedestrian Level of Stress (PLOS)⁴ and Bicycle Level of Stress (BLOS)⁵. Future improvements to the non-motorized network in Orting to address deficiencies are described in more detail in the NMTP.

⁴ Pedestrian Level of Stress is a measure used to evaluate how well a transportation system accommodates pedestrian travel. Facilities are evaluated based on a number of different criteria, such as sidewalk width, curb presence, and vehicle speed, and assigned a score from 1 to 5 with 1 being low level of stress to 5 being high level of stress.

⁵ Bicycle Level of Stress is a measure used to evaluate how well a transportation system accommodates bicycle travel (also called Level of Traffic Stress, or LTS). Similar to Pedestrian Level of Stress, facilities are evaluated based on different

As described in the NMTP, the City will work to address areas with high PLOS (scores 4 to 5) by completing gaps in the sidewalk and trail system. Pedestrian improvements would be prioritized in areas where pedestrian activity is higher and where pedestrian-oriented land use and destinations are located. Other pedestrian improvements include:

- Widen evacuation route along Calistoga Street W towards Soldiers home
- Widen the sidewalks on Calistoga Bridge
- Improve City's crosswalk safety (this is addressed primarily through the ADA transition plan, and also through associated annual projects)
- Pursue opportunities to work with Pierce County to provide Americans with Disabilities Act (ADA) access to the levee system
- Complete the Orting Emergency Evacuation Bridge System
- Also described in the NMTP, BLOS is low for most facilities in Orting. Improvements to the bicycle network would include the following:
 - Improve connectivity to the Foothills Trail at Calistoga Street W
 - Improve connectivity to the Foothills Trail at Kansas Street SW
 - Construct bicycle lanes on Calistoga Street W and Kansas Street SW
→ Restripe trail with "fast" and "slow" lanes for bicycle and foot traffic
 - Relocate intersection crossings with the Foothills Trail to be in front of the stop bar at intersections

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The City has also planned changes to the Foothills Trail alignment through the Main City park and information on that is provided in the Main Park Master Plan.

criteria, such as street width, presence of on-street parking, and number of lanes, and assigned a score from 1 to 5 with 1 being low level of stress to 5 being high level of stress.

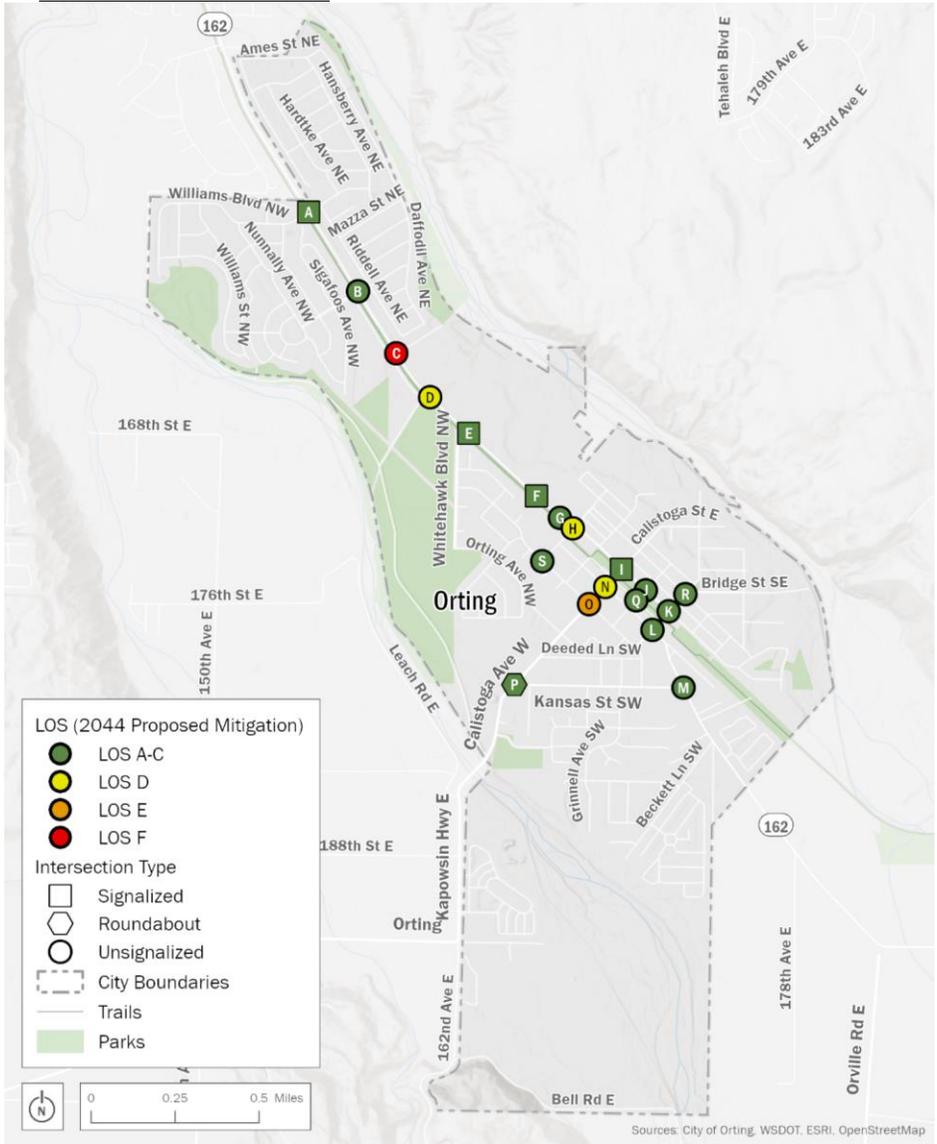


Figure T-7. 2040-2044 Transportation Vision-PM Peak Hour Traffic Operations

Transit

There are no recommended improvements for transit service.

Air and Rail Service

There are no recommended improvements for air and rail service.

Other Strategies and Programs

Other strategies and programs can be used to help improve travel in Orting include Transportation Demand Management (TDM).

Transportation Demand Management

TDM strategies can be implemented to decrease the amount of drive-alone vehicle trips, which can help to reduce congestion and delay. Viable travel alternatives help to mitigate impacts of growth in vehicular traffic and provide feasible options for more people. TDM strategies include:

- Improving land use accessibility by promoting mixed-use zoning with housing, shopping, schools, and employment within localized areas to encourage short vehicle trips and/or use of other travel modes, such as bicycling and walking.
- Encouraging ridesharing and vanpooling to reduce drive-alone vehicle trips.
- Working with the Orting School District to implement School Trip Management; School Trip Management includes promoting and implementing strategies to encourage non-vehicle travel to and from school.
- Encouraging bicycle and pedestrian travel by providing inviting, safe, convenient, and connected routes; education and incentive programs; and support services such as bicycle racks, showers, and lockers.
- Maintaining and improving a network of highways, streets, and roads that moves people, goods, and services safely and efficiently; minimizes social and environmental impacts; and supports various modes of travel.
- Providing adequate connections and access among all transportation modes, especially non-motorized and transit.
- Limiting the number of access points and driveways on major streets in Orting.

Funding the Transportation Vision

The GMA requires that a jurisdiction's transportation plan contain a funding analysis of the transportation projects it recommends. The analysis should cover funding needs and funding resources, and it should include a multi-year financing plan. The purpose of this requirement is to ensure that each jurisdiction's transportation plan is affordable or achievable. If a funding analysis reveals that a plan is not affordable or achievable, the plan must discuss how additional funds will be raised, or how land use assumptions will be reassessed.

Table T-7 summarizes the proposed ~~2040-2044~~ Improvement Program as ~~was described in Chapter 7 and Chapter 4 above.~~ [In addition, the city's Pavement Management System \(SCJ Alliance, 2024 or as amended\) and the ADA Transition Plan \(2024 or as amended\) are incorporated into this Plan by Reference.](#)

Table T-7. 2040-2044 Improvement Program

ROADWAY	IMPROVEMENT		COST ESTIMATE (\$1,000)	FUNDING SOURCE
	TYPE	DESCRIPTION		
Calistoga Street W/Kansas SW Roundabout	Capacity	Construct roundabout	\$2,380 \$2,000	City / Grants
Harman Way S/Kansas Street SW Left-turn lane	Safety and Circulation	Construct left-turn lane on Kansas Street SW	\$715 \$800	City / Grants
Ammons Lane NE/Washington Avenue N Exit Only	Safety and Circulation	Convert Ammons Lane NE to exit only	\$635 \$925	City/ WSDOT / Orting School Dist.
Whitehawk Boulevard Extension	Safety and Circulation	Extend Whitehawk Boulevard to Calistoga Street W	\$5,400	City / Grants
Specific portions of: Ammons Lane, Whitesell Street, Eldredge Ave, Leber Street/ Van Scoyoc Avenue and Leber Court*	Reconstruction (Pavement Management System)	Full reconstruction of travel lanes plus curb ramp repairs where needed	\$1,063	Grants
Specific Portions of: Old Pioneer Way, Calistoga Street, River Avenue, Bridge Street, Train Street, and Cardinal Lane/ Ammons Lane / Whitesell Street*	Overlays (Pavement Management System)	Overlay (i.e. mill and fill) of travel lanes plus curb ramp repairs where needed	\$1,908	City/ Grants
Specific Portions of Varner Avenue, Christian Lane and Skinner Way / Belfair Avenue	Chip Seal (Pavement Management System)	Chip Seal treatments (2025 workplan)	\$196	City/ Grants
Specific Portions of Van Scoyoc Avenue, Rocky Road, Hays Avenue, Varner Avenue and Corrin Avenue	Chip Seal (Pavement Management System)	Chip Seal treatments (2026 workplan)	\$207	City/ Grants
Specific Portions of Mill Avenue, and Calistoga Court	Chip Seal (Pavement Management System)	Chip Seal treatments (2027 workplan)	\$66	City/ Grants
Specific Portions of Washington Avenue	Chip Seal (Pavement Management System)	Chip Seal treatments (2028 workplan)	\$57	City/ Grants
Specific Portions of Rainier Avenue	Chip Seal (Pavement Management System)	Chip Seal treatments (2029 workplan)	\$16	City/ Grants

* Project extents are described in the [2024 Pavement Management System \(PMS\) Plan \(SCJ Alliance, 2024\)](#)

Other City of Orting transportation improvement projects are adopted on an annual basis in the City of Orting Six-Year Transportation Improvement Program.

Federal Funding

Federal funding for transportation projects includes FHWA's Surface Transportation Block Grant Program funded through the Fixing America's Surface Transportation (FAST) Act. Many types of projects are eligible, including bicycle/pedestrian, safety, traffic monitoring/management, and planning projects along with more traditional road and bridge projects. These funds are distributed by PSRC through a competitive grant application process.

The PSRC also distributes Surface Transportation Program funds through the Rural Town Centers and Corridors (RTCC) program. The RTCC program was established to recognize and support the needs of the region's rural areas. Funds are distributed through a competitive grant process that includes two stages: a Countywide stage and a Regional stage.

Orting relies heavily on these funding sources to complete transportation projects. Should grant funds not be secured, capital projects will likely be delayed, and preservation and maintenance projects will be prioritized.

Goals & Policies

This Transportation Element contains goals and policies which are presented in a distinct way as compared to this Plan's other elements.

First, the goals do not have policies listed under them. This means there is not necessarily a "one-to-one" relationship between them; rather, there may be "many-to-one" relationships which means that many listed policies may support more than one goal.

Next, the policies are organized into four broad categories and are numbered according to the category.

Goals

- Goal T 1 Maintain a transportation system that accommodates the separation of through and local traffic, provides adequate internal circulation, and interconnects effectively to the regional highway, non-motorized, and public transportation systems is responsive to the mobility needs of City businesses and neighborhoods, and guides future developments.
- Goal T 2 Coordinate with local, regional, state, and federal agencies in the development and operation of the transportation system. In particular, support City, County, and State implementation of comprehensive solutions to capacity, safety, and circulation problems with SR 162.
- Goal T 3 Establish a safe and convenient pedestrian and bicycle circulation system linking residential communities with key destinations.
- Goal T 4 Provide "Complete Streets Infrastructure"⁶ into existing public streets as feasible.
- Goal T 5 Fund transportation facility improvements with federal, state, and local public and private sources.
- Goal T 6 Realize the vision for Washington Ave N/S as Orting's main street, providing high quality aesthetic design in conjunction with multi-modal mobility, pedestrian safety, and infill economic development.
- Goal T 7 Meet federal and state air quality requirements and work with state, regional and other local agencies to develop transportation control measures and/or mobile source emission reduction programs that may be warranted to attain or maintain air quality requirements.

⁶ Complete Streets Infrastructure are features that create a comprehensive, integrated, connected transportation network for Orting that balances access, mobility, health and safety needs of pedestrians (American with Disabilities Act and Title VI compliance), bicyclists, motorists, emergency responders, freight and users of all ages and abilities, ensuring a fully connected, integrated network that provides transportation options.

Goal T 8 Ensure preparedness and flexibility in the transportation network for changes in transportation technologies and mobility patterns.

Goal T 9 Identify racial and social equity as a core objective when planning and implementing transportation improvements, programs, and services.

Part I. Vehicular Transportation Policies

Street Network

- T 1.1 Periodically update traffic forecasts and levels of service analysis on all arterials in the City to reflect changing demand and to improve safety and health.
- T 1.2 Provide adequate, system-wide capacity on arterial streets to avoid diversion of excess traffic from congested arterials to neighborhood streets.
- T 1.3 Maintain truck routes on Principal Arterials and enforce truck use accordingly.
- T 1.4 Develop the local street system to encourage connectivity between adjacent developments where feasible and provide connections to arterials from neighborhood collectors.
- T 1.5 Existing non-through (dead-end) streets shall be linked together whenever practical.
- T 1.6 Minimize the use of cul-de-sacs, dead-end streets and other designs that reduce connectivity between neighborhoods.
- T 1.7 Protect street rights-of-way from encroachment by structures, fences, retaining walls, landscaping, or other obstructions to preserve the public's use of the right-of-way, and to ensure safety and mobility.
- T 1.8 Maintain and improve the network of highways, streets, and roads that moves people, goods, and services safely and efficiently; increases the resiliency of the transportation system to support security of the system and emergency management; minimizes social and environmental impacts; and supports various modes of travel.

Street Classification

- T 1.9 Maintain a consistent classification of streets as Principal-, Minor-, and Collector Arterials, Neighborhood Collector Streets and Local Streets according to function, based on federal, state, and regional guidelines so that needed traffic capacity may be preserved and planned street improvements will be consistent with those functions.
- T 1.10 Limit the number of residences that can be served by a dead end/ cul- de-sac street.

Street Design Standards

- T 1.11 Maintain a comprehensive street improvement plan for city streets that implements the desired streetscape for each functional classification. Arterial street standards

shall provide guidance on the width of lanes, driveway access, right-of-way width, sidewalks median treatments, setbacks, lighting, pedestrian facilities, landscaping, or other improvements.

- T 1.12 Design street improvements to fit the character of areas they serve.
- T 1.13 Maximize and maintain the capacity of arterial streets through the provision of turn lanes and other auxiliary lanes rather than street widening solutions.
- T 1.14 Encourage shared use of driveways served by arterials.
- T 1.15 Use street design standards to minimize pavement widths while accommodating on-street parking, and allowing cars to pass, thereby slowing the speed of vehicles on local streets, improving pedestrian safety and allowing for landscaping.
- T 1.16 Require safe, attractive sidewalks on all new streets.
- T 1.17 Provide comprehensive street lighting, including lights for pedestrians on sidewalks and trails, using such factors as adjacent land uses, hazardous street crossings, transit routes, schools, and parks.
- T 1.18 Develop Complete Streets design criteria based on the latest relevant editions of the America Association of State Highway Officials (AASHTO), the National Association of City Transportation Officials (NACTO), and the Institute of Transportation Engineers (ITE) manuals.
- T 1.19 Monitor and adopt transportation technology as appropriate to improve mobility throughout the complete transportation network.

T 1.20 Identify racial and social equity as a core objective when planning and implementing transportation improvements, programs, and services.

Traffic Safety

- T 1.21 Monitor traffic accidents, citizen input/complaints, traffic violations, and traffic growth to identify and prioritize locations for safety improvements.

T 1.22 Ensure mobility choices for people with special needs and consider the use of devices that increase safety of pedestrian crossings such as flags, in-pavement lights, raised crosswalks, colored and textured pavements.

Neighborhood Traffic Control

- T 1.23 Consider design options for application of neighborhood traffic calming devices such as median barriers, speed humps, speed tables, raised crosswalks, raised intersections, traffic circles, roundabouts, chicanes, chokers, neckdowns, and textured pavements on local streets where traffic and pedestrian safety is of concern. Neighborhood Collectors shall receive the first priority followed by other local streets. Installation of neighborhood traffic control devices shall be avoided on arterials.

Property Access

- T 1.24 Minimize local property access on Principal and Minor arterials.

- T 1.25 Consolidate existing access driveways on arterials when street improvements are implemented, or redevelopment proposals are made.

Environmental

- T 1.26 Participate in regional efforts to improve air quality by promoting alternatives to the single occupant vehicles; use of cleaner fuels; implementing transportation demand management goals and policies and maintaining or improving the operating efficiency of the transportation system.
- T 1.27 Mitigate noise impacts when designing future roadway improvements.
- T 1.28 Reduce the amount of impervious surfaces (e.g., streets, driveways) to the extent practicable.
- T 1.29 Minimize harmful pollutants generated by transportation-related construction, operations, and maintenance activities from entering surface and groundwater resources.

Level of Service

- T 1.30 Maintain intersection level of service (LOS) according to the following standards: ~~LOS E on arterial intersections in the Mixed Use Town Center; LOS D on all other arterial intersections.~~
- T 1.31 Transportation improvement projects, strategies and actions needed to serve new developments shall be in place at the time new development occurs or be financially committed and scheduled for completion within six years of permit approvals.

Land Use / Transportation

- T 1.32 Consider the effect of the City's growth and transportation improvement programs on other adjacent jurisdictions through coordination with county, state, and regional agencies.

T1.33 Designate the Center of Local Importance (COLI) including the downtown area, school campus, and Gratzner Park as Orting's core for future major transportation improvements.

Development Impact Mitigation

- T 1.34 Maintain and apply standardized transportation impact mitigation procedures and strategies, including payment of traffic impact fees.
- T 1.35 Require dedication of right-of-way as a condition of development approval when the need for such right-of-way is determined in the permit approval process.
- T 1.36 Maintain a right-of-way use permit process to minimize environmental and traffic impacts during construction.

Part 2. Pedestrian and Bicycle Policies

- T 2.1 Promote pedestrian and bicycle networks that safely access commercial areas, schools, transit routes, parks, and other destinations within Orting and connect to adjacent communities, regional destinations and routes.
- T 2.2 Require new development to ensure safety, comfort and convenience of pedestrians and bicyclists.
- T 2.3 Designate and construct segregated internal pedestrian circulation systems in new or redeveloping commercial-retail districts. Provide connectivity to nearby transit stops using sidewalks, landscaping, covered walkways, or other treatments.
- T 2.4 Promote a comprehensive and interconnected network of pedestrian and bike routes within and between neighborhoods.
- T 2.5 Require trail routes and/or sidewalks where appropriate in PUD, plat and short plat approvals.
- T 2.6 Work progressively to provide and maintain sidewalks in established neighborhoods. Priority shall be given to all public facilities such as transit routes, schools and parks, and multi-family housing, commercial areas, and gaps in the existing sidewalk system.
- T 2.7 Provide striped, on-street bicycle facilities on arterial streets on paved shoulders or within wide curb lanes to ensure safety for bicyclists.
- T 2.8 Ensure that sidewalks meet requirements of the Americans with Disabilities Act.
- T 2.9 Identify non-motorized facility improvements on school walk routes to increase pedestrian safety.
- T 2.10 Require secure (racks and lighting) bicycle parking at commercial and institutional facilities along with automobile parking.
- T 2.11 As feasible, incorporate "Complete Streets Infrastructure" into existing public streets to create a comprehensive, integrated, connected transportation network.

Part 3. Regional and Local Coordination Policies

- T 3.1 Ensure coordination and consistency with state, regional and local transportation plans.
- T 3.2 Coordinate the Six-Year Transportation Improvement Program with adjacent jurisdictions' where City projects have regional implications.
- T 3.3 Participate in regional transportation planning to ensure that the City's interests are reflected appropriately.

T 3.4 Promote the design of transportation facilities that support local and regional growth centers and high-capacity transit station areas and fit the community in which they are located.

Part 4. Funding and Implementation Policies

Funding

- T 4.1 Maintain a street utility for the purpose of supporting preservation and ongoing maintenance and operations of its transportation systems pursuant to RCW 82.80.
- T 4.2 Maximize outside funding from regional, County, State, or Federal sources.
- T 4.3 Emphasize multimodal enhancements to the transportation system in funding transportation programs.
- T 4.4 Ensure the adopted impact fee rate schedule reflects the current land use and transportation forecasts and needs.
- T 4.5 Update the six-year Transportation Improvement Program (TIP) annually to implement the Long-Range Capital Facility Plan.

T 4.6 During review and update of the six-year Transportation Improvement Program (TIP), capital funding shall be reviewed and prioritized. Should a funding shortfall be identified, capital projects may be delayed, and preservation and maintenance of existing facilities will be prioritized.

Implementation

- T 4.7 Maintain and monitor a scheduled street maintenance program including regular street sweeping to ensure that all arterial and neighborhood collector streets shoulders and/or designated bike lanes and trails are clear of sand, glass, and debris.

5. System Air Quality Policies

- T 5.1 The City's transportation system shall conform to federal and state Clean Air Acts by maintaining conformity with the Metropolitan Transportation Plan of the Puget Sound Regional Council and by following the requirements of Chapter 173-420 of the Washington Administrative Code.
- T 5.2 Travel in modes other than single-occupant vehicles shall be encouraged. Transportation demand management strategies will be employed to discourage the use of single-occupant vehicles and to encourage non-motorized transportation.
- T 5.3 Consider air quality effects of future development when considering annexations, amendments to the Comprehensive Plan and development regulations, and during project review processes.
- T 5.4 Establish standards for the control of particulate matter on paved public roads.

ECONOMIC DEVELOPMENT



Purpose and Intent

This Economic Development Element outlines the policies for economic development that would improve the tax base and create local jobs that support city goals and are compatible with the character of the city. The [Economic Development Appendix Economic Baseline Analysis \(Appendix II\)](#) provides further information which provides the basis for these policies, describing the city's profile and the city's competitive position, including its retail, office, and industrial market potential.

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The City of Orting is including this Element as part of the current comprehensive plan update process, following Goal 5 of the Washington Growth Management Act to:

“Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.” (RCW.36.70A.070(7))¹

This Economic Development Element provides a roadmap for enhancing the economic vitality of Orting, aiming to bolster both economic stability and quality of life. This Element addresses how the community can encourage the growth of new businesses; balance and diversify commercial and residential activities; and promote the revitalization and sustainability of existing businesses. Through collaborative efforts and strategic goals and policies, the city can attract and retain residents and businesses thereby, promoting economic development and a high quality of life focused on shared prosperity. This Element details various goals and policies designed to ensure vibrant economic future for Orting, supporting the cultivation of a robust and



¹ Washington State laws set limits on the actions cities can take to support economic development, impacting the content of an economic development comprehensive plan element. Typically, cities are prohibited from directly using public funds to incentivize private development. Instead, they target policies that facilitate economic growth through land use regulations, infrastructure improvements, tourism initiatives, marketing campaigns, and partnerships with nonprofit community-based organizations. RCW 35.21.703 does allow cities to contract with nonprofit corporations to advance economic development. Article 8, Section 7 of the state constitution specifies that “No county, city, town or other municipal corporation shall hereafter give any money, property, or loan its money, or credit to or in aid of any individual, association, company or corporation, except for the necessary support of the poor and infirm.”

diverse local economy across multiple sectors, and fostering citywide economic growth across the city and in the Downtown.

This Element includes:

- a) A profile of the local economy such as population, employment, payroll, sectors, businesses, sales, and other data;
- b) An assessment of the strengths and weaknesses of the local economy defined as the commercial and industrial sectors and supporting factors such as land use, transportation, utilities, education, work force, housing, and natural/cultural resources; and
- c) Identification of policies, programs, and projects to foster economic growth and development and to address future needs.

Competitive Position

Local economic development strategies typically work to build on strengths, address weaknesses and threats, and pursue opportunities. The City's competitive position is summarized according to these themes in **Table ED-1**. In short, the City's competitive position is that of a small community offering an alternative to urban settings with scarce land, higher prices, and limited natural amenities.



Table ED-1 Strengths, Weaknesses, Opportunities and Threats (SWOT) Matrix

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Attractive physical setting and nearby farms appeal to agritourism. • Utility service capacity can serve some new development. • Underdeveloped land can accommodate residential or commercial/industrial growth targets, capacity for residential and commercial growth. • Established Downtown with a clear town center. • Strategic investments in transportation infrastructure. • Pedestrian scale shopping districts support communities with established downtowns. • High quality of life with many amenities, including outdoor activities, recreation, and community events. 	<ul style="list-style-type: none"> • Natural barriers that serve to isolate the City, specifically rivers and plateaus. • Transportation access and capacity is limited to a two-lane arterial road through the center of the City, and a two-lane arterial road serving the area to the west. Long commute times and traffic back-ups negatively affect the City. • Few publicized destinations to attract visitors to the City. The City has a wonderful view of Mt. Rainier, but is not located on any of the main routes to Mt. Rainier National Park entrances. Additionally, there are no agritourism attractions located within City limits. • Shortage of higher-paying jobs. • Market not big enough to support larger-scale retail. • Low office vacancy rates limit opportunities for new businesses to establish themselves.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • City supports select gaps in its mix of businesses, especially to recapture lost retail sales. • City can enhance its stature as a visitor destination, as small towns tend to attract visitors from urban areas. • Future development will strengthen the city's tax base and ability to fund desired public services and facilities. • Tehaleh, the master planned community on the plateau to the east, will gain increasing attention, and provide a higher profile for Orting. • The development of additional commercial uses will be needed to support future residential growth. These uses may co-locate in mixed use developments, providing attractive pedestrian-oriented settings. • Capitalize on existing strengths of Downtown to balance availability of commercial space, create a more diverse mix of businesses, and support vibrancy. 	<ul style="list-style-type: none"> • Established retail centers in Bonney Lake, Puyallup, and South Hill will continue to attract spending activity outside of the City. • Tehaleh may attract some of the employers that might otherwise consider Orting. • Small tax base of the city limits the ability to fund desired public services and facilities. • Lahar hazard threat may discourage investment. • Increasingly scarce funding poses challenges to necessary infrastructure improvements.

Goals & Policies

Goal ED 1 Support economic growth through core business retention, expansion, and formation consistent with the Comprehensive Plan vision and the other Elements.

- ED 1.1 Every two years, the city will update the ~~Prepare and maintain an~~ assessment of Orting’s business strengths, weaknesses, opportunities, and threats (SWOT) provided as a part of the 2024 Comprehensive Plan update and use the findings to inform the implementation of Economic Development strategies.
- ED 1.2 Coordinate City investment in capital facilities projects with related business, employment, and economic development opportunities.
- ED 1.3 Promote local shopping with a particular focus on ways to foster the prosperity of business startups, small businesses, and women- and minority-owned businesses.
- ED 1.4 Coordinate with state, county and adjoining local government bodies to promote economic development. Support high-quality training programs and education systems throughout the region to build and maintain a competitive edge in the regional and global economy.

Goal ED 2 Promote the creation of family-wage jobs that will serve the residents of Orting.

- ED 2.1 Promote the retention, expansion, redevelopment, and infill development of moderate business structures that compel the “small-town” feel of Orting, particularly those providing living-wage jobs to Orting residents. Prioritize the creative reuse and vertical expansion of commercially zoned properties to create more space for businesses and family-wage jobs in Orting. ~~corporate and medical office space.~~
- ED 2.2 Encourage ~~Ensure~~ continued zoning of commercial space for light industrial uses for their increase in capital of goods or energy production management, while ensuring their scale and proliferation is compatible with adjacent uses, applications and office space.

² A living-wage job is one that pays an income sufficient to cover basic living expenses without financial hardship, allowing an individual or family to afford essential needs such as housing, food, healthcare, transportation, childcare, and other necessities without relying on public assistance. For Orting, a living wage for a family of four (with one parent working) would be approximately \$45.19 an hour or \$93,995 annually (in 2024). A living wage for a family of four (with two parents working) would be about \$29.87 an hour or \$62,129 annually for both parents (in 2024). Massachusetts Institute of Technology (MIT, 2024). MIT Living wage calculation for Pierce County, Washington. Retrieved from <https://livingwage.mit.edu/counties/53053>

~~Goal ED 3 — Promote the installation of telecommunications and power capacity technology throughout the City in order to provide universal access to citizens, businesses, and institutions that is secure, reliable, and affordable/affordable.~~

~~ED 3.1 — Participate in seeking grant funding for improvement of infrastructure to support economic development.~~

~~ED 3.2 — Identify long term infrastructure needs that support economic sustainability.~~

~~ED 3.3 — Ensure providers of telecommunication and power are aware of City commercial needs and have plans to meet that need.~~

Goal ED 3 Create public-private partnerships that will nurture entrepreneurship, innovation, and business growth.

ED 3.1 Encourage economic sectors that:

- Pay higher-than-average wages;
- Bring new capital into the local economy;
- Can be sustained in the City;
- Maintain sound environmental practices;
- Diversify the economic base; and
- Encourage new business models.

ED 3.2 Ensure that City licensing and permitting practices and procedures are coherent, fair and expeditious. Where specialized industry requirements call for the inspection by government agencies, coordinate with those agencies to [streamline review/eliminate duplication of efforts](#).

ED 3.3 Promote the infill and redevelopment of the Downtown to enhance the sense of community, encourage pedestrian/bicycle mobility, and reduce the number and length of motorized shopping trips by working with property and business owners to market Orting, and provide parking solutions.

ED 3.4 Create anchor projects ~~with that include~~ public gathering places [\(such as the Main Park Master Plan\)](#) and support ~~the development of~~ mixed use retail, office and residential [development](#) projects.

~~ED 3.5 Coordinate with local, state, and federal agencies to identify underused lands such as surplus public lands or environmentally contaminated lands and:~~

- ~~Promote infill or redevelopment in growth centers and existing neighborhoods in a manner that supports the Regional Growth Strategy.~~
- ~~Develop strategies for cleaning up brownfield and contaminated sites when necessary.~~

~~ED 3.6~~ Support regional economic competitive interests by promoting local trade and commerce and by promoting regional partnerships toward infrastructural improvements that serve the efficient movement of trade goods.

~~ED 3.7~~ Promote innovation, including among businesses that promote environmental sustainability through emerging technologies, industry practices, professional services, and climate resilience.

Goal ED 4 Encourage diverse job options and entrepreneurial opportunities for people interested in full-time and part-time employment or desiring to own their own business.

~~ED 4.1~~ Accommodate and/or encourage home-based businesses that are compatible with the character of adjoining properties and neighborhoods will be accommodated.

~~ED 4.2~~ Address and prevent potential physical, economic, and cultural displacement of existing businesses that may result from redevelopment and market pressure.

Goal ED 5 Promote business practices that protect the City's natural beauty and environmental health.

~~ED 5.1~~ Encourage the use of green materials and techniques in all types of construction, and encourage the retrofitting of existing buildings for to enhance sustainability.

~~ED 5.2~~ Encourage public sector solid waste reduction and recycling, such as through continued participation in the Pierce County Solid Waste Plan.

~~Goal ED 7 Encourage a variety of affordable housing choices so that people who work in Orting can live here.~~

~~ED 7.1~~ Continue to monitor the progress in implementing the Housing Element and evaluate new ways of providing affordable housing to support the City's jobs housing balance.

~~ED 7.2~~ Ensure permitting and utility facility charges are equitable.

Goal ED 6 Promote regional tourism focused on eco-tourism and agritourism.

~~ED 6.1~~ Promote the Foothills Trail as an opportunity for multiple forms of recreation, including a source of biking, running, walking, and overall healthy living.

~~ED 6.2~~ Promote road related scenic tours that include travel routes through Orting.

ED 6.3 Promote Orting as the gateway to camping, hiking and rock climbing through the Carbon River entrance to Mt. Rainier. Further promote Orting as a destination for fishing and a gateway for hunting.

ED 6.4 Coordinate with other cities and communities in east Pierce County to ~~develop~~ identify opportunities for increasing tourism opportunities and strategies for promotion of these efforts.

ED 6.5 Evaluate tourism infrastructure (e.g., accommodations, food establishments, recreational facilities, eco-tourism businesses) and work with partners, to enhance tourism and wayfinding in Orting. ~~Promote Orting as a destination for fishing.~~

~~ED 8.6 Promote Orting as a gateway for hunting.~~

~~ED 8.7 Promote agricultural tourism in the Orting Valley.~~

Goal ED 79 *Promote and support agriculture in Pierce County.*

ED 79.1 Support the establishment of a public market, focused on where locally-produced food and agricultural products can be purchased by local and/or small vendors ~~feed-hub in City limits~~ to promote agricultural tourism in the Orting Valley.

~~ED 79.2 Work with Pierce County government and the farming community to brand Orting as the urban service center for agriculture.~~

ED 79.23 Support the local farmer's market such as through prioritized strategic infrastructure and maintenance investments and ~~Continue to support local~~ provide city wide events that support farming.

Goal ED 8 *Create a vibrant and stable downtown that hosts a variety of businesses that support both Orting residents and visitors.*

ED 8.1 ~~Update the~~ Prepare and administer a vision for Orting's Downtown Revitalization and Economic Development ~~Vision Plan.~~

~~ED 8.2 Explore a broad array of solutions the City can adopt to relieve the burden of off-street parking requirements on developments or changes of use within the downtown core.~~

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CAPITAL FACILITIES AND UTILITIES ELEMENT



Purpose

The Growth Management Act (GMA) requires cities to prepare a **Capital Facilities Element** consisting of:

1. An inventory of current capital facilities owned by public entities (including green infrastructure), showing the locations and capacities of the public facilities;
2. A forecast of the future needs for such capital facilities;
3. The proposed locations and capacities of expanded or new capital facilities;
4. At least a six-year plan that will finance capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes, and;
5. A requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent.

Park and Recreation facilities shall also be included in the Capital Facilities Element.

Similarly the GMA requires comprehensive plans to include a **Utilities Element**. Specifically, this element must address electrical power, natural gas, and telecommunications in the following manner:

1. Inventory the general location of existing utilities.
2. Establish the proposed location of proposed utilities.
3. Examine the capacity of existing and proposed utilities.

Capital Facilities and Utilities Elements may be combined into one inclusive Comprehensive Plan Element. The GMA's overall goal for public facilities and services is to ensure that the provided services are adequate to serve the projected development and use without decreasing current service levels below locally established minimum standards.

Organization and Regulatory Context

The Capital Facilities and Utilities Element establishes the level of service standards the City is obligated to provide, along with strategies for maintaining those standards. The Element is based on the goals and policies of the other elements, and incorporates the facilities needs and standards identified in the Transportation Element. The following discussion provides detailed information on the inventory of facilities and projected future needs that the Plan must anticipate over the next 20 years, and incorporates capital facilities plans for the Orting School District and for the Pierce County Library.

Major Issues

Major utility issues involve continued resolution of the sewer collection system inflow and infiltration problems as financial resources permit. Transportation issues are described in the Transportation

Element. Other capital facilities issues revolve around the need to maintain effective concurrency management to ensure that utility capacity is available to match the demands of growth and development.

Siting Essential Public Facilities

The GMA requires that city and county development regulations identify a process to review the siting of “essential public facilities”. These are large scale land uses that provide regional benefits and include airports, state educational facilities, state or regional transportation facilities, state and local correction facilities, solid waste handling facilities, and inpatient facilities (e.g., substance abuse, mental health, group home, and secure community transition facilities). The Pierce County Countywide Planning Policies (CPPs) address this topic.

Water

The City’s Public Works Department operates the Water System and the Comprehensive Water System Plan provides long-term planning for the system.



The Comprehensive Water System Plan (2009 or as updated) is adopted into this Comprehensive Plan by reference.

Service Area

Orting’s water system is a small “Group A” system with four sub-service areas: Harman and Wingate Springs, Central Business District, Northend, and west of the Puyallup River along the Orting Kapowsin Highway.

Water Demand

Current Water Demand

As of January 2024, there were 3,276 metered connections in the City’s water system. For water demand calculations, the metered connections are converted to Equivalent Residential Units (ERUs) to account for non-residential services. The 3,276 connections are equivalent to 2,955 ERUs. In addition to the metered connections, unaccounted water in Orting’s system is estimated to be 745 ERUs. One ERU is equivalent to 200 gallons per day per connection for average use and 472 gallons per day per connection during peak day events.

Community water usage exceeds 1,800,000 gallons per day during peak events. The City has adequate water (and pressure) for fire flow city-wide.

Projected Water Demand

Future water demands are calculated by multiplying projected population estimates from the land use element by system ERUs for average and peak day demands. Because the types and extent of anticipated land uses do not differ substantially from the existing types of land uses, it is assumed that future water use patterns will not differ substantially from existing demands. **Table CFU-1** presents projections of future water demand.

Table CFU-1: Projection of Future Water Demands

Year	Projected Households (Equivalent Residential Unit) ¹	Average Daily Water Demand (gallons per day) ²	Maximum Daily Demand (gallons per day)
2030	3,950	790,000	1,896,000
3035	4,113	822,700	1,974,500
2040	4,285	857,000	2,056,800
2044	4,428	885,700	2,125,700

¹ Population based on County-wide allocation, and on a 2.5-person household size.

² Average and Maximum Daily Water Demands do not include Water Use Efficiency (WUE) Efforts

Water Supply

Table CFU-2 describes the proposed improvements to water sources for each service area. Based on the allowable capacity of the sources (the lesser of physical source capacity or water rights), the City’s sources are currently capable of delivering instantaneous flow of up to 1,850 gpm and annual flow of up to 2,274.3 acre-feet. The current system allowable capacity is adequate for the current and projected population through the year 2045.

Year 2044 demand projections anticipate an instantaneous flow rate of 1,426 gpm and an annual flow of 1,045 acre-feet, both of which are far below the source capacity. **Table CFU-3** illustrates the water rights, physical capacities, and allowable use capacity of the City’s water sources.



Table CFU-2 Inventory of Water Sources

Service Area	Source	Proposed Improvements	Distribution System
Wingate & Harman Springs	Wingate & Harman Springs	Replace wrapped steel and asbestos-cement distribution mains. Wingate booster pump station upgrades.	6-12" wrapped steel, ductile iron, and asbestos-cement pipe
Central Business District	Wells #1, #3, and #4 Wingate & Harman Springs	Replace asbestos-cement distribution mains. Well 2 improvements; iron and manganese filtration, well rehabilitation, new building.	2-12" wrapped steel, ductile iron, and asbestos-cement pipe
Northend	Wells #1, #3, and #4 Wingate & Harman Springs		6-12" ductile iron and PVC pipe
West of Puyallup River	Wells #1 and #3 Wingate & Harman Springs	8" ductile iron connecting Whitehawk to Calistoga E	8"-12" ductile iron, 9" PVC

Table CFU-3 Capacities of Water Sources

Source	Production Rate (GPM)
Well #1	500
Well #2	0 (Currently disconnected from distribution system)
Harman Springs	90
Wingate Spring	136
Well #3	650
Well #4	1,185
Total	2,561

Water Storage and Transmission

The total existing water storage capacity of the Orting water system is 1,958,600 gallons. Each of the two spring sites is equipped with a concrete reservoir storage tank with capacities as follows: Lower Harman (190,000), and Wingate (125,900). The lower Harman reservoir was replaced in 2003 with a 190,000-gallon tank to account for storage losses at the Boatman facility. Boatman Springs, which was once a source of supply for the City, has been disconnected from the distribution system. Well #1 has a 550,000 gallon concrete reservoir, and Well #4 has a 1-million gallon concrete reservoir.

Storage analysis indicates the City's existing storage facilities are sufficient. The addition of the 1-million-gallon North End Reservoir at Well #4 to the water system currently provides an excess storage capacity of over 500,000 gallons. At build-out conditions, the system will have an excess storage capacity of approximately TBD gallons. No storage improvements are needed to accommodate forecasted growth in the City; however, should storage improvements later be needed, the City would explore the potential to add capacity to Well #2.

One of the most serious problems with the water system is the leaking of primary transmission pipes. These pipes carry municipal water from the wells and spring sites to the city's customers. The unaccounted water (the difference between quantities of water read at the source meters and consumers' meters) requires considerable city crew time to repair leaks and represents lost revenue potential for future connections. Prior to 2018 it was known that a majority of the water loss occurred in the upper zone of the system. In January 2018, the new Orville Road water main came online and distribution system leakage has largely decreased since.

The City is aware that a majority of this water loss occurring in the system is due to aging asbestos concrete (AC)¹ and wrapped steel pipe in the distribution systems. Annually, the City surveys all the existing AC and wrapped steel water lines running to spring sources and the downtown area for leaks. Additionally, the City has an annual leak detection program in an effort to reduce the quantity of unaccounted water.

Water Quality

The water supply is chlorinated at all of the sources and is carefully monitored in accordance with State Department of Health and US Environmental Protection Agency standards. The Orting water supply was analyzed on the basis of available storage and the ability of the system to supply fire flows as well as providing domestic needs.

Existing water rights will be adequate for supplying water for the demands of projected populations. The City has completed a number of water right change applications to create a well field so the newly constructed Well #4 can withdraw water utilizing the City's existing water rights. The system is capable of supplying fire flow requirements for single occurrence residential and commercial fires.

The Capital Facilities Program (**Table CFU-7**) contains specific water system improvements that have been identified in the water utility master plan. In addition, the plan identifies the need for additional operation and maintenance staffing. The 2022-2028 capital improvement projects include:

- On-Site Chlorination System
- WSDOT Water Line Replacement
- Well 1 Cleaning and Liner
- Water Meter Upgrades and Replacement
- Central Metering Technology

¹ Asbestos concrete was a water main material used in the 1920's to 1970's and is very brittle so it easily cracks. It's completely safe for drinking water but many cities are replacing due to leaks.

Commented [NS1]: The consultant team is working to get this number.

Wastewater

The City's Public Works Department operates the wastewater (sanitary sewer) system and the General Sewer Plan provides long-term planning for the system.



The General Sewer Plan (2001 with a 2010 addendum, or as updated) is adopted into this Comprehensive Plan by reference.

Existing Collection Systems

Orting's collection system ranges in age from the 1943 "old town" lines to new lines installed in recent subdivisions. The sewer system serves virtually all of the commercial and residential property in the city. As of September 2017, the City's sewer system had 2,897 physical connections which is equivalent to approximately 3,317 ERUs based upon consumptive meter readings. The system service area covers about 1,250 acres including the High Cedars golf course community located outside the City limits². At the present time there are no industrial users of the system.

Commented [NS2]: This information to be updated (the city staff is checking on this).

The general slope of the Orting planning area is from the southeast to the northwest, towards the treatment plant. The northern and western portions of the area slope away from the existing treatment plant, creating a need for the pumping of sewage.

The city has five pumping stations. One is located at the intersection of Calistoga Street W and the Puyallup River serving the Soldiers' Home and the portion of service area south of the Puyallup River. The Soldier's Home, housing approximately 192 residents, is the major commercial user in the area.

The second pumping station serves the High Cedars Village and Golf Course and discharges to the city sewer system through a 3,100 foot 6-inch diameter forcemain. The system is designed to handle 300 connections in the High Cedars development. In 2008, the pump station had a total of 180 hookups. The Village Green, Village Crest, and Rainier Meadows pumping stations respectively serve those three developments.

Commented [NS3]: This information to be updated (the city staff is checking on this to confirm this is still the current configuration following a replacement in 2018).

Wastewater Treatment

The wastewater treatment plant serves all property within the City including the High Cedars golf course development and the Soldier's Home.

Existing Deficiencies

The existing gravity collection system has a serious inflow and infiltration problem due to the aging infrastructure. Inflow is defined as surface water and storm sewer water entering the sanitary sewer system through leaks. The state Department of Ecology has directed the city to correct this problem. Immediate complete correction of infiltration and inflow is not financially feasible, making gradual replacement and rehabilitation of the existing sewers the only economic alternative. Replacement and rehabilitation of the existing sewers will take place systematically by removing areas of the system with the greatest inflow and infiltration problems first. In 2008, the City performed a survey of the entire sanitary sewer collection system, which included videotaping and smoke testing. Through

Commented [NS4]: This information to be updated (the city staff is checking on this to determine the most recent video taping of the entire system).

² An agreement between the City and the County ensures that payments (user fees) are provided to the city for the use.

this survey, areas of high infiltration and inflow were identified and ranked based on severity. In 2011, the City completed sanitary sewer rehabilitation on Deeded Lane and Whitesell Street, two highly ranked locations identified by the sanitary survey. In 2017 the City constructed the Eldredge Avenue NW sanitary sewer rehabilitation project. The City continues working to reduce inflow and infiltration and plans to spend approximately \$300,000 each year on inflow and infiltration projects.

Effluent from the wastewater treatment plant currently discharges into the Carbon River just north of the plant through an outfall pipe located 8 feet above the river bottom. Due to concerns over river bar formation in the vicinity of the exposed outfall which prohibit the development of a submerged outfall, this side bank discharge will be maintained for all phases of future expansion. Solids from the treatment process are stored in a lagoon facility at the treatment plant site.

The City is currently designing a solids upgrade facility which will produce Class A biosolids, known as a **“Water Resource Recovery Facility.”** The project would include the construction of a new 6,600 sq. ft. biosolids building and replacement of the lagoon operation (which is in need of substantial upgrades) with new technology that will produce a dry/stable Class A fertilizer.

These biosolids will be made available to the public as a fertilizer, high in nutrients. Initial market sounding has shown that the public, the agriculture community, and the Orting School District are interested in using the product as a soil amendment.

Future Wastewater Flows

To project future wastewater flows for Orting, existing treatment plant flows and loadings as well as future collection systems have been evaluated. Total wastewater flows are the sum of residential, commercial and industrial wastewater plus infiltration and inflow. The existing sewer flows are mainly a function of residential flows and infiltration and inflow; industrial and commercial flows are minimal, as described earlier. The City of Orting General Sewer Plan/Engineering Report Amendment (Parametrix, Inc., 2001) details the methodology for projecting service area population equivalents within the City’s urban growth area. **Table CFU-4** shows the current population, the wastewater treatment plant design population and the projected build out population.

Table CFU-4: Sanitary Sewer Service Area Population Equivalents*

Region	Population Equivalents		
	Current	Phase 1	Build Out
Residential	3,723	4,312	8,025
Commercial	107	370	915
High Cedars	110	229	475
Total	3,940	4,911	9,415

* Population Equivalent = one individual contributing a typical per capita flow and waste load to the treatment plant.
 * Residential: 2.5 population equivalents per dwelling unit
 * Commercial 1,000 population equivalents per 7 acres; 2,000 gallons per acre per day; and 130 gallons per capita per day per population equivalent
 * High Cedars: 110 existing dwelling units; 190 dwelling units at build out, for planning purposes only. Actual service is not anticipated.
 Source: Parametrix, Inc.

The General Sewer Plan provides more information on the WWTP influent design flows and the rated capacity. The influent design flows are based on the build out condition of 9,415 population equivalents.

To further understand the effect of inflow and infiltration on plant capacity, the City of Orting completed an Infiltration and Inflow Report Update (Parametrix) in 2011. Inflow and infiltration appears to be consistent since the Deeded Lane and Whitesell Street sewer rehabilitation project completed in 2011. Continued sanitary sewer rehabilitation and replacement projects should further decrease and stabilize inflow and infiltration in the system.

Water Reuse

Irrigation of nonfood crops is the least costly and most prevalent potential use of reclaimed water. Irrigation demand could be greater than the dry season maximum month effluent flow of the Orting wastewater treatment plant. Feasible irrigation uses of reclaimed water include the Orting Middle School, Ptarmigan Ridge Elementary, Gratzner Park, Village Green and Whitehawk Parks, and the Foothills Trail. These uses are estimated to generate ultimate demand for 574 gpm on average and 1,150 gpm for the peak period. Water reuse facilities at the treatment plant and in the Orting Valley may be constructed by the City Sewer Utility. All facilities will be owned and operated by the City. Gratzner Park and the Orting Middle School were constructed with purple pipe irrigation systems, ready to receive reclaimed water.

The Capital Improvements Program (**Table CFU-8**) lists planned improvements to the wastewater and water reuse system that are planned for the next 14 years. These improvements include providing solids handling facilities at the treatment plant and development of an extensive water reuse treatment and distribution system. Storage of the solids in the on-site lagoon will end as soon as the solids treatment facility is complete.

Storm Water



The Stormwater Comprehensive Plan (2009 or as updated) is adopted into this Comprehensive Plan by reference.

The City's storm water utility collects fees based on storm water runoff created by impervious surfaces on each parcel within the city. These funds are used to construct needed storm water collection, detention, and treatment facilities. The City has also adopted ECY's Stormwater Management Manual for Western Washington, 2019 edition, as part of the Orting Municipal Code. All new and redevelopment must comply with the requirements and recommendations in the manual.

~~The Pierce County Comprehensive Flood Control Management Plan refers to Orting as one of the "hot spots" in the study area which has experienced chronic flooding problems and is not adequately protected from the 100-year floods. If a flood on either the Puyallup or Carbon Rivers were to cause levee failure or change their course, they would usually flood and possibly erode adjacent high-quality agricultural lands. Potential damage to urbanized areas in Orting is also high if the levees protecting these areas were to fail.~~

~~The Puyallup River Basin Comprehensive Flood Control Management Plan identifies the types of~~

potential damage which could occur along the Puyallup River, including the inundation of residential and agricultural lands south of Orting; the inundation of over 100 single family residences plus a power substation in Orting; closure of Calistoga St W, a major arterial in Orting; inundation of River Glen Campground, High Cedars Golf Course and agricultural lands northwest of Orting; and overtopping and possible closure of SR 162 between Orting and McMillin. Specific areas of potential damage along the Carbon River include minor inundation of vacant and agricultural land in Orting.

The Pierce County Comprehensive Flood Control Hazard Management Plan (2023) refers to Orting as one of the low lying "hot spots" in the study area which are subject to chronic flooding problems. Located between the Puyallup and Carbon Rivers, the flood risk is present along both levee systems. The City completed the Calistoga/Wolfe Levee Setback in 2015, which provides flood protection within City Limits for a 100-year flood event on the Puyallup River. However, the upstream Jones Levee does not provide adequate protection from a 100-year event, which has been mapped to show potential flood risks to the City. At the time of the 2023 Comprehensive Flood Hazard Management Plan, Pierce County has identified the \$25.1 million Jones Setback Levee as a project to address this problem. Additionally, the County is planning on \$2 million in maintenance to the Ford Setback Levee upstream of the Jones Levee.

On the Carbon River, the County has identified multiple projects upstream of City limits, extending to Bridge Street in Orting. These projects include the following:

1. Carbon River Setback Levee, left bank near Bridge Street to upstream of Voight Creek (\$19.6M)
2. Carbon River Right Bank Floodplain Connection (\$4.1M)
3. Carbon River Left Bank Voight Creek to SR 162 to Bridge, RM 4.5 – RM 5.9 Feasibility Study (\$25M)

In 2008, Pierce County completed their Levee Setback Feasibility Study between River Miles 2.6 and 23.3 on the Puyallup River. Information from Pierce County's Setback Levee Feasibility Study was used by the City as the first step in identifying a setback levee project location. Pierce County evaluated setback levee sites using three main goals: 1) Increase floodplain connectivity and flood storage, 2) Re-establish short and long-term geomorphic processes and function, and 3) Maximize aquatic habitat and diversity use. Out of 32 potential setback levee sites, the proposed site in Orting ranked as the second best location for a levee setback on the Puyallup River.

To prevent flooding from the Puyallup River, the City used this feasibility study to move forward with the Calistoga Setback Levee project. Between 2008 and 2013, the City worked to acquire property, coordinate with stakeholders, secure grant funding, and design and permit the 1.5-mile long Calistoga Setback Levee. The new levee was designed to be at least 3-feet above the 100-year base flood elevation to protect the City during large storm events. The project also provides habitat benefits to the River system. Removal of the existing levee reconnected approximately 46 acres of floodplain to the middle Puyallup River, in addition to 55 acres of reconnected side stream/backwater habitat. The project was completed in 2015.

Electrical System

Puget Sound Energy (PSE) is an investor-owned utility providing electrical and natural gas service to approximately 4,000,000-1.2 Million residential, commercial, and industrial customers and natural gas service to over 900,000 customers in ten counties in western Washington. To provide reliable service, PSE builds, operates, and maintains an extensive electrical system consisting of generating plants, transmission lines, substations, and distribution systems. PSE is regulated by the Washington Utilities and Transportation Commission (WUTC) and is obligated to serve its customers subject to WUTC rates and tariffs.

Existing System

There are two main access points for receiving power in Pierce County: White River 230/115 kilovolt (kV) Transmission Station located north of Orting; and at PSE's Frederickson Generation station located in Frederickson Industrial area of Pierce County. A third and fourth access point from St. Clair transmission substation near the Thurston/Pierce County line and Tone near Thurston/Lewis county line provide a major tie between Pierce and Thurston Counties. The existing electrical system serving the Orting area consists of the following:



Transmission Substations:

- The White River Transmission Station (immediately east of Sumner, north of Orting)
- Alderton Transmission Station (in Alderton)
- Electron Heights Switching Station
- Frederickson Generation Station

Distribution Substations:

- Orting
- Rhodes Lake
- Kapowsin
- Gardella
- Knoble

Transmission Lines (115kV):

- Alderton — Electron Heights
- White River — Alderton # 2
- Blumaer — Electron Heights

The City of Orting is mainly served from one 115/12kV distribution substation, namely Orting substation. This substation, with circuit ties to several adjacent substations included a well-connected transmission backbone system, is currently serving the city and surrounding population. The electrical system can be expanded as the area load develops. The timing of any future capacity additions is largely dependent on the development growth of the City, as well as any reliability-related improvement work that would be needed.

An existing 38-mile transmission line had previously only tied together three substations in the area, lacking the redundancy needed to reliably serve customers and increasing the possibility of outages in the area.

To strengthen the system and improve electric service reliability for customers, PSE constructed three new 115 kilovolt transmission lines from points along the existing transmission system to the Alderton substation in Puyallup. The lines will were constructed in two phases:

- Phase 1: Constructed one 115 kV transmission line along four miles of an existing water main corridor. The line runs from an interconnection point on an existing 115 kV line approximately 1,000 feet west of our existing Rhodes Lake substation in Bonney Lake to the Alderton substation.
- Phase 2: Constructed two 115 kV transmission lines along 3.2 miles of an existing regional utility corridor. The two parallel lines run from the Alderton substation to an interconnection point on an existing 115 kV line at Myers Rd E near Highway 410.

By constructing the new lines, PSE segmented the existing system into three smaller, more reliable systems that can back up each other in the event of an outage on one of the lines. This project added redundancy which limits the number of affected customers during an outage and eliminating electric capacity constraints on the existing system - ultimately keeping the lights on for customers.

This work is related to our Pierce County 230 kV project, which constructed approximately eight miles of new 230 kV transmission line from the White River substation in Bonney Lake to the Alderton substation in Puyallup. The Pierce 230 kV project was completed in late 2017. These projects work together to strengthen the overall electric grid and increase electric reliability for customers Orting as well as in Sumner, Bonney Lake, and central Pierce County.

Capacity

The power utilization factor of all distribution substations serving the City of Orting and surrounding area is at 72-percent. The utilization factor is a comparison of current peak system load (during the winter heating season), divided by the design capacity of the substations in the area. The following table illustrates the capacity versus peak winter loads for the Orting distribution substations.

Table CFU-1: Electrical Utilities: Existing Capacity in MVA*

Distribution Substations	Capacity	Winter Load (Feb 6, 2014 January 16, 2024)	Summer Load (August 16, 2023)
Orting	25	25 23.2	24
Rhodes Lake	25	22 22.4	25
Kapowsin	25 20	11 12.7	6
Gardella	25	23 19.2	21
Knoble	25	13 8.9	11
Total	125 120	95.0% 86.4	76.0%

*MVA = Mega Volt Amperes

The electrical system can be expanded as the area load develops. The timing of future construction is largely dependent on the development growth of an area, and the associated increase electric

demand (load), as well as facility maintenance requirements, reliability related improvements, or system replacement needs.

Projected Need

PSE's future Electrical Facilities Plans are developed for all of Pierce County to support the projected load level in the county including the city of Orting and surrounding areas.

The population and employment forecasts are based on a regional economic and demographic model and then allocated into each of the counties within the service territory. The regional forecasts account for the latest assumption about the national economy and reflect the historical structure of employment and population within each county as well as their recent growth patterns. The historical population data by county is based on the state's Office of Financial Management data, while the employment data is based on the state's Employment Security Department's monthly reports. The projection of these inputs together with the company's projections of conservation, retail rates and any known short term large load additions or deletions from the company's forecast of energy and peak loads.

Proposed System

Puget Sound Energy has identified system and transmission improvements required to serve the forecasted load growth in Pierce County. Many improvements are in progress or planned for the future; others have been identified as future improvements to meet the growth demand. These improvements are intended to meet the growth and reliability demands for the City of Orting and the surrounding area, as well as other portions of Pierce County.

System Improvements in Progress

PSE has identified the need for a new bulk power delivery point for Pierce County at the Alderton Transmission Station, located approximately 5 miles north of Orting City limits. Existing transmission lines are planned to be upgraded to provide a 230 kV tie between the White River Transmission Station and the Alderton Transmission Station. Future improvements are as follows:

- **Alderton 230 kV Development** – Pierce County will need a major upgrade of bulk power delivery system in the near future. The Alderton Transmission Station has been identified as a future 230 kV transformation station. The project will involve upgrade of existing transmission lines north of Orting and installation of a 230 – 115 kV transformer at the Alderton transmission substation.
- **Blumaer** – Electron Heights 115 kV Transmission rebuild: This project is to rebuild the 42-mile transmission line in stages, rebuilding mostly low-capacity conductors with 115 kV high-capacity conductors.

Future Transmission Improvements:

- **Woodland** – St. Clair Phase II – This project will involve upgrade of Woodland substation (in southwest Puyallup) to a switching station and rebuilding of existing lines between Lakewood and Woodland. When completed, the project will increase transmission backup capacity between Pierce and Thurston counties and improve reliability in central Pierce County.
- **Alderton** – Electron Heights Transmission Re-configuration: This is a long range plan to Re-configure the 115 kV transmission network south of Alderton towards Electron Heights to increase transmission reliability in Orting valley and surrounding areas. This project may include a new transmission line between Frederickson and Electron Heights via Graham.

Completed Distribution Improvements

- **New 25MVA transformer bank installed at Orting substation in 2014** – The new transformer bank added 5 MVA of capacity to Orting substation.
- **White River** – Electron Heights transmission loop into Alderton – These improvements provided a transmission route from the Bonney Lake area into the Alderton Transmission Station and from the Rhodes Lake Area also into Alderton Transmission Station. Phase one of this project was completed in 2014; with the 2nd phase completed in 2017.

Future Distribution Improvements

- **New 12KV distribution circuit out of Orting substation** – This project ~~will build~~ built up existing infrastructure and ~~add~~ added new infrastructure to relieve load from the most heavily loaded and unreliable circuit at Orting substation. ~~When completed~~ Completed in 2016, this project ~~will help~~ improved reliability for customers on both the existing circuit and the new circuit.

Additionally, PSE replaces aging underground electric cables across their service area. PSE initiated the Cable Remediation Program (CRP) initiated in response to increasing numbers of underground cable failures in residential areas, causing customer outages. For example, in 2024 approximately 1,235 linear feet of underground cable will be replaced along Grinnell Ave SW from Kansas Street and Belear Street SW, together with segments on Kansas Street, Fairlane Street and Belear Streets.

Climate

Climate change is one of the biggest existential threats facing our planet today. The City, in partnership with PSE, is on the path to meet current and future needs of customers and deliver on the requirements to decarbonize operations and serve customers and communities equitably. Potential efforts to support PSE programs and meet future Climate Resilience goals of the City could include:

- Promoting financial assistance and discounted billing programs for income qualified residents to ensure that the most vulnerable are not disproportionately impacted by the State's clean energy transition.
- Supporting EV charging infrastructure throughout the community in order to support the decarbonization of the transportation sector.
- Promoting energy efficiency programs and initiatives and expedite permitting processes related to energy efficiency upgrades.
- Promoting local investments and customer enrollment in clean energy projects and programs to achieve clean energy goals
- Promoting and supporting programs designed to decrease load on the grid during peak use.
- Effectively meeting rapidly increasing electrical demand as the City and region work to achieve a Clean Energy Transition by adopting codes that support existing and new technologies.
- Expediting local permitting and approval processes to maintain grid capacity and reliability.
- Promoting and supporting the growth of customer owned distribution energy resources.
- Supporting ongoing vegetation management to maintain system reliability.
- Pursuing public-private partnership to seek funding sources to accelerate clean energy projects.
- Supporting PSE's wildfire mitigation efforts including electric system upgrades, year-round vegetation management, and fire weather operational procedures. Work closely with utilities and local fire departments to lessen the risk and impact of wildfires.

Natural Gas

PSE operates the state's largest natural gas distribution system ~~serving more than over~~ 900,000 gas

customers in six counties, PSE manages a strategically diversified gas supply portfolio. About half the gas is obtained from producers and marketers in British Columbia and Alberta and the rest comes from Rocky Mountains states. All the gas PSE acquires is transported into its service area through large interstate pipelines owned and operated by another company. Once PSE takes possession of the gas, it is distributed to customers through more than 26,000 miles of PSE-owned gas mains and service lines; supply mains range from 4"-20" to 2"-20". PSE currently operates one 2" high-pressure natural gas main within the City.

PSE provides natural gas to certain locations in the city. Gas service is generally extended to new development upon evaluations of requests based on an economic feasibility study. Currently the natural gas supply system meets the existing demand.

Existing Distribution System

Natural gas comes from gas wells in the Rocky Mountains and in Canada and is transported through interstate pipelines by Williams Northwest Pipeline to Puget Sound Energy's gate stations. Supply mains then transport the gas from the gate stations to district regulators where the pressure is reduced to less than 60 psig. The supply mains are made of welded steel pipe that has been coated and is cathodically protected to prevent corrosion. They range in size from 4" to 20".

Distribution mains are fed from the district regulators. They range in size from 1- 1/4" to 8" and the pipe material typically is polyethylene (PE) or wrapped steel (STW). Individual residential service lines are fed by the distribution mains and are typically 5/8" or 1-1/8" in diameter. Individual commercial and industrial service lines are typically 1-1/4", 2" or 4" in diameter.

Future Facility Construction

PSE does not have any major projects planned in Orting at this time, but new projects can be developed in the future at any time due to:

- New or replacement of existing facilities to increased capacity requirements due to new building construction and conversion from alternate fuels.
- Main replacement to facilitate improved maintenance of facilities.
- Replacement or relocation of facilities due to municipal and state projects.

Telecommunications

Telecommunications services include switched and dedicated voice, data, video, and other communication services delivered over the telephone and cable network.

Regulated or non-regulated companies may provide these services. Cable service includes communication, information and entertainment services delivered over the cable system whether those services are provided in video, voice or data form.

There are no shortages in the existing or future capacity of the telecommunication services for Orting. The existing network of phone and cable television lines has sufficient capacity to accommodate increases in development or subscription. The limitation in providing services would stem from lack of a direct hook-up from a specific residence to the television or telephone line. This linkage can be installed when service is desired.

Communication Services

Multiple companies offer communication services in Orting, including integrated voice and data. CenturyLink (d.b.a. CenturyTel), the Incumbent Local Exchange Carrier (ILEC), provides local telephone and a mix of copper and fiber based internet services.

Since the Washington Utilities Trade Commission (WUTC) regulations require CenturyLink to provide adequate public switched telephone network (PTSN) telecommunications service on demand, there are no limits to future capacity, although demand for land lines is declining.

Orting is now served by most wireless telephone providers and several internet providers.

Cable and Satellite

Cable television and cable internet service is provided in Orting by Xfinity, Dish, and DirecTV. The Orting area is handled through the TCI Cable of Auburn Office.

Solid Waste Management

Under state law governing solid waste management (RCW 70.95.090) local governments are required to provide collection of source separated recyclable materials from single and multi-family residences; drop-off or alternative systems for rural residents; yard waste collection; educational and public outreach programs; programs to monitor the collection of recyclables from commercial sources; in-house recycling and procurement programs; and any other programs the municipalities determine are necessary to achieve state and local waste reduction and recycling goals.

The Tacoma-Pierce County Solid Waste Management Plan (2021-2040) guides all aspects of solid waste handling in Pierce County and each city and town wholly within Pierce County. The most recent plan was adopted by Orting City Council in September 2022 (Ordinance 2022-23). It is the primary tool implementing the law cited above. The Washington State Department of Ecology adopted the State Solid and Hazardous Waste Plan – Moving Washington Beyond Waste and Toxics Plan in December 2021, which provides direction for local governments on their individual waste management plans.

Except for collection contracting authority, which it retains through an Interlocal Agreement, Orting has designated Pierce County as the entity responsible for managing waste reduction, recycling, composting, disposal, and household hazardous waste programs, including associated public information, outreach, and engagement. Under County direction, waste generated within the City of Orting is disposed in the LRI Landfill in unincorporated Pierce County and yard waste is composted at facilities owned by Pierce County or operated under contract with Pierce County.

Orting contracts with Murrey's Disposal for the collection of household and commercial garbage, recyclables and yard waste. Residents and businesses can self-haul special wastes and recyclables (e.g., household hazardous waste, tires, batteries, and oil) to fixed facilities located throughout the County.

Public Schools

Orting is within the Orting School District. The GMA authorizes cities to impose impact fees for

school facilities upon the adoption of a capital facilities plan element and enabling ordinance. These criteria have been met and the Orting School District collects impact fees for residential development.

The Orting School District Capital Facilities Plan is a six-year plan intended to be revised each year for the succeeding six years. The plan is intended to guide the District in providing new capital facilities to serve the projected increase in student enrollment as well as new developments emerging within the District boundaries. The plan is reviewed on an annual basis and updated based on current and future enrollment and projected financing.

Also included in the plan are major capital repairs and improvements needed to maintain the District's existing facilities.

School Facilities Inventory

Facilities include Orting High School, Orting Middle School, Orting Elementary School, Ptarmigan Ridge Elementary School, Central Administration Building, and the old Administration Building that houses the Transportation Department and Facilities Department (to include custodial, grounds, and maintenance).

The District recently acquired two separate parcels totaling 65 acres within the City of Orting boundaries. The District also owns 22.9 acres of undeveloped land south of Orting (known as the Orville Road property). County ordinances make the Orville Road property unsuitable for a school facility due to Pierce County zoning regulations prohibiting construction of school buildings in the Mount Rainier Lahar Designated Zone and wetlands area.

Forecast of Future Needs

To better understand the degree of the enrollment changes taking place in the Orting School District, the District's student enrollment history and enrollment projections are reviewed.

The School District reviews historical demographic trends and actual enrollments to determine projections for future enrollment. The District predicts growth in addition to the usual expected trends, due to the current plans for additional housing and planned developments within the District borders.

Student enrollment at the elementary level has experienced significant increases in recent years, with an exception for recent years due to Covid-19. This growth, combined with the current class size reduction initiatives by the Legislature, have created a high need for elementary school classrooms and support spaces. Ongoing growth without accompanying permanent capacity projects has created the need for additional temporary classrooms ("portables"). The Board approved a plan to purchase an eight-classroom portable at Ptarmigan Ridge Elementary School which was completed at the beginning of the 2019-2020 school year.

The District is anticipating significant growth from four major housing developments outside of Orting city limits; Tehaleh, Uplands, Daybreak, and South Sunrise. Tehaleh is expected to add 462 students over the next 6 years. Uplands is expected to add 376, Daybreak 221, and South Sunrise 203. Detailed projections by year, and total buildout projections, can be found in the Orting School District's Capital Facilities Plan.

The Orting School district acquired 65.08 additional acres of land in the City of Orting, and rezoned this land to Public Facilities from MUTCN. The preliminary goal for this site is a K-5 elementary school that may serve 600-700 students, and associated improvements. The Orting School District has been unsuccessful to bond for the construction on this new facility.

The District will need to determine how to proceed with the Board's February 2024 bond planning and CFAC recommendation to determine construction and modernization. These funds will be derived from the sale of general obligation bonds and impact fees on new housing developments as they are built. The District will consider the use of state matching funds in the overall recommendation.

Mitigation / Impact Fees

Pursuant to RCW 82.02.050, Impact Fees "(a) Shall only be imposed for system improvements that are reasonably related to the new development; (b) Shall not exceed a proportionate share of the costs of system improvements that are reasonably related to the new development; and (c) Shall be used for system improvements that will reasonably benefit the new development."

Impact fees can be calculated on the basis of "unhoused student need" as based on "the maintenance of a district's level of service" related to students expected from new residential development. A determination of insufficient existing permanent and/or portable school space, combined with expected growth from new development over the six-year planning period, allows a district to seek imposition of impact fees on a new residential dwelling unit. The amounts to be charged are calculated based on the costs for providing the space to serve the average projected number of students who will reside within a residential unit. Credits are provided for anticipated SCAP funds that will be applied to the planned growth-related capacity project as well as taxes that a new homeowner will pay toward the school bond that will fund the capacity project. A district's school board must first approve a Capital Facilities Plan with a recommended school impact fee and the District's Capital Facilities Plan must be adopted by reference as a part of the assessing jurisdiction's Comprehensive Plan, with the jurisdiction also adopting the impact fee amount based upon the District's recommendation. Developers may contribute properties which will have value to a district. In such cases, the developer is entitled to a credit for the actual cost of the provided property. This credit can reduce or eliminate the impact fee that would otherwise be assessed on units within the development.

The code provisions for school impact fees in both Pierce County and the City of Orting contain a "maximum fee obligation" that is set at a rate significantly lower than the District's calculated impact per dwelling unit.

Library

Public libraries offer education, information, and recreational services to the community, as well as community gathering space. Orting's public library at 202 Washington Ave S. is a branch of the Pierce County Library System, housed in the Multi-purpose Center (the facility is jointly used by the library and the city's Recreation department and the City owns the building). The Multi-purpose Center was constructed in 1981, and the library occupies 2,700 square feet of it and shares the restrooms and entry. The site area is 10,560 square feet and includes parking and an entry plaza.

The Orting Pierce County Library is a full-service public library. It provides residents with an on-site collection of over 20,000 books, movies, music, magazines, audio books, newspapers and reference resources, as well as access to the Library System's collection of over 1.1 million books, movies and

other materials. Public computers and printers are provided and free Wi-Fi is available to mobile computer users in the library as well as in the surrounding neighborhood.

The Library System's 24/7 online branch also provides Orting residents free access to over 500,000 downloadable books, audiobooks, movies and other materials. Mobile services reach schools, adult care facilities, persons who are homebound and are present at community events. Pierce County Library has reciprocal borrowing agreements that provide Orting residents with free use of other Washington libraries including the nearby King County Library System and Timberland Regional Library, Tacoma Public Library and the Puyallup Public Library.

As part of the Pierce County Library system, use of the facility and its services is not limited to Orting residents. The Orting Library's current service area population is estimated at 12,700, and includes residents from surrounding communities such as Graham, South Prairie, Bonney Lake and Sumner.

Future Needs

The Pierce County Library system is updating their library facility plan and so future plans for the library are in the process of evaluation. However, in a previous facilities master plan that was prepared in 2010 called "Pierce County Library 2030," it was noted that the Orting library branch is a HUD-built building that is undersized for the communities needs and has complex ownership and maintenance agreement challenges. A recommendation to relocate and expand the Orting library was listed as a preferred facility recommendation, and between 10,400 to 12,100 square feet of space was listed as the probable space need. Amenities such as meeting rooms, group study spaces were listed, in addition to expanding the library's collection and computers at the site. A site that has minimal dangers from potential flooding or lahar impacts is preferred. The project cost was listed at \$8.3 Million (2010 dollars).

Parks and Recreation

The City's close proximity to Mt. Rainier National Park, the Gifford Pinchot National Forest and mountain wilderness areas offer Orting residents numerous recreation opportunities. The Foothills Trail is a regional attraction, and an important recreational asset within the community.

There are a little more than 170 acres of public parks and natural resource areas, and over two miles of trails within the City of Orting. Several local residential developments also maintain private parks. Descriptions and a full inventory, are provided in the Parks, Trails, and Open Space (PTOS) Plan.

A parks plan certified by the state Recreation and Conservation Office (RCO) is required to be eligible for RCO grant funding, and an update is required every six years. The PTOS is certified by the RCO and identifies current resources and needs, forecasts future demand, and identifies strategies for meeting future need. Level of Service standards for park, facilities, trails and natural resource areas are set in the Capital Facilities Element by Policy CF 3.3.



The City of Orting Parks, Trails, and Open Space (PTOS) Plan and Appendix, as approved by Orting City Council pursuant to Resolution 2022-03, are hereby adopted by this reference.

The City of Orting PTOS Plan covers a six-year planning period and may be amended or replaced at the end of that period, and subsequent six-year periods. This comprehensive plan references the most current version of the PTOS Plan.

There are a total of 19 parks within the City (including public and private) and ten of these are owned by the City. The City also contains three trails, multiple natural areas, and open space/playfields at school facilities. Additionally, the City has a Multi-Purpose Center which shares a building with the Orting Pierce County Library and offers rentable event space with a kitchen area. The Multi-Purpose Center is also used for many of the recreational programs offered within the City, including various fitness and craft classes. The City of Orting has a Park Advisory Board, which is a five-member board that provides recommendations on park creation, improvements, and maintenance to the Orting City Council. City parks are maintained and operated by the Parks Department, within the Public Works Department.

Police Protection

The Orting Police Department is a full-service organization dedicated to excelling in all aspects of law enforcement, protecting people's rights, lives, and property, and collaborating with the community to solve problems, decrease crime, foster a safer atmosphere, and enhance quality of life. The Department's Mission is *"Through a partnership with our community, working to protect our citizens with integrity, compassion & respect."*

The Police Department is based out of the Orting Public Safety building which is adjacent to City Hall and also houses the Orting Municipal Court and the Orting Valley Fire and Rescue (OVFR).

The Orting Police Department operates with one chief, one Lieutenant, one Community Services Officer, a clerk, and six officers, one of which is also a School Resource Officer. Currently, the department has achieved a ratio of about 1 officer per 1,000 resident population, which is below the national average of 2.4 officers per 1,000 population. The Department's service area is limited to Orting city limits, but officers will respond to an incident outside of the city, as necessary to assist other agencies. The department strives to maintain an unofficial response time of three to four minutes.

Police facilities are currently located in the Orting City Hall at 104 Bridge St South, in downtown Orting. The Department has fourteen police vehicles, which allows for Reserve Officers & a backup vehicle for primary vehicles, when occasional maintenance takes them out of service. Orting is dispatched by South Sound 911 county wide dispatch service.

Alternate text to consider:

The Orting Department has an authorized staff of thirteen full-time personnel, comprised of one civilian employee and commissioned Officers. Full time personnel work ten hour days four days a week to provide the best patrol coverage during peak hours. Currently, the department has a ratio of about 1.2 officers per 1,000 resident population, which is below the national average of 2.7 officers per 1,000 population. The Department's service area is limited to Orting city limits, but officers will respond to an incident outside of the city, as necessary to assist other agencies when necessary. Additionally, the department participates in numerous regional multi-jurisdiction investigative teams with surrounding law enforcement agencies to pool resources when needed to handle large-scale incidents.

The Department strives to maintain an unofficial response time of three to four minutes.

Police facilities are currently located in the new Orting City Hall at 104 Bridge Street. The Department has fourteen police vehicles, which allows for adequate assignment to Officers plus additional to act as backup vehicles, when occasional maintenance takes them out of service. Orting is dispatched by South Sound 911 county wide dispatch service.

Fire and Emergency Medical Services

The City receives contracted services from ~~Pierce County Fire District 18 also known as Orting Valley Fire and Rescue (OVFR), Central Pierce Fire & Rescue~~ to provide fire protection and emergency medical services to Orting and the Orting Valley. Private properties within Orting pay a fire benefit charge on property taxes, and the charge varies depending on size of the structure and use of the property, in order to receive fire services. The Orting fire station is located in the Public Safety Building (southeast side of the building) at 401 Washington Ave S. ~~OVFR has~~ There is an additional fire station located on Patterson Road. The Fire Department is comprised of 32 response staff, including the Battalion Chief, Lieutenants, and firefighters, several of which double as paramedics. Additionally, OVFR employs the Fire Chief, three administrative staff, and a chaplain.



Orting has a Fire Insurance Rating classification of four on a scale that ranges from one to ten, with a rating of one being the highest.

City Administration

Orting City Hall is located at 104 Bridge Street S. (at the corner of Washington Avenue and Bridge Street), and houses the City's municipal services. This building was constructed in 2019 and is approximately 11,800 square feet. The new City Hall building helps the City provide appropriate services for Orting residents.

Additionally, in 2019 the City completed construction of a new Public Works and Maintenance Facility. This facility includes nearly 2,500 square feet of offices, meeting space, working area, locker rooms and conference rooms. The attached garage space includes 500 square feet of secure storage space, 3,600 square feet of heated garage space, 2,700 square feet of unheated enclosed garage space and an additional 3,600 square feet of open covered garage space. The building sits on a 1.5-acre site which includes public parking, and gated storage.

The City also has a cemetery overseen by a board of appointed managers.

Orting Emergency Evacuation Bridge System

Due to the City's location along the Puyallup and Carbon Rivers, which flow from Mt. Rainier, Orting is at risk in the event of a lahar flow. The Natural Environment element of this plan covers hazard mitigation in further detail. Construction for Phase 1 of a pedestrian bridge across the Carbon River with a grade-separated SR 162 crossing and pedestrian trail linkages is underway; this project is

also known as Orting Emergency Evacuation Bridge System. This project is intended to provide an emergency evacuation route for children from the Orting schools, as well as other locations. Phase 1 consists of the above grade crossing of SR 162 at Rocky Road.

Phase 2, Preliminary/conceptual design for a pedestrian bridge across the Carbon River is complete. This project is intended to provide an emergency evacuation route for children from the Orting schools, as well as other locations. Efforts are underway to raise additional grant funding from state and federal sources for final design and construction of Phase 2.



Concurrency

The Capital Facilities Element is intended to establish an inventory of existing capital facilities, forecast future needs for such facilities based upon the projected growth in the community, and discuss how such facilities may be financed. Future needs should also be based not only upon the projected growth of the community, but also maintaining a locally determined level of service to be provided by those facilities. This concept of maintaining level of service standards throughout the planning time frame is a key goal of the Growth Management Act. Goal 12 of the Act states that those public facilities and services necessary to support development shall be adequate to serve the development at the same time the development is available for occupancy and use without

decreasing current service levels below locally established minimum standards. This concept is known as "concurrency," and it applies to transportation facilities and to a locally defined list of additional capital facilities.

Locally established standards are referred to as "level of service standards (LOS)," and are a method of measuring the quality or quantity of service provided by a facility. Policy CF 3.3 of the Capital Facilities Element establishes the City's adopted LOS. The Orting Municipal Code requires concurrency review for certain permitting processes. New development is required to be adequately served by public facilities and services within a reasonable time after development occurs, and the adopted LOS must be maintained.

Capital Facilities Financing

The City's six-year capital facilities plan includes improvements that the comprehensive plan elements indicate are necessary, along with potential funding sources. In order to identify these potential funding sources, it is important to review how capital improvements have been financed in Orting in the past.

Orting does not typically allocate general fund revenues for large capital projects. Rather, these projects are funded through bond issues, state and federal grants, and revenues from enterprise funds, such as water, sewer and solid waste fee revenues. Over the past three years capital projects have been financed primarily through federal and state grants, and revenues from the Motor Vehicle Tax.



The City of Orting Capital Improvement Plan (CIP) for 2024-2030 or as amended is adopted into this Comprehensive Plan by reference.

Financing Sources

The funding sources identified below are potential long-term choices that may be available to the City for major capital improvement projects. The sources will depend on the status of the City's existing financial commitments, capital required, cash flow requirements, source availability, and whether the source is acceptable to the customers. Any package selected must provide sufficient revenue to construct system improvements as well as satisfying any debt services. The following section will describe the several funding sources available to the City without reference to any specific project.

Revenue Bonds

The most common source of funds for construction of major capital improvements is the sale of revenue bonds. The tax-free bonds are issued by the City. The major source of funds for debt service on these bonds is from user charges to the individual utility customers. The major advantage of revenue bonds is that they protect the general obligation debt capacity for other projects. The City is capable of issuing tax exempt bonds up to a 20-year term without public vote. In order to qualify to sell revenue bonds, the City must show that its net operating income (gross income less expenses from the utility) is equal to or greater than 1.4 times the annual principal and interest payments due for all outstanding bonded indebtedness. This 1.4 factor is commonly referred to as the coverage factor and is applicable to revenue bonds sold on the commercial market. As a comparison, the FmHA loan program only requires a coverage factor of approximately 1.1. The major disadvantages to revenue bonds when compared to general obligation bonds are:

- Issuance costs tend to be higher.
- Interest rates tend to be higher because of lower security with the lack of a general obligation bond.
- Revenue bonds may require that all of the project's net revenues first be applied to either reducing outstanding debt or creating reserve funds for the same purpose.

General Obligation Bonds

The City, by special election, may issue general obligation bonds to finance almost any project of general benefit to the City. The bonds are paid off by assessments levied annually against all privately-owned properties within the City. This includes vacant property which otherwise would not contribute to the cost of such general improvements. This type of bond issue is usually reserved for municipal improvements that are of general benefit to the public, such as arterial streets, bridges, lighting, municipal buildings, firefighting equipment, and parks. In as much as the money is raised by assessment levied on property values, the business community also provides a fair share of the funds to pay off such bonds.

General obligation bonds have the best market value and carry the lowest rate of interest of all types of bonds available to the City because they are backed by the good faith of all the entire city's assets. Disadvantages of general obligation bonds include the following:

- Voter approval is required which may be time-consuming, with no guarantee of successful approval of the bond.
- The City would have a practical or legal limit for the total amount of general obligation debt. Financing large capital improvements through general obligation debt severely dilutes the ability of the city to issue future debt.
- Extensive use of general obligation debt may endanger the City's credit rating.

Utility Local Improvement Districts

Another potential source of funds for improvements comes through the formation of Utility Local Improvement Districts (ULID's) involving a lien against the property collected through assessment made on properties benefited by the improvements. ULID bonds are further guaranteed by revenues and are financed by issuance of revenue bonds.

ULID financing is frequently applied to water or sewer system extensions into previously unserved areas. Typically, ULID's are formed by the City at the written request (by petition) of the property owners within a specified area of the City. Upon receipt of a sufficient number of signatures on petitions, the local improvement area is defined, and a system is designed for that particular area in accordance with the City's general comprehensive plan. Each separate property in the ULID is assessed with the special benefits the property receives from the system improvements. A City-wide ULID could form part of a financing package for large-scale capital projects such as water supply or storage improvements which benefit all residents in the service area. The City-wide ULID would be formed by a majority vote of the City Council.

There are several benefits to the City in selecting ULID financing. The assessment places a lien on the property and must be paid in full upon sale of the property. Further, a substantial number of property owners can be expected to pay the assessment immediately upon receipt.

Therefore, the City avoids the need to pay interest cost for a portion of the costs financed by the

ULID. The advantages of ULID financing, as opposed to rate financing, to the property- owner include:

- The ability to avoid interest costs by early payment of assessments.
- If the ULID assessment is paid off in installments, it may be eligible to be deducted from federal income taxes.
- Low-income senior citizens may be able to defer assessment payments until the property is sold.
- Some Community Block Grant funds are available to property owners with incomes near or below the poverty level. Funds are available only to reduce assessments.

The major disadvantage to the City-wide ULID process is that it may be politically difficult to approve formation. The ULID process may be stopped if owners of 40-percent of the property within the ULID boundary protest its formation.

Drinking Water State Revolving Fund

State low interest loans and loan guarantees administered by the Environmental Protection Agency. The Clean Water State Revolving Fund aims to help communities meet the goals of the Clean Water Act by improving water quality, achieving and maintaining compliance with environmental laws, protecting aquatic wildlife, protecting and restoring drinking water sources, and preserving waters for recreational use. Applicants must show a water quality need, have a facilities plan for treatment works, and show the ability to pay back the loan through a dedicated source of funding. Funds must be used for construction of water pollution control facilities (wastewater treatment plants, stormwater treatment facilities, etc.).

Department of Health Water Grants and Loans

State grants available for upgrading existing water systems, ensuring effective management, and achieving maximum conservation of safe drinking water. Grant funds can be used for technical assistance for upgrading current water systems. The Drinking Water State Revolving Fund provides low-interest construction loans to drinking water systems to finance infrastructure improvements.

Conservation Futures

Pierce County provides grant funds to purchase conservation easements or property for the purposes of habitat and resource protection and active recreation.

Housing and Urban Development Block Grant

The city may qualify for Federal Department of Housing and Urban Development (HUD) Block Grants depending on its needs and the ability to compete with other communities. To qualify for a block grant, the applicant must show that the project benefits low- and moderate-income persons or households.

State Public Works Board

The Public Works Board (PWB) is authorized to grant and loan money to jurisdictions in Washington State. The PWB offers construction, pre-construction, and emergency loans for public works development projects. These loans cover expenses related to repair, replacement, and construction of facilities, ROW acquisition, design and engineering work, permits, environmental and cultural review, value planning, and public notification.

Developer Financing

Developers may fund the construction of extensions to the water system to property within new plats. The Developer extensions are turned over to the City for operation and maintenance when completed. It may be necessary, in some cases, to require the developer to construct more facilities than those required by the development in order to provide either extensions beyond the plat and/or larger pipelines for the ultimate development of the sewer system. The City may, by policy, reimburse the developer through either direct outlay, latecomer charges, or reimbursement agreements for the additional cost of facilities, including increased size of pipelines over those required to serve the property under development. Compensation for oversizing is usually considered when it is necessary to construct a pipe larger than eight inches in diameter in residential areas to comply with the intent of the Comprehensive Plan. Construction of any pipe in commercial or industrial areas that is larger than the size required to service the development should also be considered as an oversized line possibly eligible for compensation. Developer reimbursement (latecomer) agreements provide up to 10 years or more for developers to receive payment from other connections made to the developer-financed improvements. The developer may collect up to 75% of the cost of the original improvement through latecomer reimbursement.

System Development Charges

The City may adopt a system development charge to finance improvements of general benefit to the total system which are required to meet future growth. System development charges (general facilities charges) are generally established as one-time charges assessed against developers or new customers as a way to recover a part or all of the cost of additional system capacity constructed for their use.

The system development charge or fee is deposited in a construction fund to construct such facilities. The intent is that all new system customers will pay an equitable share of the cost of the system improvements needed to accommodate growth. Typical items of construction financed by the system development charge are water treatment facilities, pump stations, transmission lines, and other general improvements that benefit the entire system. This system development charge is quite effective in a fast growing community, but of little value in areas with slow growth because too much time is required to accumulate sufficient funds.

The system development charge is applicable to those lots within plat developments that install a complete water system in their plat to include all lines and appurtenances. The system development charge then help finance the development of transmission lines, pump stations and water treatment facilities to increase the system capacity to meet the new demands.

There are two basic methods for determining system development charges. One is the system buy-in method, and the other is the incremental-cost pricing method. The first method recognizes capital contributions of existing customers towards financing existing facilities. New customers are required to pay an amount equivalent to that paid by existing customers towards invested capital funds under this method. Under the incremental-cost pricing method, new customers are responsible for their share of the last increment of the cost of system facilities. The goal of the incremental-cost pricing method is to eliminate or minimize future service rate increases due to growth by an up-front charge for new capacity.

CERB (Community Economic Revitalization Board): CERB provides funding to local governments and federally-recognized tribes for public infrastructure which supports private business growth and expansion. Eligible projects include domestic and industrial water, storm water, wastewater, public buildings, telecommunications, and port facilities.

Department of Ecology Grants: The Washington State Department of Ecology offers grants on an annual basis for projects that improve and protect water quality, including stormwater facilities and activities. Grants are awarded based on funding availability.

Other Federal Grants: Congressional transportation funding appropriations and other federal grant sources may be available to the city; future grant funding is highly volatile and dependent upon actions taken by Congress.

RCO (Recreation and Conservation Office): The State Recreation and Conservation Office (RCO) manages a number of different grants for recreation projects, such as the Aquatic Land Enhancement Account (ALEA), Washington Wildlife Recreation Program (WWRP), Recreational Trails Program (RTP), and Youth Athletic Facilities (YAF).

SRF (State Revolving Fund): The Drinking Water State Revolving Fund (DWSRF) makes funds available to drinking water systems to pay for infrastructure improvements. This loan program is funded through federal and state money and subject to state laws and additional federal regulations.

STP (Surface Transportation Program): This is a program of the Federal Highway Administration, and one of several federal funding sources created by the Intermodal Surface Transportation Efficiency Act to finance transportation projects. STP funds are the most “flexible” funding source since they may be used on transit projects, bicycle and pedestrian, safety, traffic monitoring and management, planning, and the development of management systems, as well as more traditional road or bridge projects. A local match of 13.5 percent is required. For pedestrian and bike facilities, a 20 percent local match is required.

- STP-E: Surface Transportation program – Enhancement
- STP-U: Surface Transportation program – Urban
- STP-UL: Surface Transportation program – Urban, Large Area

TIB (Transportation Improvement Board): The Washington State Transportation Improvement Board (TIB) funds high priority transportation projects in communities throughout Washington to enhance the movement of people, goods, and services. TIB is an independent state agency, created by the Legislature, which distributes and manages street construction and maintenance grants. Funding for TIB’s grant programs comes from revenue generated by three cents of the statewide gas tax.

- **UAP (Urban Arterial Program):** The Washington State Transportation Improvement Board manages UAP grants. The purpose of the UAP Program is to provide financial assistance to local agencies to improve the state’s arterial street system by increasing capacity, reducing accident rates, correcting structural deficiencies, and providing adequate widths. The UAP receives eight percent of the gas tax revenue. Funded projects must be listed in the City’s six-year Capital Improvement Plan.

Interlocal Agreements and Partnerships: Partnerships and interlocal agreements are important to the City of Orting. Partnering with other local jurisdictions and local agencies (with and without financial agreements or components) ensure that projects and programs can take place.

Impact Fees: Impact fees are one-time charges assessed by local governments against a new development project to help pay for new or expanded public facilities that will directly address the increased demand created by that development. Impact fees may only be used for capital facilities that are reasonably related to the new development, will directly benefit the new development, and

will also serve the community at large (in other words, impact fees may not be used to pay for private facilities that solely benefit the development).

LIDs (Local Improvement Districts): LIDs are special assessment districts in which improvements will specially benefit primarily the property owners in the district. They are created under the sponsorship of a municipal government and are not self-governing special purpose districts. To the extent and in the manner noted in the enabling statutes, they must be approved by both the local government and benefitted property owners.

Real Estate Excise Tax Funds (REET): The real estate excise tax is levied on all sales of real estate, measured by the full selling price, including the amount of any liens, mortgages, and other debts given to secure the purchase. The state levies this tax at a rate between 1.1% and 3% based upon sales price. Orting has added the locally imposed tax of .50 for a total of 1.78-percent.

- The City must spend the first .25-percent up to \$100,000 of the real estate excise tax receipts solely on capital projects that are listed in the capital facilities plan element of the comprehensive plan. “Capital projects” funded by the first quarter percent of the REET are “public works projects of a local government for planning, acquisition, construction, reconstruction, repair, replacement, rehabilitation, or improvement of streets; roads; highways; sidewalks; street and road lighting systems; traffic signals; bridges; domestic water systems; storm and sanitary sewer systems; parks; recreational facilities; law enforcement facilities; fire protection facilities; trails; libraries; administrative and judicial facilities”. The state law requires that the “legislative authority” (Council) shall identify in the adopted budget the capital projects funded in whole or in part from the proceeds of the tax authorized in this section, and shall indicate that such tax is intended to be in addition to other funds that may be reasonably available for such capital projects. These funds may also be used to make loan and debt service payments on projects that are permitted uses.
- The second .25-percent of the REET, may be used to fund capital projects listed above, except that acquisition of land for parks is not permitted. Payments of loan and debt service for these projects are also authorized for the use of these funds.

Revenue Bonds: Revenue bonds may be issued to finance projects for any enterprise that is self-supporting. Revenue bonds are generally used to finance water and wastewater projects, airports, and stormwater systems. Payment for debt service on revenue bonds comes from user fees generated by the capital facility that is being built. The local entity is then responsible for establishing and collecting sufficient revenue (through rates) to retire the debt.

Six Year Capital Facilities Plan

The six-year capital facilities plan, based on the capital facility needs identified in this plan and related functional plans, is adopted annually by ordinance. Since the comprehensive planning process is a continuing, evolving process, this six-year plan will be continually reviewed and updated. Any plan is a tool to aid in decision making. This plan is no exception. By outlining how the needed capital facilities of the future can be successfully provided, it will assist annual budget decisions which need to incrementally provide the funding for those facilities. The plan is not intended as a substitute for those budget decisions, only to provide a tool for them.

Capital facility is a widely used term that can be used in a variety of ways. In accounting, it may mean any asset that is capable of being capitalized. As such it would include vehicles, furniture, equipment, and similar assets, as well as much longer-term fixed assets. The use of the term here, however, is intended to be much more limited, referring instead to long term fixed assets that have a significant (at least three year) life, and a substantial cost (at least \$20,000). As such, these facilities

would require a policy for financing on a longer-term basis than that which can be readily afforded by the annual budget cycle of the City.

In addition to the six-year plan, the Comprehensive Plan also anticipates other capital facilities needs throughout the 20-year life of the Plan.

20-Year Capital Facilities Needs

Table CFU-7 lists the anticipated capital facilities needs, estimated costs, and potential funding sources for projects that the City is considering to accommodate growth between 2015 and 2035.

(Transportation Facility Needs are identified in **Table T-XX** in the Transportation Appendix)

Commented [NS5]: Banana

Table CFU-7 Twenty-Year Capital Facilities Needs

WATER PROJECTS	YEAR(S)	ESTIMATED COST
Well #2 Rehab Design and Construction (Treatment & Well)	2025-2026	TBD
Well #1 and Wingate Roof Coating	2025	\$100,000
SCADA System Upgrades	2025	\$175,000
Security Upgrades – Video/Control Access	2028-2029	TBD
WSDOT Water Line Replacement per Franchise (lowering water lines)	2025-2029	\$300,000
Water System Plan – Addendums	2025	\$200,000
Downtown Main Replacement Program	2025-2029	\$1,250,000
Tacoma Intertie Design and Construction	2026-2027	TBD
Kansas Street Water Lines	2025	TBD
Backup Power for Wingate, Well #1, #3, and #4	TBD	TBD
Wingate Reservoir & Pump Station Upgrade	2028-2029	TBD
Wingate Water Line Replacement – Design	2025	TBD
Wingate Water Line Replacement – Construction	2025-2026	TBD
Capital Equipment	TBD	TBD
Water Meter Upgrades and Replacement	2025-2029	\$70,000
Central Metering Technology	2025	\$100,000
Chlorination System – Well #4 Upgrade	TBD	TBD
WSDOT Franchise	2025	TBD
Water Line Relocation: WSDOT/Fish Passage Upgrade	2025	TBD
Water Line Relocation: Orville and SR162 (Rouche/Card Creek Crossing) Design and Construction	2025-2026	TBD

Commented [NS6]: This is a draft version as of 7/30/2024. This list is consistent with information brought to a council committee for review earlier this summer, with some subsequent small adjustments. Further refinement may be needed.

SEWER PROJECTS	YEAR(S)	ESTIMATED COST
System Plan	2025	TBD
SCADA Sewer	2025	\$175,000
WRRF/WWTP Upgrades Construction	2025-2026	\$18,500,000
Process Design	2026	TBD
Membrane Filtration Design	2026-2027	TBD
Membrane Filtration Upgrade	2028	TBD
Lagoon Dredge	2025	\$850,000
Manhole Upgrades	2025-2029	TBD
I&I Improvements Design	2026-2029	\$120,000
I&I Improvements Construction	2026-2029	\$1,200,000
STORMWATER PROJECTS	YEAR(S)	ESTIMATED COST
Village Green Outfall ROW and construction	2025-2030	\$700,000
Calistoga St W Storm/Kansas St SW Outfall Construction	TBD	\$1,400,000
Kansas Street Stormwater Improvement	2027	\$1,600,000
Program: NPDES Stormwater Mgmt. Plan Updates	2025-2030	\$30,000
Equipment: Vactor Truck	2025	\$180,000
Equipment: Street Sweeper	2026	\$200,000
Equipment: Lift Truck	2027	\$160,000
PARKS AND RECREATION PROJECTS	YEAR(S)	ESTIMATED COST
Parks Master Plan Design and Construction	2024	TBD
Realignment of Trail Design	2024	\$175,000
Realignment of Trail Construction	2025	\$1,260,000

Calistoga/Whitehawk Master Plan	TBD	TBD
Whitehawk/Gratzer Park Complex Master Plan	TBD	TBD
Charter Park Court Complex Design	2025	\$50,000
Charter Park Court Complex Construction	2026	\$800,000
Play Structure Ground Cover	TBD	TBD
MUNICIPAL FACILITIES PROJECTS	YEAR(S)	ESTIMATED COST
Develop Plan to Dispose of Old Facilities	2025-2030	TBD
MPC/Library Window Replacement	TBD	TBD
Old City Hall Building Roof	TBD	TBD

Goals and Policies for Capital Facilities

Goal CF 1 **Assure that capital improvements necessary to carry out the comprehensive plan are provided when they are needed.**

- CF 1.1 The City ~~shall~~will coordinate its land use and public works planning activities with an ongoing program of long-range financial planning, in order to identify fiscal resources necessary to implement the capital facilities plan.
- CF 1.2 Management of capital facilities should emphasize the following concepts:
- Providing preventive maintenance and cost-effective replacement of aging elements;
 - Planning for the orderly extension and upgrading of capital systems while recognizing that system extensions associated with new development should be the responsibility of those desiring service;
 - Inspecting systems to ensure conformance with design standards; and,
- ~~ed.~~ Reducing the potential for drastic rate increases through effective fiscal management and rate structures that reflect the LOS and CIP's.
- CF 1.3 Determine which services are most cost-effectively delivered by the city and which services should be contracted out to be delivered by other jurisdictions or service providers. Where appropriate, joint facilities with adjacent service purveyors should be used to provide the most efficient and cost-effective service to customers.

Goal CF 2 **Ensure that the continued development and implementation of the Capital Improvement Program (CIP) reflects the policy priorities of the City Council.**

- CF 2.1 ~~High priority of funding shall be accorded to~~ Projects which are consistent with the adopted goals and policies of the City Council will be given priority.
- CF 2.2 Projects ~~shall~~should be funded only when incorporated into the City budget, as adopted by the City Council, unless an emergency warrants funding.
- ~~CF 2.3 Capital projects that are not included in the six year Capital Facilities Plan and which are potentially inconsistent with the comprehensive plan shall be evaluated by means of the comprehensive planning process prior to their inclusion into the City's annual budget.~~
- CF 2.3 The six-year Capital Facilities Plan ~~shall~~should be updated annually prior to the City budget process.
- CF 2.4 All City departments shall review changes to the CIP and ~~shall~~should participate in the annual review.

Goal CF 3 **Manage growth and the related development of city facilities and services to direct and control land use patterns and intensities. Ensure that all new development can be adequately served by capital facilities, utilities, and municipal services.**

- CF 3.1 The City ~~shall~~will continue upgrading the sanitary sewer system as needs emerge to

ensure adequate capacity for future growth and development.

CF 3.2

The following level of service guidelines ~~shall will~~ be used to evaluate whether existing public facilities are adequate to accommodate the demands of new development:

Water (Source Capacity and Reliability) LOS: Maintain the existing source capacity of approximately 1.73 MGD for adequate household use and fire protection. The minimum fire flow requirements are based on Pierce County's Ordinance No. 17C.60:

Development Classification	Minimum Fire Flow Requirement
Residential	750 gpm for 45 minutes
Commercial & Multi-Family	1,500 gpm for 60 minutes
Industrial	2,000 gpm for 120 minutes

Water Quality LOS: The water system quality ~~shall standard will~~ be in compliance with Washington Administrative Code requirements for water quality.

Sewer LOS: Maximum month average daily flows for the City's wastewater gravity collection system and wastewater treatment facility shall not exceed the Washington Department of Ecology's MGD limit.

Stormwater LOS: Stormwater management ~~shall will~~ comply with the Washington Department of Ecology's requirements.

Fire LOS: Design – Coordinate land use planning, development review and fire protection facility planning to ensure that: a) adequate fire protection and emergency medical service can be provided; and b) project designs minimize the potential for fire hazard.

Fire LOS: Rating – Orting Valley Fire and Rescue (Pierce County Fire District 18) ~~shall should~~ maintain and make efforts to improve its current insurance rating of "7".

Police LOS: Design – Coordinate land use planning, development review, and police protection facility planning to ensure that: a) adequate police protection can be provided; and b) project designs discourage criminal activity.

Police LOS: Response Time – The Orting Police Department ~~shall will~~ have as a goal to maintain a 3 to 4 minute response time for emergency calls.

Parks, Trails and Open Space LOS: ~~The following level of service standards shall apply to land and facilities. The Parks, Trails, and Open Space (PTOS) LOS is established by the PTOS Plan, adopted here by reference.~~

Type of Facility	LOS (facilities/population)
Baseball/Softball Field	1/2,000 (softball) 1/2 1/2,000- (baseball)
Multi-Use Rectangular Field (e.g. soccer, football, lacrosse)	1/3,500

Basketball Courts (Two half courts are equivalent to one court)	1/3,500
Tennis/ Pickle/ Racquetball Courts	1/4,000
Playground/ Big Toy	1/1,000
Special Facilities (e.g. skate park, splash park, BMX park)	1/5,000
Trails	.25 miles/1,000
Natural Resource Areas/ Open Space	14 acres/ 1,000
Parkland	8 acres/1,000

Transportation LOS: Transportation and land use planning should be coordinated so that adequate transportation facilities can be built concurrent with growth. The following level of service standards should be used to evaluate whether existing transportation facilities are adequate to accommodate the demands of new development: The transportation system ~~shall~~ should function at a service level of at least D.

- CF 3.3 A development ~~shall~~ should not be approved if it causes the level of service on a capital facility to decline below the standards set forth in CF Policy 3.23 and 3.4, unless capital improvements or a strategy to accommodate the impacts are made concurrent with the development for the purposes of this policy. In this context, "concurrent with the development" ~~shall mean means~~ that improvements or strategy are in place at the time of the development or that a financial commitment is in place to complete the improvements or strategies within six years.
- CF 3.4 If adequate facilities are currently unavailable and public funds are not committed to provide such facilities, developers must provide such facilities at their own expense, or pay impact fees in order to develop. If the probable funding falls short of meeting the capital facility needs of the anticipated future land uses and population, the type and extent of land uses planned for the City must be reassessed.
- CF 3.5 Require that development proposals are reviewed by the various providers of services, such as school districts, sewer, water, and fire departments, for available capacity to accommodate development and needed system improvements.
- CF 3.6 New or expanded capital facilities should be compatible with surrounding land uses; such facilities should have a minimal impact on the natural or built environment.
- CF 3.7 Maintain the water quality of the Carbon and Puyallup Rivers by complying with Washington Department of Ecology guidelines.

Goal CF 4 *Ensure that financing for the city's needed capital facilities is as economical, efficient, and equitable as possible.*

- CF 4.1 The burden for financing capital facility improvements should be borne by the primary beneficiaries of the facility.
- CF 4.2 General Fund revenues should be used only to fund projects that provide a benefit to the entire community or to accommodate unmet facility needs beyond those created by new growth.

- CF 4.3 Long-term borrowing for capital facilities should be considered as an appropriate method of financing large facilities that benefit more than one generation of users.
- CF 4.4 Where possible, special assessment, revenue and other self-supporting bonds and grants will be used instead of tax supported general obligation bonds.

Goal CF 5 *Provide the most cost-effective and efficient water, stormwater and sewer service to residents within Orting and its service area.*

- CF 5.1 Expansion of sewer service ~~shall will~~ be coordinated among Orting, the Washington State Department of Ecology, and Pierce County, and ~~shall give priority~~ will be given to infill within the city limits and existing urbanized unincorporated areas within the ~~urban growth~~service area.
~~CF 5.2 Phasing of sewer expansion shall follow the city's urban growth area established in the comprehensive plan, unless sewer service will remedy groundwater contamination and other health problems or the city arranges to provide services to other urban growth areas established by the Pierce County Comprehensive Plan~~
- CF 5.2 New industrial development ~~shall will~~ not be allowed to utilize on-site sewage systems. ~~New industrial development, and shall must~~ be served by the City's treatment facilities.
- CF 5.3 Require sewage gravity collection system connections for all new development including single-family subdivisions unless otherwise approved by the Council and consistent with the Pierce County Countywide policies.
- CF 5.4 Identify, prioritize, and gradually replace existing sewer lines in poor condition to reduce inflow and infiltration to increase the capacity of the sewage treatment system.
- CF 5.5 Provide an adequate water supply and distribution system for all domestic use, fire flow and fire protection at all times. Fire flow capabilities can be increased, and Fire Insurance Rating Classifications improved by upgrading water pipeline sizes, creating additional pipe networks, and increasing water storage capacities. Require transfer of private water rights to the city as part of all development permit approvals.

Commented [NS7]: This should be deleted because the city does not have a UGA beyond city limits.

Goal CF 6 *Develop a system of parks and recreation facilities that is attractive, safe, and available to all segments of the population.*

- CF 6.1 Mitigate impacts on parks, trails, and the recreation system from new growth based on impact fees, land dedication, and/or facility donations based on the level of service standards.
- CF 6.2 Cooperate and coordinate with the school district, other public agencies and private groups through the use of interlocal agreements and contracts to meet the recreation needs of the City.
- CF 6.3 Support continued development of the Foothills Trail and related links and parks for bicycles, pedestrians and equestrians, running through Pierce County to Mount Rainier National Park.
- CF 6.4 Develop a network of parks, open space and trails throughout the city for pedestrians, bicycles and equestrians, with priorities on:

a. The dedication and development of lands which would link with the Foothills Trail, the downtown parks, the Puyallup and Carbon River waterfront corridors and a linkage across the Carbon River to the Cascadia trail system.

b. Maintaining and improving the accessibility, usability, and safety of Orting's parks and trails, and

c. Sustaining community-wide efforts to improve public access to the Carbon and Puyallup Rivers at those points along the banks which best fulfill the criteria for education, accessibility and restoration as outlined in the City's Shoreline Master Program.

CF 6.5 Future park plans or remodels should prioritize barrier-free equipment additions, such as wheelchair swings, adaptive spinners, or the like where none currently exist.

CF 6.6 Create, periodically review, and update the Main Parks Master Plan to provide for cohesive development of the park and connectivity with the downtown core. Continue progress toward the finalization and construction of the Main Parks Master Plan.

CF 6.7 Work with Pierce County and applicable agencies to identify and help mitigate impacts to Calistoga Park.

~~Pol. CF 6.1 — Mitigate impacts on parks, trails, and the recreation system from new growth based on impact fees, land dedication, and/or facility donations based on the level of service standards.~~

~~Pol. CF 6.2 — Cooperate and coordinate with the school district, other public agencies and private groups through the use of interlocal agreements and contracts to meet the recreation needs of the City.~~

~~Pol. CF 6.3 — Support Pierce County development of the Foothills Trail, and related links and parks, for bicycles, pedestrians and equestrians, running through Pierce County to Mount Rainier National Park.~~

~~Pol. CF 6.4 — Improve the network of parks, open space and trails throughout the city for pedestrians, bicycles and equestrians, with priority on:~~

~~The dedication and development of lands which would link with the Foothills Trail, the downtown parks, the Puyallup and Carbon River waterfront corridors and a linkage across the Carbon River to the Cascadia trail system;~~

~~Maintaining and improving the accessibility, usability, and safety of Orting's sidewalks, parks and trails, and~~

~~Sustaining community wide efforts to improve public access to the Carbon and Puyallup Rivers at those points along the banks which best fulfill the criteria for education, accessibility and restoration as outlined in the 2009 Shoreline Master Program.~~

~~Pol. CF 6.5 — Future park plans or remodels should prioritize barrier-free equipment additions, such as wheelchair swings, adaptive spinners, or the like — where none currently exist.~~

~~Pol. CF 6.6 — Create and periodically review and update a Master Plan for City Park to provide for cohesive development of the park that serves the community.~~

~~Pol. CF 6.7 — Work with Pierce County and applicable agencies to identify and help mitigate impacts to Calistoga Park.~~

Goal CF 7 Cooperate in the siting of essential public facilities in Orting.

CF 7.1 The site selection process for essential public facilities on the list maintained by the Office of Finance and Management ~~shall~~ should include the following components:

a. The state must provide a justifiable need for the public facility and its location

in Orting based upon forecasted needs and a logical service area;

b. The state must establish a public process by which residents of Orting have an opportunity to meaningfully participate in the site selection process.

- CF 7.2 Public facilities ~~shall~~ should not be located in designated resource lands, critical areas, or other areas where the siting of such facilities would be incompatible.
- CF 7.3 Multiple use of corridors for major utilities, trails, and transportation rights-of-way is encouraged.
- CF 7.4 Siting of public facilities ~~shall~~ will be based upon criteria including, but not limited to:
- a. Specific facility requirements (acreage, transportation access, etc.);
 - b. Land use compatibility;
 - c. Potential environmental impacts;
 - d. Potential traffic impacts;
 - e. Fair distribution of such public facilities throughout the County;
 - f. Consistency with state law and regulations.
- CF 7.5 City plans and development regulations should identify and allow for the siting of essential public facilities. Design standards ~~shall be~~ are required to ensure compatibility with adjacent land uses and mitigate any adverse impacts. The City's siting process may include requirements that facilities provide amenities or incentives to the neighborhood as a condition of approval. At least one public hearing ~~shall~~ will be required to ensure adequate public participation.
- CF 7.6 Cooperatively work with surrounding municipalities including Pierce County during the siting and development of facilities of regional significance. The City ~~shall~~ will seek an agreement with neighboring jurisdictions, state or county agencies to mitigate any disproportionate financial and other burdens which may fall on the City due to the siting.
- CF 7.7 Essential public facilities that are county-wide or state-wide in nature (e.g., solid waste and/or hazardous waste facilities), must meet existing state law and regulations requiring specific siting and permitting requirements.

Goal CF 8 *Manage stormwater runoff in such a manner as to: Protect property from flooding and erosion; protect streams and shorelines from erosion and sedimentation to avoid the degradation of environmental quality and natural system aesthetics; protect the quality of groundwater and surface water, and; provide recharge of groundwater where appropriate.*

- CF 8.1 Manage the stormwater utility to:
- a. Identify existing and potential problems at the drainage basin level;
 - b. Propose solutions to those problems;
 - c. Recognize the importance of natural systems and receiving waters and their preservation and protection;
 - d. Set design and development guidelines; and
 - e. Provide a strategy for implementation and funding.
- CF 8.2 Encourage either regional or low impact development approaches to managing stormwater ~~to~~ provide improved performance, maintenance, and cost efficiency. Wherever possible, regional facilities should be considered as a multi-functional

community resource which provides other public benefits such as recreational, habitat, cultural, educational, open space, and aesthetic opportunities.

- CF 8.3 The City should require new development to provide onsite storm drainage and all off-site improvements necessary to avoid adverse downstream impacts.
- CF 8.4 Where appropriate and feasible, infiltration of stormwater is preferred over surface discharge to downstream system. The return of precipitation to the soil at natural rates near where it falls should be encouraged through the use of detention ponds, grassy swales, and infiltration.
- CF 8.5 Development should be designed to minimize disruption and/or degradation of natural drainage systems, both during and after construction. Development design which minimizes impermeable surface coverage ~~by limiting site coverage and maximizing maximizes~~ the exposure of natural surfaces should be encouraged.
- CF 8.6 Industries and businesses should use best management practices to prevent erosion and sedimentation from occurring, and to prevent pollutants from entering ground or surface waters.
- CF 8.7 Sites that have been cleared, graded, or filled in violation of current or prior standards should be fully restored before construction permits are issued.

~~Goal CF 9 — Ensure that those public facilities and services necessary to support development shall be adequate to serve the development without decreasing current service levels below adopted level of service standards.~~

~~Pol. CF 9.1 — Coordinate new development with the provision of an adequate level of services and facilities, such as schools, water, transportation and parks, as established in the capital facilities element.~~

~~Pol. CF 9.2 — Ensure that new development does not outpace the City's ability to provide and maintain adequate public facilities and services, by allowing new development to occur only when and where adequate facilities exist or will be provided.~~

~~Pol. CF 9.3 — The City will coordinate concurrency review. Developers shall provide information relating to impacts that the proposed development will have on public facilities and services. The City shall evaluate the impact analysis and determine whether the development will be served by adequate public facilities.~~

~~Pol. CF 9.4 — The City shall permit the development of essential public facilities in accordance with the provisions of the County Wide Planning Policies.~~

Goal CF 9 — Ensure that all public facilities and services are sited and provided in an equitable and sustainable manner.

- CF 9.1 Consider the potential impacts of climate change on public facilities and support the necessary investments to move to low-carbon energy sources and other green initiatives for public infrastructure and services.
- CF 9.2 Promote affordable and equitable access to public services, including drinking water and telecommunication infrastructure, to provide access to all communities, especially underserved communities.
- CF 9.3 Locate community facilities and services, including civic places like parks, schools, and other public spaces, in centers and near transit (or near probable future locations for transit), with consideration for climate change, economic, social and health impacts.

Goals and Policies for Utilities

Goal U 1 *Assure that the energy and communication facilities and services to support current and future development are available as needed.*

U 1.1 The City does not provide natural gas, electrical or communication services. These facilities and services are currently provided by private companies. To facilitate the coordination of these services, the City should discuss and exchange population forecasts, development plans and technical data with the agencies identified in this plan.

U 1.2 New development ~~shall~~should be allowed only when and where all public utilities are adequate, and only when and where such development can be adequately served without reducing level of service elsewhere.

U 1.3 Coordinate City actions with the appropriate activities of the service providers such as Bonneville Power Administration, Puget Sound Energy, CenturyLink, AT&T, MCI, Sprint, and Comcast and so forth. These coordination efforts should ensure that these providers of services and utilities rely upon the Land Use Element of this Plan to plan future facilities.

U 1.4 The City of Orting adopts the following level of service guidelines:

- Collection service for solid waste ~~shall~~will be available and required for all properties within the City.
- Coordinate land use and facility planning with Puget Sound Energy to allow for siting and construction of electrical transmission and distribution facilities that provide sufficient amounts of power with minimal periods of service interruption.
- Promote the extension of natural gas distribution lines within the City.
- Coordinate land use and facility planning to allow for construction and replacement of natural gas distribution conduits along roadways which are undergoing reconstruction.
- For telecommunications, including telephone, internet, cellular telephone and cable television, advocate the development and maintenance of facilities necessary to provide services as needed to accommodate population growth and advancements in technology. For cellular telephone service, work with providers to enhance the range of the regional service area.

Goal U 2 *Seek to minimize impacts associated with the siting, development, and operation of utility services and facilities on adjacent properties and the natural environment.*

U 2.1 Electric power substations and recycling drop-off boxes should be sited, designed, and buffered (through extensive screening and/or landscaping) to fit in harmoniously with their surroundings. When sited within or adjacent to residential areas, special attention should be given to minimizing noise, light and glare impacts. Visual and land use impacts resulting from electrical system upgrades ~~shall~~must also be mitigated.

U 2.2 The City ~~shall~~should encourage or require implementation of resource conservation practices and best management practices according to the U.S.D.A. Soil Conservation Service during the construction, operation, and maintenance of utility

structures and improvements.

U 2.3 The City ~~shall~~ should establish a process for identifying and siting essential public facilities, such as solid waste or recycling handling facilities and cooperatively work with surrounding municipalities and Pierce County during the siting and development of facilities of regional significance.

U 2.4 Protect and enhance the environment and public health and safety when providing services and facilities.

Goal U 3 *Maintain an adequate and effective solid waste and recycling program which maintains public health, environmental and land use quality.*

U 3.1 Continue work with Pierce County and solid waste haulers to reduce the solid waste stream and maintain or surpass the 50-percent recycling goal.

U 3.2 Continue existing recycling activities and work with Pierce County and solid waste haulers to expand the local recycling program, including collection of materials not currently collected.

U 3.3 Support Pierce County in maintaining an information management program which will aid in tracking and evaluating the waste stream and recycling program impacts in the City.

U 3.4 Encourage private and public sector involvement in recycling programs and in the use of recycled products.

NATURAL ENVIRONMENT ELEMENT



Purpose

This Natural Environment Element, added to the Comprehensive Plan as a part of the 2024 periodic update, contains the goals and policies necessary to support the City's responsibility and desire for preserving, protecting, and enhancing the natural environment through implementing regulations, guidelines, and standards. It also addresses strategies for managing risks posed by natural hazards such as floods, wildfire, and lahars. It is maintained to direct land use and City decisions and policies over the next 20 years.

The opening discussion of the Natural Environment element contains the data and background information that informs the goals and policies that follow. [This element discusses natural features, environmentally critical areas, geologic hazard areas, critical aquifer recharge areas, fish and wildlife habitat conservation areas, flood hazard, topography and soils, climate, hazard mitigation planning, lahar preparedness, and wildfires.](#)

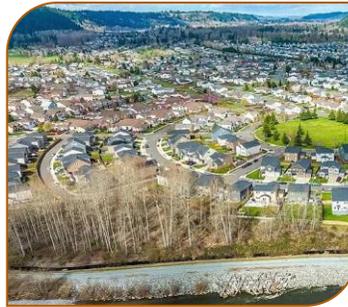
Discussion

The Carbon and Puyallup Rivers

Orting is bordered on the northeast by the Carbon River and on its southwest boundary by the Puyallup River. The Carbon River flows from the Carbon Glacier on the north side of Mt. Rainier, and joins with the Puyallup river just northwest of Orting. According to the Statewide Washington Integrated Fish Distribution (SWIFD) dataset managed by the Washington Department of Fish and Wildlife, the Carbon River supports runs of cutthroat, steelhead, and bull trout, and chinook, chum, coho, and pink salmon. Many of these fish are also supported by nearby streams that feed the Carbon River.

The Puyallup River has two source points on the west side of Mt. Rainier; the Puyallup Glacier and the Tahoma Glacier. The SWIFD dataset indicates that the Puyallup River supports chinook, chum, coho, and pink salmon, and steelhead and bull trout. Orting falls within the Puyallup watershed.

Both the Carbon and Puyallup rivers flow northwest into the Puget Sound (Commencement Bay) and are regionally significant in terms of fish and wildlife habitat, and human use and recreation.



Orting's geographic situation requires unique land use considerations throughout the city and evaluation of flood risks in a significant portion of the city. This element includes an exploration of flood risk data and flood hazard maps that inform many land use decisions. In addition to assessing risks to property from flooding associated with the rivers, it is important to consider the effects of land use decisions on the rivers and areas adjacent to the rivers.

Both rivers are classified as Shorelines of the State, which means they are protected under the Shoreline Management Act (1971). The primary goal of the Act is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." The City's Shoreline Master Program (SMP) (2019) implements the state's Shoreline Management Act (SMA). The SMP includes:

- An inventory of the natural characteristics and land use patterns along shorelines covered by the SMA;
- Shoreline development regulations;
- A permit system to further the goals and policies of both the SMA and the SMP; and
- A Restoration Plan that includes goals, policies, and actions for restoration of impaired shoreline ecological functions.

According to the SMP there are 4.5 miles of river shoreline within city limits. The SMP provides environmental protection and consistency of development along the rivers and their associated 100-year floodways. The SMP designates a shoreline jurisdiction and establishes regulations and requirements for development in that shoreline environment. All of the shorelines within the city have been designated Urban Conservancy. No development except for limited public facilities is allowed within the first 150 feet of the shoreline jurisdiction along the rivers.

The City conducted a comprehensive update of the SMP in 2007 which included the preparation of a detailed inventory and characterization of the shoreline conditions along the Carbon and Puyallup Rivers to document "baseline conditions" for future permitting purposes. In addition, "opportunity sites" for potential shoreline restoration and increased public access were identified. A minor update of the SMP was adopted in 2013, and again in 2019. [Ordinance 2019-1045](#).

[The current SMP, or as amended](#), is adopted as a part of this Comprehensive Plan.

WRIA 10 Watershed

Orting falls within Water Resource Inventory Area (WRIA) 10. The Washington Department of Ecology (Ecology) states that "WRIAs are areas defined by higher elevation that capture precipitation and funnel rain and snowmelt through smaller subbasins into streams, tributaries, and rivers." WRIA 10

is referred to as the Puyallup-White watershed, and includes the Puyallup, Carbon, and White Rivers. The watershed extends from Mt. Rainier National Park to the Port of Tacoma. Ecology regulates and manages water availability for each WRIA; WRIA 10 is regulated by the Watershed Restoration and Enhancement Plan, adopted by Ecology in 2021.

Water Quality Protection Measures

The City has adopted Best Management Practices (BMPs) to protect water quality. BMPs are a structure or operation intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. Operational source control BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater.

The City of Orting is covered under the Western Washington Phase II Municipal Stormwater Permit (Permit). This permit was issued by the Washington State Department of Ecology to administer the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) requirements. Coverage under the Permit requires the City to implement a stormwater management program and adopt stormwater design and control measures. The City adopted the Ecology Stormwater Management Manual for Western Washington to satisfy this Permit requirement. The Permit is renewed every five years by Ecology which results in the local adoption of updated design standards by the City to facilitate permit compliance.

These measures are further described in the Capital Facilities Element of this plan.

Critical Areas

The protection of critical areas is a key component of the City's land use plan. Critical areas are those which are environmentally sensitive and must be protected according to state statute. The plans and regulations designed to protect critical areas are not intended to deny a reasonable use of private and public property, but to assure that development on or near critical areas is accomplished in a manner that is sensitive to the environmental resources of the community.

As mandated by the GMA, the City's Critical Areas Ordinance (CAO), codified at Orting Municipal Code Title 11, promotes the maintenance, enhancement, and preservation of critical areas and environmentally sensitive natural systems by avoiding or minimizing adverse impacts from construction and development. Under the state GMA, local governments are required to use the Best Available Science (BAS) when reviewing and revising policies and regulations for critical areas per WAC 365-196-485.

Wetlands

Wetlands are defined in WAC 197-11-756 "[...]as areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar area."

Commented [WC1]: Modification based on discussion with Planning Commission on July 1, 2024

This paragraph is a revision to the previous language that identified the version of the Ecology that is in place today. The Ecology manual adoption will change periodically as the City maintains compliance with the Permit.

Most, but not all, mapped potential wetland areas in Orting are associated with the Carbon and Puyallup rivers, and many of the larger wetland areas fall within existing reserves, parks, or open green spaces. The Pierce County Wetland Inventory and the National Wetland Inventory provide general wetland data and locations as shown on **Figure NE-1** however, studies conducted by the City or by individual property owners yield more specific and accurate data. Wetlands are regulated by Orting’s Critical Areas Ordinance, according to the Washington State Department of Ecology requirements and are classified using the Washington State Wetland Rating System for Western Washington.

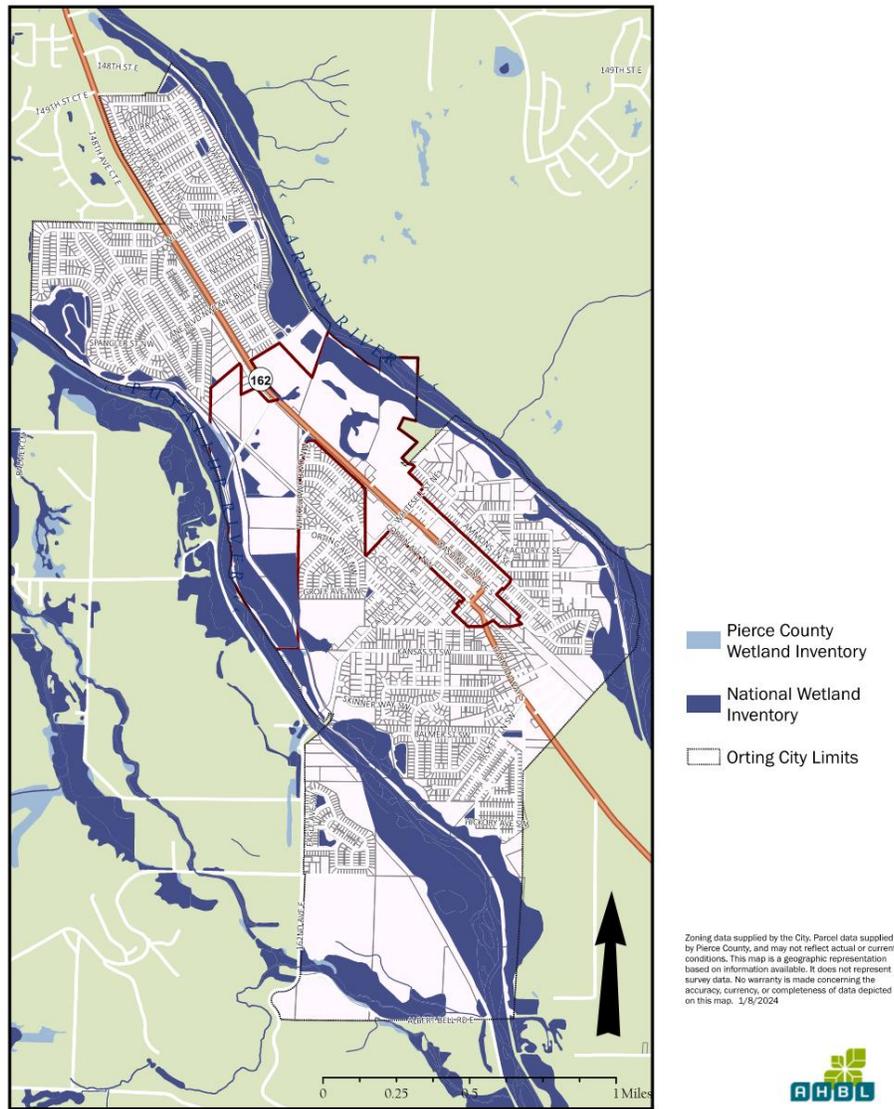


Figure NE-1: Potential Wetlands

Geologic Hazard Areas

Geologically hazardous areas “include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices so that risks to public health and safety are minimized. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas must be avoided.” (WAC 365-190-120)

The topography of the land within Orting’s city limits is generally very flat. However, along the banks of the Carbon and Puyallup Rivers near the borders of the city, there are some steep areas that pose erosion and landslide risks. Regionally, western Washington is at risk for earthquake events of varying severity. According to the Washington Department of Natural Resources, Orting falls within an area of Moderate to High liquefaction susceptibility, meaning that during an earthquake, saturated sand and silt have a higher risk of taking on the characteristics of a liquid. Liquefaction poses a risk of increased damage during an earthquake.

Critical Aquifer Recharge Areas (CARAs)

Groundwater is water that has collected beneath the surface in underground basins called aquifers and is typically accessed as a water source by drilling wells. Groundwater is important both for human use, and for maintaining stream flows in dry seasons. Contamination of soil and surface water can damage or pollute groundwater reserves. In order to maintain water quality and prevent damage to ecosystems, some areas are designated as protected aquifer recharge areas, or Critical Aquifer Recharge Areas (CARAs).

As depicted in **Figure NE-2**, much of Orting lies within CARAs which are defined by the Growth Management act as, “areas with a critical recharging effect on aquifers used for potable water.” These areas are protected and maintained to avoid contamination of groundwater sources, such as wells¹. They are classified by the Orting CAO as either High, Medium, or Low Significance, depending on the physical characteristics of the soil in the area. Based on local conditions, the City classifies wellhead protection areas as CARAs. Wellhead protection areas are defined by the boundaries of the 10-year groundwater time of travel, or boundaries established using alternate criteria approved by the Department of Health in those settings where groundwater time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135. Protection of these sites is of vital importance as the City uses well water to provide potable drinking water to citizens. As required by federal law, water used for municipal drinking water is monitored and tested to ensure it meets the required standards.

While development is allowed in these areas, certain uses with a high risk for contamination require a hydrogeologic assessment to ensure that the use will not pose a threat to the aquifer system.

¹ The Washington State Department of Health (DOH) Source Water Assessment Program (SWAP) mapping program should also be consulted for permitting land uses that may impact CARAs, available at <https://fortress.wa.gov/doh/swap/index.html>

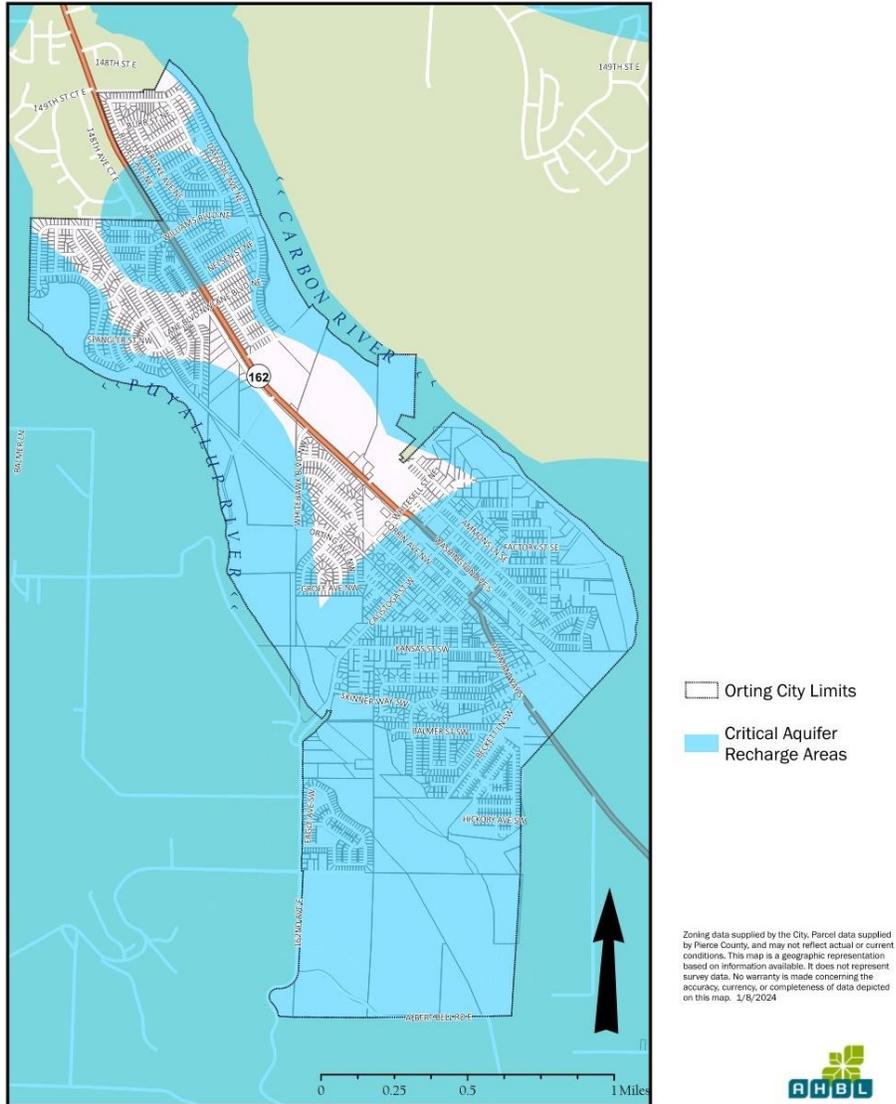


Figure NE-2: Critical Aquifer Recharge Areas

Fish and Wildlife Habitat Conservation Areas

Critical Fish and Wildlife Habitat Conservation areas are those areas identified as being of critical importance in the maintenance and preservation of fish, wildlife, and natural vegetation.

The Washington Department of Fish and Wildlife (WDFW) maintains maps and data regarding Priority [Habitats and Species and Habitats](#) (PHS). The PHS system indicates locations for threatened, endangered, or otherwise protected species and their habitats. As discussed elsewhere in this Plan, the Carbon and Puyallup rivers and their banks provide habitat to several species of birds and fish, including salmon. The freshwater wetland areas near the riverbanks also provide habitat to the Little Brown Bat.

Potential threatened or endangered species include:

- Oregon spotted frog
- Streaked horned lark
- Marbled murrelet
- Fisher
- Mash sandwort
- Golden paintbrush
- Bull trout
- Chinook salmon
- Steelhead
- North American wolverine

The City is located within the Pacific Flyway, a migratory bird route that extends from Alaska to South America.

Flood Hazard Areas

The Carbon and Puyallup Rivers are susceptible to annual flooding events that pose threats to life and safety and may cause significant property damage. Snowmelt from the Cascade Mountain range also contributes substantially to flooding. Flood-related damage occurs nearly every year. The flooding events of November 2006 and February 2009 caused significant flooding when prolonged precipitation accompanied by snowmelt, caused by a warm-weather trend known as a “Pineapple Express,” caused many rivers and creeks throughout the Puyallup/Carbon watershed to rise to 100-year flood levels, causing flooding in both rural and urban areas. There was also a major flooding event in 2014, but the city remained protected by the levee system.

Flood hazard areas exist along the Puyallup and Carbon rivers and **Figure NE-3** shows the approximate location and extents of these areas as documented by the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Maps (FIRMs) released in March 2017.

The zones depicted on Figure NE-3 are defined as follows:

- Floodway: The floodway is the channel of a stream plus any adjacent areas that must be kept free of encroachment.
- Special flood hazard areas (SFHA) are areas that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year; this is also referred to as the base flood or the 100-year flood.

Other mapped Flood Areas include the 500-year flood area and areas protected by levees from the 100-year flood.

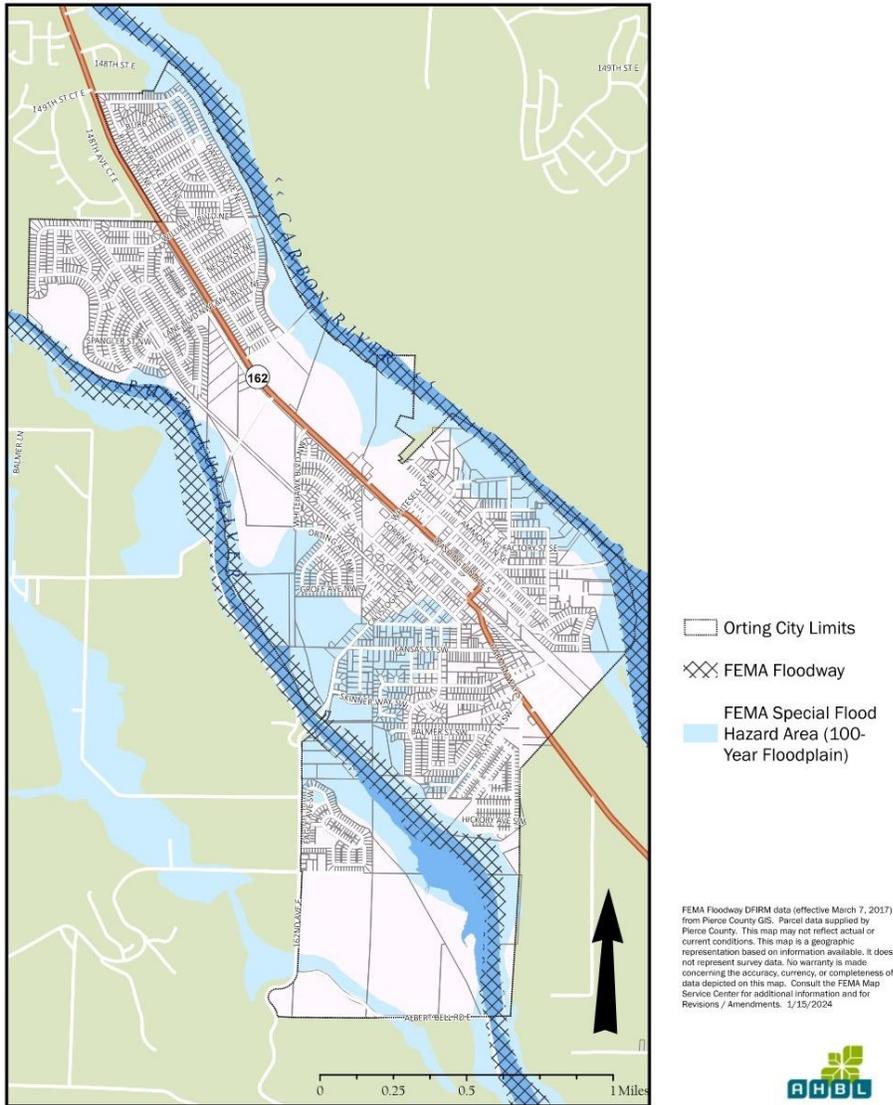


Figure NE-3: Flood Hazards

Flooding occurs when climate, geology, and hydrology combine to create conditions where river and stream waters flow outside of their usual course and “overspill” beyond their banks. In Orting, the combination of these factors creates chronic seasonal flooding conditions. Mt. Rainier’s snowmelt provides a continuous water source throughout the year and can contribute significantly to the development of flooding.

Flooding is most common from October through April, when storms from the Pacific Ocean, 100 miles away, bring intense rainfall to the area. Larger floods result from heavy rains that continue over the course of several days, augmented by snowmelt at a time when the soil is near saturation from previous rains. Frozen topsoil also contributes to the frequency of floods.

The City of Orting participates in the National Flood Insurance Program (NFIP) that makes available federally backed flood insurance for all structures, whether or not they are located within the floodplain. Title 14 of the Orting Municipal Code “Flood Control” governs development and uses in frequently flooded areas. The City also provides useful information about flooding on the City’s website.

Topography and Soils

Topography within the City is generally flat across the valley floor, with steeper slopes surrounding the developed areas. The valley floor slopes gently from south (300 feet NAVD 88) to north (140 feet NAVD 88). Most of the soil in the valley is comprised of alluvial deposits from the White, Carbon, and Puyallup Rivers. A large portion of the soils can be attributed to mudflows from eruptions of Mt. Rainier. Infiltration capabilities vary, based on the amount of fine silts and clays in the top layers. Overall, the soils in the valley infiltrate poorly.

Additionally, the area within Orting’s city limits consists mostly of the Puyallup-Sultan soil association. According to the National Cooperative Soil Survey, the Puyallup soil association is commonly used for growing crops such as hay and row crops. Native vegetation such as the Douglas fir, western red cedar, black- and salmonberries, and ferns grow well in this soil.

Climate and Climate Change

The Puget Sound region has already experienced measurable effects of a changing climate, and this trend will likely continue. According to Pierce County, average temperatures in the Pacific Northwest have increased by 1.3 degrees Fahrenheit since 1895. The County predicts that extreme heat events will become more likely in the coming years. Western Washington has also seen an increase

About 10 years ago the Calistoga Reach Setback Levee and Side-Channel Construction project was completed. The project reduced flood risk and helped restore salmon habitat on 3.5 miles of the Puyallup River.

By reconnecting side channels, moving 1.5 miles of the levee back to give the river more room, and installing log jams that effectively slow the river down, the Calistoga Reach Floodplains by Design project has proven to be a success for the community.

in wildfires and according to the EPA, Washington has experienced an increase of 2.83 acres of burned land per square mile from 2002-2020, compared to 1984-2001 (EPA, 2022).

Pierce county also predicts impacts to rivers, including the Carbon and Puyallup rivers, due to glacial changes on Mt. Rainier. Glaciers and snowpack on the mountain have been receding due to temperature changes, exposing more soil, and decreasing summer stream flows. Increased sedimentation which occurs as a result of these processes poses a greater flood risk, as it raises the elevation of stream and river channels. Other impacts associated with climate change, which should be taken into account when planning, are rising sea levels, increased severe weather events, and more extreme precipitation. Increased water temperature and acidity and decreased air quality will likely affect wildlife in the region as well.

In 2023 the state legislature passed HB 1181 and added **Climate Change and Resiliency** as the 14th Growth Management Act goal. Under the new law, the city is required to have a “Climate” Element in the future and must:

- Add a greenhouse gas emissions reduction sub-element by June 30, 2029. The sub-element and implementing development regulations must identify actions Orting will take that will result in reductions in overall greenhouse gas (GHG) emissions generated by the transportation and land use systems within the jurisdiction but without increasing emissions elsewhere; result in reductions in vehicle miles traveled within the jurisdictions but without increasing emissions elsewhere; and prioritize reductions that would benefit overburdened communities in order to maximize the co-benefits of reduced air pollution and environmental justice.
- Add a resiliency sub-element by June 30, 2029. This requirement can potentially be satisfied by adopting by reference a FEMA natural hazard mitigation plan that is in substantial conformance with this sub-element.
- Update the Transportation Element by June 30, 2029, to include certain climate change related topics, including a prohibition on denying a development permit because a project may cause the transportation level of service to fall below the minimum standard where multimodal mitigation is possible.
- By June 30, 2034, update the land use, capital facilities, park and recreation, and utilities elements to include certain climate change related topics.

The State’s Health Environment for All (or HEAL) Act defines Environmental Justice as “The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, rules, and policies. Environmental justice includes addressing disproportionate environmental and health impacts in all laws, rules, and policies by prioritizing vulnerable populations and overburdened communities, striving for the equitable distribution of resources and benefits, and

- Include consideration of environmental justice² in order to avoid worsening environmental health disparities.

The city will fortunately be eligible for grant funding from the Department of Commerce to fund these future changes.

Natural Resources and Energy Conservation

Trees enhance the natural environment and help provide many benefits. Trees provide oxygen, purify the air, slow and absorb stormwater runoff, mask noise and screen from visual trespass, stabilize slopes, prevent erosion, and provide shade. They can greatly enhance a community's appearance, and provide natural beauty. Trees also provide habitat for birds and animals.

Street trees can provide added benefits by visually enhancing a roadway and can help to provide a unifying look. Street trees can shade public areas and parking lots, and help control temperatures.

The retention of native vegetation and significant trees is a required stormwater management technique within the City of Orting which aids in the conservation of natural resources. The standards for the preservation of significant trees and vegetation are contained in the Orting Municipal Code.

In addition to the energy saving benefits from trees, the City of Orting has adopted a suite of building codes adopted by the Washington State Building Code Council WAC Title 15 to aid in the conservation of energy and resources.

Hazard Mitigation Planning

The Disaster Mitigation Act of 2000 established a new federal priority for pre-disaster planning and mitigation as opposed to post-disaster assistance. FEMA leads this program through the provision of planning guidelines and grants. The state of Washington Department of Emergency Services manages the program.

Orting adopted a Comprehensive Flood Hazard Mitigation Plan under the program in 2009 and has completed the Calistoga Setback Levee along the Puyallup River between the Calistoga Bridge and Village Green Wetland Park. This project is further described in the Capital Facilities Element.

The City is also included in the Pierce County Region 5 Hazard Mitigation Plan, a multi-jurisdictional plan encompassing 77 jurisdictions including municipalities, fire districts, school districts, universities, and other special-purpose districts. The Plan is a natural hazard mitigation plan in which all jurisdictions worked together to develop shared goals and a foundation for mitigation measures.

² The definition of "Environmental Justice" is from the HEAL act which was passed into law in 2021 and created requirements for state agencies. While it does not impose specific requirements on the City of Orting, the City could utilize the framework and tools that resulted from the Act to assess and address potential Environmental Justice issues within the City. Additionally, these tools can help to ensure appropriate consideration is given to environmental health disparities that exist among the local population.

The Plan is maintained by the Pierce County Department of Emergency Management, and is available online at <https://www.piercecountywa.gov/943/Emergency-Planning>.

The City has plans and programs in place to address future impacts of potential natural hazards. The City is a participant in the Pierce County Forum's development of the Region 5 All Hazard Mitigation Plan process. That plan contains an extensive city-specific mitigation strategy for avoiding and/or addressing impacts of natural hazards including floods, lahars, storms, and other events. The City has implemented some of these strategies through the completion of setback levees, and the on-going planning for the Carbon River Evacuation Bridge (Bridge for Kids). In addition, the City manages public education and involvement activities related to the strategies. The City is also a part of the East Pierce Interlocal Coalition for Emergency Management which is a group of seven jurisdictions that coordinate emergency management planning, including evacuation training, seeking out grant opportunities, and collaborating on planning documents.

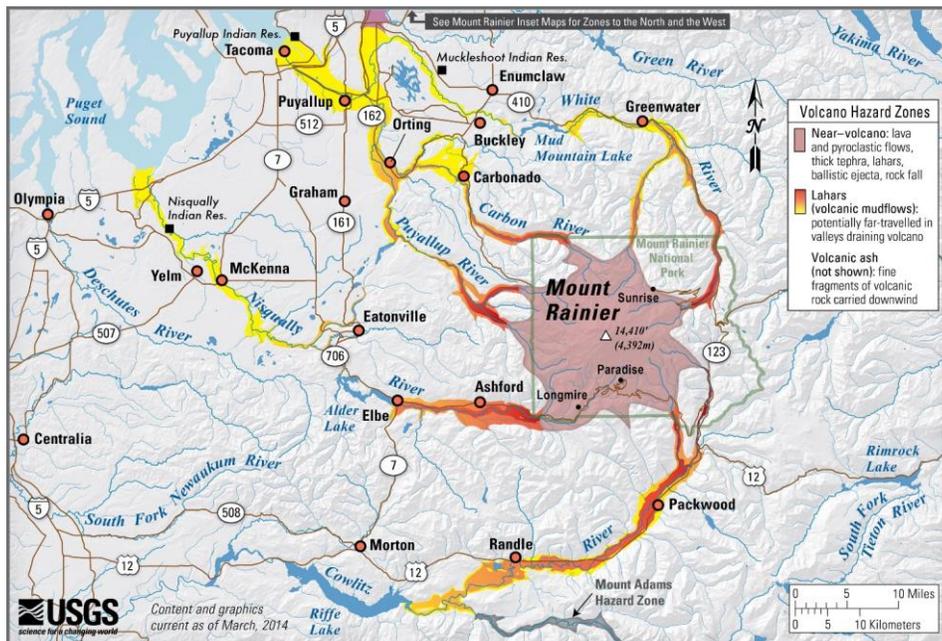


Figure NE-4: Hazard zones for lahars, lava flows and pyroclastic flows from Mount Rainier

Source: USGS Communications and Publishing, 2016
 [Accessed at <https://www.usgs.gov/media/images/mt-rainier-lahar-hazard-map>]

Mt. Rainier Lahar Preparedness

The greatest hazard from Mt. Rainier is a potential lahar event, also known as volcanic mudflows or debris flows (illustrated in **Figure NE-4**). The city is located on top of the Electron Mudflow pathway, one of three major lahar events from the last 10,000 years and is at risk of experiencing future lahar events. The United States Geological Survey (USGS) and Pierce County Emergency Management have taken steps to monitor seismic activity on Mt. Rainier to provide early warning of volcanic activity. A lahar event could result from:

- A Volcanic Eruption causing rapid melting of snow and glaciers (Pyroclastic flows).
- Mobilization of soil sediments as a result of heavy rains.
- Sulfuric breakdown of Mt. Rainier western flanks resulting in a collapse of the western flank.
- Earthquake caused landslides which can occur without forewarning of rising magma.
- Release of debris dammed lakes.

Figure NE-5 shows that Orting is situated in an area mapped as "Case 2 Lahar" severity rating, as delineated by Cascade Volcano Observatory scientists³. These are areas that could be affected by relatively large non-cohesive lahars, which most commonly are caused by the melting of snow and glacier ice by hot rock fragments during an eruption, but which can also have a non-eruptive origin. The average time interval between Case 2 lahars from Mount Rainer is near the lower end of the 100 to 500-year range, making these flows analogous to the so-called "100-year flood" commonly considered in engineering practice.

The City has instituted the following procedures:

- 1 - Lahar sirens are tested monthly.
- 2 - Evacuation signage leading out of the city.
- 3 - Annual School District evacuation drill.
- 4 - Website and packages to citizens identifying the current pedestrian evacuation to the Peirce County Rock Quarry.

³ Additional information on the dataset is available at https://matterhorn.co.pierce.wa.us/GISmetadata/pdbplan_volcanic_hazards.html

The city is located at the confluence of the Puyallup and Carbon rivers, both of which originate on Mt. Rainier. Any lahar that originates on the north face of Mt. Rainier will flow down the Puyallup River and/or Carbon River valleys. USGS estimates that the city will have approximately 42 minutes to evacuate once a lahar event is confirmed.



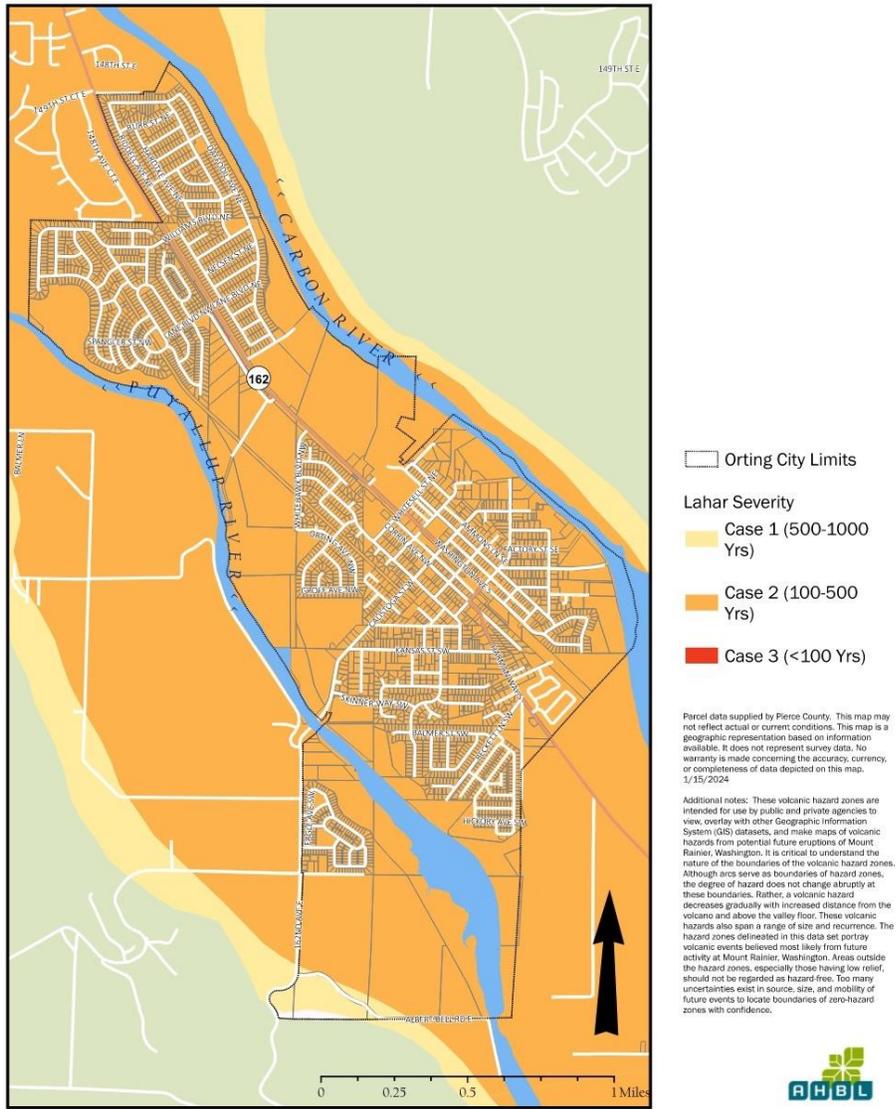


Figure NE-5: Lahar Severity Map

Needed Evacuation Route Improvements

Sensors on Mt. Rainier are intended to warn residents in the valley of a Lahar in progress. The current pedestrian evacuation route leads to Pierce County Rock Quarry. Based on the 2024 Orting School District evacuation drills, it takes an average of 47 minutes for a majority of the students to evacuate to this location. Remaining children and seniors are vulnerable with inadequate time to evacuate by foot. The current evacuation plan relies heavily on motor vehicle evacuation. The risks of over-reliance on a Motor Vehicle Plan include roads becoming congested and an increased risk for vehicular accidents. Pedestrian evacuation is the most reliable way to evacuate people on the valley floor within a short time period.

Orting Emergency Evacuation Bridge System

Founded in 2002, the Bridge for Kids non-profit organization was awarded grant money from the State and Federal Government of nearly \$2.4 million to do a feasibility study and eventually design a more effective evacuation route off the valley floor. Pierce County Public Works administered the design process and funds. The engineering firm, BergerABAM was contracted to design the evacuation route and structures needed to meet ADA compliance and the 40-minute criteria.

The proposed three-component Emergency Evacuation Bridge System as presented in October 2014, was adopted by the City Council. The project is now identified as the “Orting Emergency Evacuation Bridge System.” It consists of a bridge over the state highway at Rocky Road NE, an evacuation designation of Rocky Road NE, and an ADA compliant Bridge over the Carbon River. Through a stewardship agreement with the Federal Highway Administration (FHWA), the Washington State Department of Transportation (WSDOT) retained the approval authority for the final Bridge for Kids Alternative Analysis Report, which the Bridge for Kids Committee played a central role in developing. WSDOT determined that Pierce County had delivered a product meeting the intent of the federal grant funds.

The design for the project was funded by the Washington State Department of Transportation and Washington State Department of Commerce. Conceptual drawings are shown in **Figure NE-6**. In the event of a lahar from Mt. Rainier or a major flood event, students and residents will be able to utilize the bridge to safely cross SR-162. By removing the existing at-grade highway crossing with the bridge over the highway a safer pedestrian access to schools, commercial centers and to the Foothills Trail will be available.

The Orting Emergency Evacuation Bridge project will construct a new elevated pedestrian bridge across SR 162. The bridge provides a single 112-foot main span across SR 162. Construction of the project is estimated to cost between \$7.0 million and \$7.5 million and is anticipated to be completed in 2025.



Figure NE-6: Bridge Design Conceptual Drawings

Wildfires

Orting is situated in a narrow valley proximate to beautifully forested areas. Additionally, new development expands into areas that were previously undisturbed, resulting in an expansion of an area that is commonly considered the “Wildland – Urban Interface” as depicted⁴ in **Figure NE-7**.

The Wildland-Urban Interface (WUI) can be thought of as a zone where natural areas and development meet. This is where the possible threat of wildfires on structures is increased due to the proximity of fire-prone vegetation near the structures. Climate conditions, weather patterns,

⁴ The Washington State Department of Natural Resources (DNR) provides these geographic data as is; DNR makes no guarantee or warranty concerning the accuracy of information contained in the geographic data. DNR further makes no warranties, either expressed or implied as to any other matter whatsoever, including, without limitation, the condition of the product, or its fitness for any particular purpose. The burden for determining fitness for use lies entirely with the user. Although these data have been processed successfully on computers of DNR, no warranty, expressed or implied, is made by DNR regarding the use of these data on any other system, nor does the fact of distribution constitute or imply any such warranty. In no event shall the DNR have any liability whatsoever for payment of any consequential, incidental, indirect, special, or tort damages of any kind, including, but not limited to, any loss of profits arising out of use of or reliance on the geographic data or arising out of the delivery, installation, operation, or support by DNR

topography, hydrology, and development conditions all contribute to the set of conditions that can increase potential threat of catastrophic events.

Through implementation of land use and related land development policies and regulations, the City can support mitigation, particularly where firefighting (or suppression) systems may be limited.

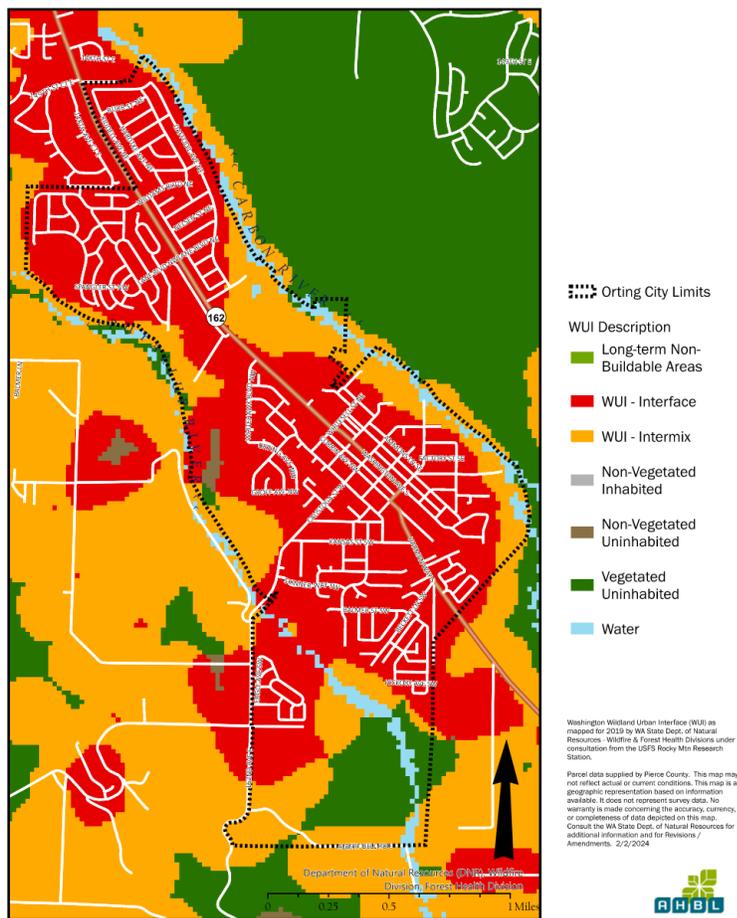


Figure NE-7: Wildland Urban Interface (WUI)

Goals & Policies

Critical Areas

Goal NE 1 *Protect the City's critical areas.*

- NE 1.1 All development activities shall be located, designed, constructed, and managed to avoid disturbance of and minimize adverse impacts to fish and wildlife resources, including spawning, nesting, rearing and habitat areas and migratory routes. resulting in no net loss of critical area functions.
- NE 1.2 Prohibit the unnecessary disturbance of natural vegetation in new development, in accordance with the Critical Areas Ordinance.
- NE 1.3 Where there is a high probability of erosion, grading should be kept to a minimum and disturbed vegetation should be restored as soon as feasible. In all cases, appropriate measures to control erosion and sedimentation shall be required.
- NE 1.4 Seek to retain as open space wetlands, river and stream banks, ravines, and any other areas that provide essential habitat for endangered or threatened plant or wildlife species.
- NE 1.5 Protect wetlands to enable them to fulfill their natural functions as recipients of floodwaters and as habitat for wildlife through the critical areas ordinance.
- NE 1.6 Advance integrated and interdisciplinary approaches for environmental planning and assessments and ensure the use of the Best Available Science.
- NE 1.7 Alternative domestic waste systems are discouraged, and must meet Pierce County Department of Health standards for soil suitability and location.

Commented [A2]: These policies are moved here from the Land Use element Goal LU 11. We have shown proposed edits with tracked changes.

General

Goal NE 2 *Protect local surface water and groundwater quality.*

- NE 2.1 Agricultural land uses within the Carbon and Puyallup River floodplains shall use Best Management Practices as recommended by the U.S.D.A. Soil Conservation Service to minimize the use of chemicals that may later be released into surface waters and to minimize erosion of soil into surface waters.
- NE 2.2 Alternative domestic waste systems are discouraged, and must meet Pierce County Department of Health standards for soil suitability and location.
- NE 2.3 The City shall consider the impacts of new development on water quality as part of its review process and require any appropriate mitigating measures. Impacts on fish resources shall be a priority concern in such reviews.

Commented [A3]: From former Pol. LU 11.7

Commented [A4]: From former Pol. LU 11.8

NE 2.4 The City's Shoreline Master Program shall govern the development of all designated Shorelines of the State within Orting. Lands adjacent to these areas shall be managed in a manner consistent with that program.

Commented [A5]: From Former Pol LU 11.9

NE 2.5 Implement the use of source-control Best Management Practices (BMPs) to benefit plants, animals, fish, and related habitats. BMPs are a structure or operation intended to prevent pollutants from coming into contact with stormwater through physical separation of areas or careful management of activities that are sources of pollutants. Operational source control BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater.

Commented [A6]: NE 2.5 and 2.6 Newly added

NE 2.6 Encourage the use of Low-Impact Development principles (i.e., reducing impervious surfaces, reducing stormwater runoff, and encouraging native plantings) to reduce and to mitigate against the discharge of pollutants.

Goal NE 3 *Promote equity and environmental justice in environmental planning and land use decisions, and balance economic viability with critical areas protection.*

NE 3.1 Support programs to ensure that all residents, regardless of race, social, or economic status, have clean air, clean water, and other elements of a healthy environment and prioritize the reduction of impacts to vulnerable populations that have been disproportionately affected. Address impacts to vulnerable populations and areas that have been or will be disproportionately affected by climate change.

Commented [A7]: NE 3.1 is newly added (Environmental Justice requirements)

NE 3.2 Support and incentivize environmental stewardship on private and public lands

Goal NE 4 *Consider and plan for the impacts of climate change, and promote methods for the reduction of environmental impacts.*

NE 4.1 Protect and restore natural resources that sequester and store carbon, including native vegetation and tree canopy.

Commented [A8]: Goal NE 4 and policies are newly added (Partial compliance with the Climate Action bill)

NE 4.2 Support programs and policies to identify and address the impacts of climate change and natural hazards on the region to increase resiliency.

NE 4.3 Address rising sea water by siting and planning for relocation of hazardous industries and essential public services away from the 500-year floodplain.

NE 4.4 Encourage non-motorized forms of transportation, carpooling and other trip-reduction measures.

NE 4.5 Establish a network of paths and multi-use trails throughout the city.

NE 4.6 Encourage energy-efficient homes, buildings, and building systems.

NE4.7 By June 30, 2029 add a Climate Element, comprised of two sub-elements (a Greenhouse Gas Emissions Reduction sub-element and a Resiliency sub-element) to this Plan (pending the availability of grant funding).

Goal NE 5 *Support Wildland-Urban Interface (WUI) hazard mitigation planning and implement adopted mitigation initiatives.*

Commented [A9]: Goal 5 and policies are newly added (Requirement for WUI planning)

NE 5.1 Implement the provisions of the Wildland-Urban Interface (WUI) code as adopted by the Washington State Legislature, in order to reduce and mitigate the risk to lives and property posed by wildfires.

NE 5.2 Inform the public of the Wildland Urban Interface (WUI) mapping products produced by the Washington State Department of Natural Resources.

NE 5.3 Consider implementation of selected "Firewise" principles, as established by the National Fire Protection Association, which can assist in hazard abatement and mitigation.

NE 5.4 Require proposed developments to provide sufficient and adequate access for firefighting equipment.

NE 5.5 Require bridges, culverts, road drains and other structures shall be constructed and maintained in a manner to accommodate firefighting apparatus on a year-round basis.

Shoreline

The Goals and Policies in the City of Orting Shoreline Master Program (as adopted via Ordinance 2019-1045 or as amended) are incorporated into this Plan by reference.

Commented [A10]: This is a proposed addition.

Emergency Management

Commented [NS11]: This section is newly added

Goal NE 6 *Protect life and property and avoid (or mitigate) significant risks to public / private property and to public health and safety.*

NE 6.1 Review divisions of land (subdivisions and short plats) for the ability for future development to protect people and property from wildfires and other emergency situations. Providing more than one route "out" of an area is an example of a way to ensure safety and mitigate against potential threats.

NE 6.2 Implement "Firewise" principles and advise property owners on steps they can take to protect life and property from wildfire threat, particularly in remote areas and in areas on the urban fringe and in locations where the diversity and amount of fire

equipment and available fire-fighting personnel is limited, and especially in cases where property may be difficult to access (such as steep slopes).

- NE 6.3 Coordinate the following with local agencies and jurisdictions to assure quick responses in case of emergencies: the transportation/circulation system, emergency services plan, signage, and general access provisions.
- NE 6.4 Continue to coordinate with Orting Valley Fire & Rescue as well as regional, state and federal agencies to ensure comprehensive emergency management planning is conducted and ready to implement.

APPENDIX I: LAND USE CAPACITY

This appendix serves as the *Land Capacity Analysis* and supports the Land Use Element and the Housing Element.

Background

The **Buildable Lands Program** is a continuous review and monitoring initiative mandated by the **Growth Management Act (GMA)** in RCW 36.70A.215. Pierce County is responsible for establishing and overseeing this program, ensuring coordination among Orting and the county's other 22 cities and towns. In collaboration with its cities and towns, the County annually collects development data and uses the information to produce a report on observed development and future capacity within the urban growth area (UGA). Pierce County issued the [2021 Buildable Lands Report](#) (Fourth Edition, Updated Version, Published 11/11/2022) to fulfill their ongoing reporting requirements.

The data that was assembled and analyzed for the buildable lands program can now be used as a baseline for assessing the city's future land use map / zoning map in the context of the Comprehensive Plan Update, and for evaluating the city's capacity to accommodate housing needs among various income levels.

Part one: Land Capacity Check

As noted in the Land Use Element, Orting's population is targeted to grow to 9,590 persons and 3,167 housing units by the year 2044. Likewise, the City must plan for a target of 1,473 jobs by that year. Using the data from the 2021 Buildable Lands Report, we evaluated the city's capacity to meet the projections.

As of April 1, 2024 the state Office of Financial Management (OFM) estimates the city's population to be 9,125 residents which are housed in 3,035 housing units. *This means we need to ensure that there are sufficient lands to accommodate 465 additional people and 135 new housing units in the next 20 years.*

We have reproduced Table 14-8 from the Buildable Lands Report, with corrections, which is labeled as **Table 1**. The data is from January 2020.

Table 1: City of Orting 2020-2044 Housing Capacity (Dwelling Units)

Zone:	Vacant	Underutilized	Vacant - Single Unit	Pipeline	Total
LM	0	0	0	0	0
MUTC	26	9	0	0	35
MUTCN	166	0	0	4	170
PF	0	0	1	0	1
RC	0	1	2	0	3
RMF	10	5	0	0	15
RU ⁽¹⁾	28	12	30	52	122
Total	230	27	33	56	346

(1) Typos are corrected per AHBL Correspondence from 11/22/2023 for RU Vacant Single Unit and Pipeline (the values in the "total" row and column were correct)

The table shows the city’s estimated net capacity for new housing units among parcels that were classified among four categories, as *vacant*, *underutilized*, *vacant – single unit*, or *pipeline* to arrive at estimates for capacity on a per unit basis according to zoning district (*built out* and *undevelopable* counts are not shown).

- These “net” figures account for deductions to land capacity made for probable market factors, critical area protections, and other factors. (See the *Buildable Lands Report* for further information on methodology and for definitions).

However, more than half of the total residential capacity that was reported in the buildable lands report is now no longer available. This is because the report’s analysis was based on a previous Land Use map for the city which featured a large area of land with the Mixed-Use Town Center North (MUTCN) zoning designation – a location where residential units are permitted to be built.

- In January of 2023 the City Council adopted amendments to the Comprehensive Plan changing the land use and zoning designation of approximately 65 acres from the MUTCN designation to Public Facilities (PF). The change was made to grant the request by the school district because the district bought the property for planned capital projects.
- While residential units were permitted in the MUTCN designation, they are not permitted in the PF zoning district resulting in reduced capacity.

To reconcile and update the data, we obtained the GIS shapefile prepared by the County for the buildable lands analysis and assembled permit data for the time period of 2020-2024 to create an updated table according to all known changes that have occurred since 2020, and additionally consulted with you for your input. As a result of this step, we made the following adjustments, listed by zoning district and detailed in **Table 2: Adjustment Matrix**.

Light Manufacturing (LM) Zone: *No changes*

Mixed Use – Town Center (MUTC) Zone:

- Elimination of 1 unit from the vacant category due to parcel consolidation at 222 Washington Ave N
- Added 1 unit to the vacant category due to land that was apparently missed (parcel 6565000773 on Bridge Street)
- There is no net change

Mixed Use – Town Center North (MUTCN) Zone:

- Elimination of 166 units from the “Vacant, MUTCN” and elimination 4 units from the “Pipeline, MUTCN” group due to the Comprehensive Plan map change detailed above

Public Facilities (PF) Zone:

- Elimination of 1 unit in “PF, Vacant, single unit” for the city hall site

Residential – Conservation (RC) Zone: *No changes*

Residential – Multifamily (RMF) Zone:

- Addition of 33 units to “Pipeline, RMF” for the Bridgewater plat (note: there is no offset as the land was previously identified as “unbuildable”)

Residential – Urban (RU) Zone:

- We have accounted for 53 new units due to recent construction, all in the RU zone that were previously counted as “pipeline:”
 - a. 19 units for the Meadows at Orting South development (all removed from “pipeline”)
 - b. 32 units for the Tahoma Valley Estates development (removed 30 from “pipeline”)
 - c. 2 units removed from “pipeline” for homes at 604 and 606 Harmon Way S.
- We have accounted for 10 additional new units due to recent construction, all in the RU zone that were previously counted as “vacant” (removed from “vacant” using our best guess / assumption)
 - a. 10 units of additional “infill” type development not occurring in a long plat subdivision (removed from “vacant” using our best guess/ assumption)
- Following that we have the following additional adjustments:
 - a. Removal of 11 units from “Underutilized, RU” and addition of 41 units to “Pipeline” for the Rainier Meadows Division 2 development (parent parcel no. 0519321001)
 - b. Addition of 8 units (per feasibility check) as “vacant” for the land at parcels 7930000-102 and -103 which are currently for sale (there is no offset as the land was previously identified as “unbuildable”)
 - c. Addition of 6 units as parcels 0519293096 and 2585000114 have not been developed and have plenty of net acreage for development but were previously identified as either constructed or “unbuildable” (thus no offset)
 - d. Addition of 10 units at parcel 0519311700 which was listed as “unbuildable” due to critical areas; there are ROW improvements for the site but it can likely also accommodate some modest housing development

Table 2: Adjustment Matrix

Zone:	Vacant	Under - utilized	Vacant - Single Unit	Pipeline
LM				
MUTC	0			
MUTCN	-166			-4
PF			-1	
RC				
RMF				+33
	-10			
	+8			
	+6			-53
RU	+10	-11		+41
Total	-152	-11	-1	-17

With these documented adjustments, the resulting table provides our best estimate of land capacity from 2024-2044, aligning the information to be consistent with current population counts.

The resulting table shows an updated total capacity for 193 units, 75 of which are now in the current “pipeline”:

Table 3: City of Orting 2024-2044 Housing Capacity (Dwelling Units)

Zone:	Vacant	Underutilized	Vacant - Single Unit	Pipeline	Updated Total Capacity
LM	0	0	0	0	0
MUTC	26	9	0	0	35
MUTCN	0	0	0	0	0
PF	0	0	0	0	0
RC	0	1	2	0	3
RMF	10	5	0	33	48
RU	34	1	30	42	107
Total	70	16	32	75	193

Commented [KM1]: Nicole, we need to adjust the tables to include a row for emergency housing. It's conditionally permissible in the MUTC and MUTCN.

In conclusion, we have documented that Orting has sufficient land for planned population growth (population and housing targets).

Part two: Accommodating Housing Needs

The Growth Management Act (GMA) requires comprehensive plans to include a Housing Element identifying “sufficient capacity of land” to accommodate all projected housing needs during the 20-year planning period (RCW 36.70A.070(2)(c)). With recent state law changes, the state now additionally requires municipalities to specifically review their ability to accommodate needs for moderate, low, very low and extremely low-income households, as defined in RCW 36.70A.030. The income level is relative to “median household income adjusted for household size, for the county where the household is located, as reported by the United States department of housing and urban

development.” The Department of Housing and Urban Development (HUD) publishes Area Median Income (AMI) for each county (or market area which may include several counties) on an annual basis. The AMI in 2024 is \$136,600.00

Through Pierce County Ordinance No. 2023-22s, the County set out the specific housing unit requirements for Orting according to income band, which is further detailed in the draft Housing Element prepared for the Comprehensive Plan Periodic Update project (AHBL, June 25, 2024). In order to evaluate land capacity by income level, we used the 6-step process as outlined by Commerce¹.

STEP 1: SUMMARIZE LAND CAPACITY BY ZONE

Table 3, “City of Orting 2024-2044 Housing Capacity (Dwelling Units)” provides this information. The Buildable Lands Report does not take the addition of ADUs into account but there is some latent capacity that could be realized. Orting must make code amendments to allow two ADUs per lot, on lots that allow single family homes, per HB 1337. Orting already adopted code changes pursuant to HB 1923 that increased the opportunity for ADUs. As of April 1, 2024 there are 2,711 single family residential homes in Orting per OFM. Assuming that ADUs will be added to 3 percent of all those lots within the coming 20 years, we can estimate that 81 ADUs could be added in the time period from now to 2044 throughout the city in all zones, which is probably a conservative estimate (4 per year).

STEP 2: CATEGORIZE ZONES

In Table 4, we document what the code allows for, and what assigned zoning category corresponds to each zoning district.

“DUA” stands for dwelling unit per acre.

Table 4: Orting Zoning Districts and Allowed Housing Types / Density Level

Zone	Housing types allowed	Max density level allowed	Assigned zone category
MUTC	Duplex, Multifamily, townhouse	None	Low rise multifamily
MUTCN	Duplex, Multifamily, cottage, townhouse	N/A	Low rise multifamily
RC	Detached single family, Cottage, duplex,	0.5 DUA	Low density
RU	Detached single family, townhouse, duplex, cottage	6 DUA	Low density
RMF	Cottage, duplex, multifamily, townhouse	8 DUA	Moderate density

STEP 3: RELATE ZONE CATEGORIES TO POTENTIAL INCOME LEVELS & HOUSING TYPES SERVED

The following table is from Commerce’s “Guidance for Updating Your Housing Element.” It is important to note how ADU’s are classified, as well as how subsidies and other marketplace interventions are assumed to be needed for the attainment of housing for certain income levels.

¹ “Guidance for Updating Your Housing Element: Updating Your Housing Element to Address New Requirements. *Local Government Division, Growth Management Services*. Department of Commerce. **August 2023**. Available at <https://deptofcommerce.app.box.com/s/1d9d517g509r389f0mjpowh8isipirlh>

Table 5: Zone categories and potential income levels served

Zone category	Housing types allowed	Lowest Potential income level served		Assumed affordability level for capacity analysis
		Market Rate	With subsidies and/or incentives	
Low Density	Detached single-family homes	Higher income (>120% AMI)	Not typically feasible at scale	Higher income (>120% AMI)
Moderate Density	Townhomes, duplexes, triplexes, quadplexes	Moderate income (>80-120% AMI)	Not typically feasible at scale	Moderate income (>80-120% AMI)
Low-Rise Multifamily	Walk-up apartments or condominiums (up to 3 floors)	Low income (>50-80% AMI)	Extremely low and Very low income (0-50% AMI)	Low income (0-80% AMI) and Permanent Supportive Housing (PSH)
ADUs (All zones)	Accessory dwelling Units on developed residential lots	Low income (>50-80% AMI)	N/A	Low income (> 50-80% AMI)

Table 5 is taken directly from Commerce’s “Guidance for Updating Your Housing Element” (Book 2) Exhibit 12 and is for “moderate-cost communities” which generally fits best for Orting (there was alternate guidance / example assumptions for” communities with relatively higher housing costs compared to the rest of the state (e.g., Seattle, East King County)” at Exhibit 13).

This choice is based upon information found in a **Rental Housing Market Report**, examining reported data for the 2nd quarter of 2024. The Rental Housing Market Report is provided by the Washington Center for Real Estate Research (at UW) under contract with the Washington Department of Commerce as required by RCW 36.70A.610.

- The data set includes most cities in Washington that are fully-planning under the Growth Management Act (and specifically includes those cities for which adequate data could be collected for reporting purposes; in Pierce County the City of Roy was excluded, none were excluded for Snohomish County and in King County the Cities of Black Diamond and Duvall were excluded).
- There are 134 cities listed in the report with values for the 2nd quarter of 2024.
- The rent prices listed represent “stabilized apartment rent prices” (which generally means the data come from apartments classified as market-rate or affordable in developments with at least five units and are “stabilized” by excluding new units developed within the previous two years; this reduces distortion that might occur as projects are being leased up, particularly in smaller markets).
- Orting’s average rent was \$1,214 which ranks as the 43rd *least expensive* among the 134 cities for which rent was data compiled. In fact, the rent in Orting was also the second lowest among all cities for which data was listed among Pierce, King and Snohomish Counties (only Buckley, in Pierce County, had a lower rent reported).

- The rental cost in Orting is comparable to Longview (in Cowlitz County), Walla Walla (in Walla Walla County), Mount Vernon (in Skagit County), Everson (in Whatcom County) and Cheney (in Spokane County).

STEP 4: SUMMARIZE CAPACITY BY ZONE CATEGORY

We estimate there is a capacity for 110 units in the low-density category, 35 units in the low-rise multifamily category and 48 units in the moderate density category in addition to capacity for 81 ADUs as show in Table 6:

Table 6: Orting Building Capacity Summarized by Zone Category

Zone:	Unit Capacity (from Table 3)	Unit Capacity for ADUs	Assigned zone category
MUTC	35		Low Rise Multifamily
RC	3		Low Density
RMF	48		Moderate Density
RU	107		Low Density
ALL		81	N/A

STEP 5: COMPARE PROJECTED HOUSING NEEDS BY CAPACITY

For Step 5 we populated Table 7 to show the housing need as allocated by Pierce County for the years 2020-2044, but also adjusted to reflect that development of 63+ units which has occurred since the year 2000 to satisfy (and likely exceed) the housing need at the income bands at or above 100% of AMI. As a result, we have labeled the table for the years 2024-2044 and set the housing need for the bands from 100-120% to 4 and for the band at or above 120% of AMI to 0. We also adjusted down the projected housing need for 0-30% PSH by a reduction of 35 units to account for the 35 units of permanent supportive housing that was constructed in 2021 at the Orting Veteran’s Village.

Table 7: Orting Projected Housing Needs compared to Available Capacity (2024-2044)

Income Level (% AMI)	Projected housing need <i>(*Denotes Adjusted for 2024-2044)</i>	Zone categories serving these needs	Aggregated housing needs	Total capacity (from Step 4)	Capacity: surplus or deficit
0-30% PSH	4*	Low-rise multifamily Plus all zones, with ADUs	107	116	+9
0-30% Other	29				
>30-50%	41				
>50-80%	33				
>80-100%	14	Moderate density	18	48	+30
>100-120%	4*	Low density	0	107	+107
>120%	0*				

PSH = Permanent Supportive Housing

The results of our evaluation show that Orting has no deficit in housing capacity for any of the income bands.

STEP 6: IMPLEMENT ACTIONS TO INCREASE CAPACITY FOR ONE OR MORE HOUSING NEEDS. THEN REASSESS CAPACITY (STEP 1) BASED ON ACTIONS.

This step does not apply; there is sufficient capacity.

APPENDIX II: ECONOMIC BASELINE ANALYSIS

This Appendix serves as the Economic Baseline Analysis, providing a foundation for the Economic Development Element. Orting has long understood that it has very limited resources to directly support economic development in a formal way from City Hall (for example, with dedicated staff or a department to provide specific services). However, many small cities find that they can achieve success in improving the tax base and creating local jobs through collaboration and setting the stage through policy measures that support business which nurtures economic prosperity. Orting is an attractive community in many ways and new residents continue to be attracted to the community. In turn, these factors generating demand for community-serving retail and personal service businesses, parks and schools, and transportation infrastructure.

This analysis provides comparisons to Pierce County and other surrounding cities as needed to contextualize conditions and articulate the City’s situation in the region. The analysis relied on data primarily sourced from the United States Census Bureau’s 5-year American Community Survey (ACS) estimates, CoStar, Washington Office of Financial Management (OFM), the United States Department of Housing and Urban Development (HUD), the Puget Sound Regional Council (PSRC), and the City of Orting. This appendix summarizes the economic development analysis in three sections: 1) City Economic Profile, 2) Market Potential, and 3) Employment Growth Targets and Land Demand.

SECTION I. CITY ECONOMIC PROFILE

Population

Population Growth & Projections

Figure ED- 1 shows Orting’s population and population average annual growth rate (AAGR) between 2000 and 2024. According to data from the state Office of Financial Management (OFM), Orting’s population grew from 3,931 persons in 2000 to 9,125 persons in 2024, for a total increase of 5,194 persons. During this time period, Orting more than doubled its population with an average annual growth rate (AAGR) of 3.6%, compared to 1.3% for Pierce County. Between 2000 and 2020, Orting experienced rapid population growth which diminished to a slower pace between 2020 and 2024.



According to the Puget Sound Regional Council projections, the population of Orting is anticipated to experience additional growth, with an estimated population of 9,550 persons by 2044, implying a substantial slowing of growth over the next two decades.

Figure ED- 1. Population and Population Growth (1999-2024)

Source: Washington State Office of Financial Management

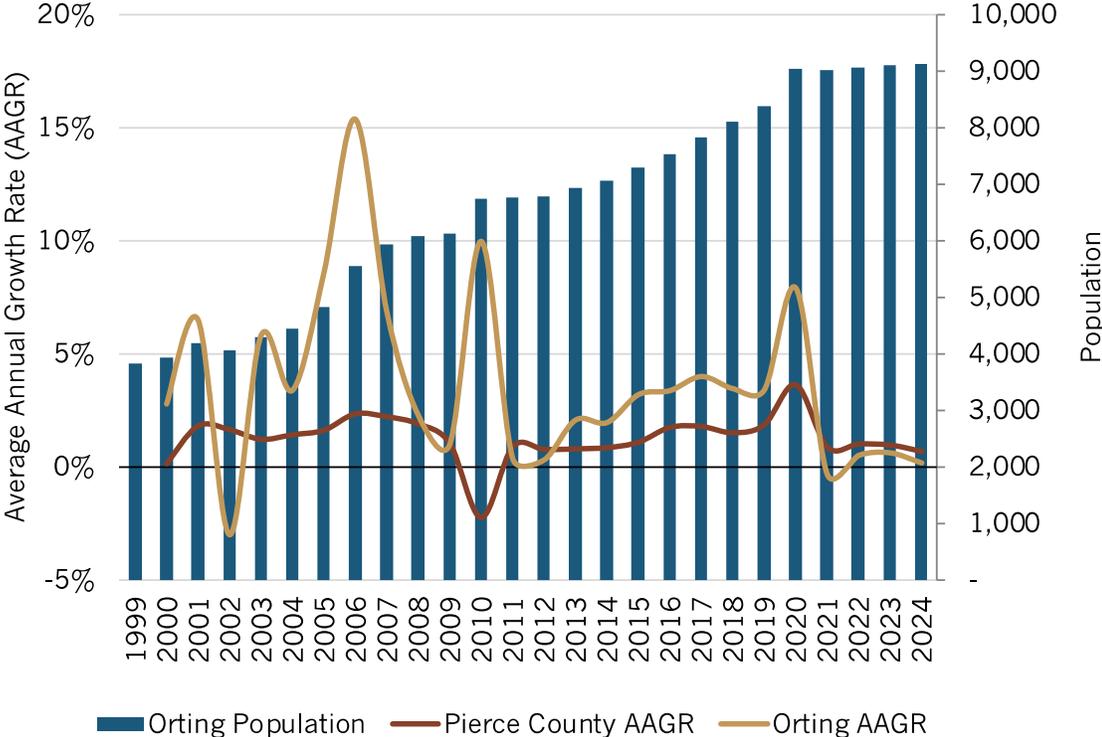


Figure ED- 2. City of Orting Population and Household Projections (2025 through 2050)

	2025	2030	2035	2040	2044	2050
Population	9,109	9,222	9,334	9,450	9,550	9,679
Households	2,986	3,055	3,124	3,194	3,250	3,333

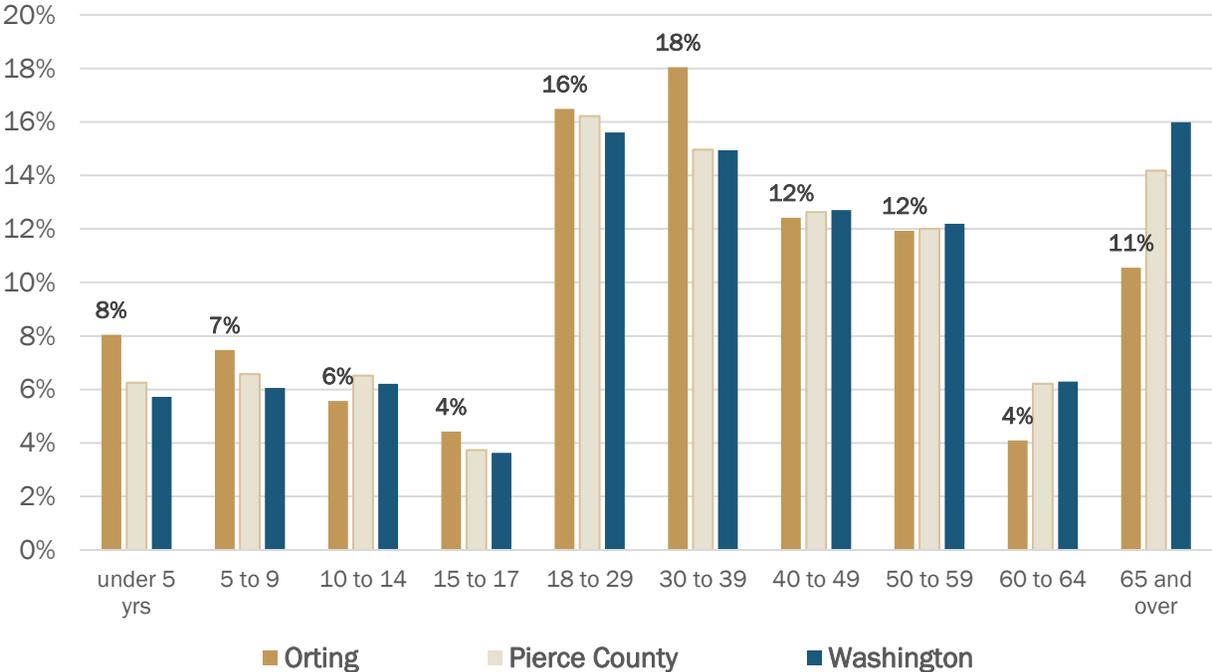
Population by Age

Orting’s population tends to be younger with a median age of 34.1 years, compared to 37.0 years in Pierce County and 38.4 years in Washington. Orting’s younger population is reflected in the higher concentration of children (17 years and under) and young adults and working age persons (aged 18 to 49 years old) as shown in Figure ED- 3. These trends indicate that Orting is attracting families with children. As these families mature, they will need diverse employment opportunities. The City could

strategically plan for a diverse job sector, including technology, healthcare, and environmentally sustainable industries to broaden the career paths for the young adult demographic.

Figure ED- 3. Population Distribution by Age Group, Orting (2022)

Source: U.S. Census Bureau, 2018-2022 ACS 5-Year Estimates



Population by Race and Ethnicity

While most of Orting’s residents identify as white (78%), Orting became more racially and ethnically diverse between 2012 and 2022. The Hispanic population comprises the second largest ethnic group making up 9% of the City’s total population, which has remained steady from 2012 to 2022. The percentage of residents identifying as two or more races has grown over time to 8%, becoming the third largest racial/ethnic demographic in the City. The Asian and American Indian demographic has also experienced a notable increase in population size over time.

Figure ED- 4. Population by Race and Ethnicity, Orting (2022)

Source: U.S. Census Bureau, 2018-2022 ACS 5-Year Estimates

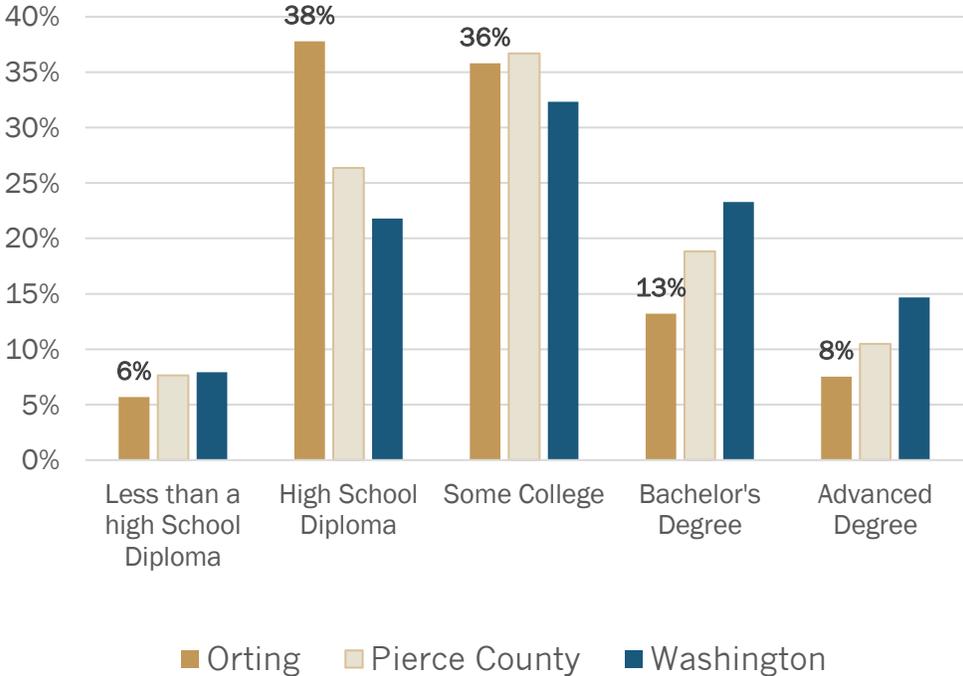
	2012	2022
White	82%	78%
Black or African American	1%	1%
American Indian	0%	2%
Asian	1%	2%
Pacific Islander	1%	0%
Other Race	0%	0%
Two or More Races	6%	8%
Hispanic	9%	9%

Educational Attainment

Orting’s workforce shows diverse educational attainment with 38% having a high school diploma and 36% having some college education. Only 13% of the City’s population have a bachelor’s degree and 8% have an advanced degree, which are both lower percentages than the averages for both Pierce County and Washington.

Figure ED- 5. Education Attainment (Population 25 Years and Older), Orting (2022)

Source: U.S. Census Bureau, 2018-2022 ACS 5-Year Estimates



Employment

From 2012 to 2022, Orting experienced a 29% increase in total employment, rising from 1,022 to 1,320 jobs. The services sector, which saw a 43% increase, remains the largest employment sector,

accounting for 38% of jobs in 2022. Significant growth was also seen in the education industry (33%). In contrast, the finance, insurance, and real estate sector experienced a 20% decline, while government employment saw a slight 4% decrease.

Figure ED- 6. Total Employment by Industry, Orting (2012-2022)

Source: Puget Sound Regional Council (PSRC)

Note(s):

*Finance, Insurance, and Real Estate industries collectively form the FIRE sector

**Wholesale trade, Transportation and Warehousing, and Utilities collectively make up the WTU sector

*** The term “suppressed” indicates that data related to a particular industry with a limited number of employers, or a single dominant employer is withheld to maintain confidentiality and protect sensitive employer information.

	2012		2022		2012-2022 PERCENT CHANGE
	COUNT	PERCENT	COUNT	PERCENT	
Construction & Resources	Suppressed***	-	86	7%	-
FIRE*	25	2%	20	2%	-20%
Manufacturing	Suppressed	-	0	0%	-
Retail	47	5%	58	4%	23%
Services	351	34%	503	38%	43%
WTU**	3	0%	7	1%	133%
Government	251	25%	240	18%	-4%
Education	306	30%	406	31%	33%
Total	1,022	100%	1,320	100%	29%

According to OFM, the average annual wage across all industries in Pierce County was \$61,050 in 2021 (see Figure ED- 7). The highest paying sectors included management of companies and enterprises (\$101,031), utilities (\$99,828), and finance and insurance (\$97,380).

Orting’s employment concentration lies within education, services, and the government sector. These industries in Pierce County tend to have average annual wages ranging between \$43,117 on the lower-end and \$75,440 on the upper-end.

In 2022, Orting’s median household income was \$114,458, substantially higher than Pierce County’s \$91,486 and Washington States \$90,325 (see Figure ED- 8). This shows that Orting is a relatively affluent community, with residents earning substantially more than the county and state averages. The commuting patterns and trends in household median income suggest that Orting serves as a bedroom community for higher-paying jobs in nearby centers like Tacoma and Seattle, allowing residents to earn higher salaries—despite lower educational attainment, while potentially benefiting from a lower cost of living.

Figure ED- 7. Average Annual Wages, Pierce County (2021)

Source: Office of Finance and Management

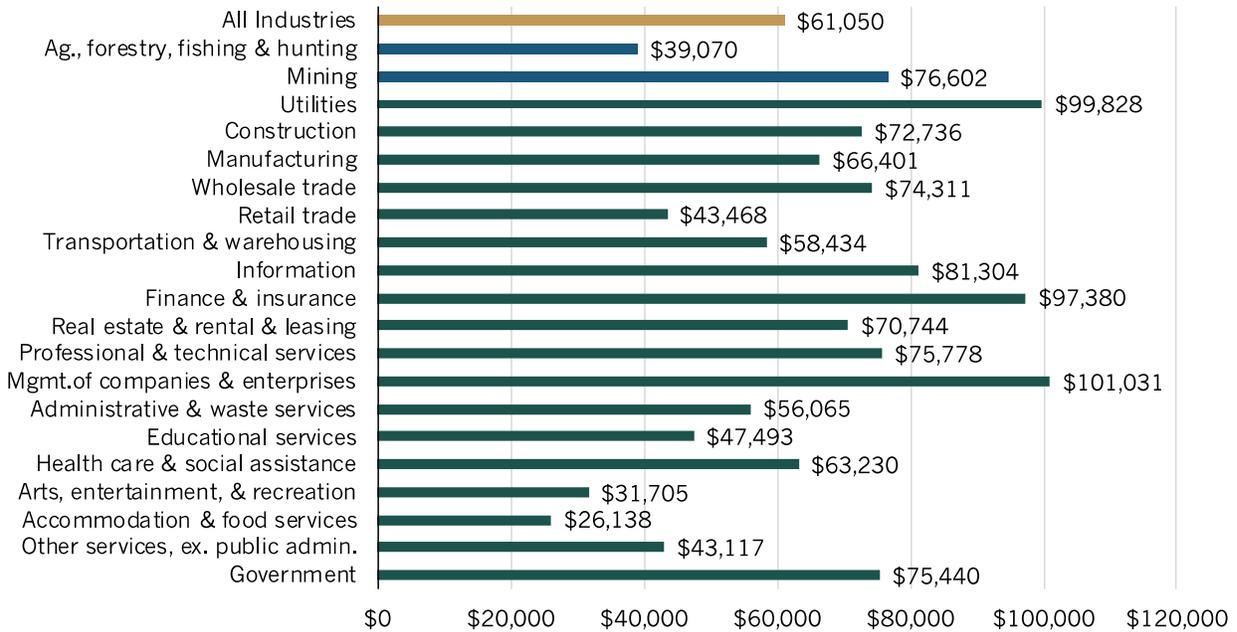
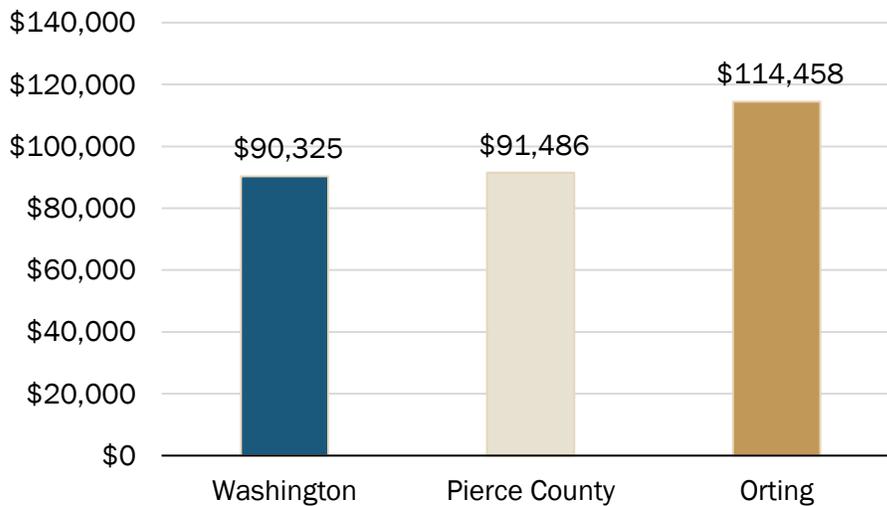


Figure ED- 8. Median Household Income, Orting (2022)

Source: U.S. Census Bureau, 2018-2022 ACS 5-Year Estimates



Commute Patterns

The location of job opportunities significantly impacts an individual’s choice of residence, and similarly, their residential preference can influence where they decide to relocate. Figure ED-9 shows that more than 2,750 Orting residents commute outside the city for work, while approximately 626

employees commute to Orting for work, and 79 residents live and work within Orting. This suggests that Orting can be considered a bedroom or commuter community, due to a greater number of residents traveling outside of the City for work, compared to the number of employees who commute into Orting for employment.

Figure ED- 9. Inflow/Outflow Job Counts (Commute Patterns), Orting (2021)

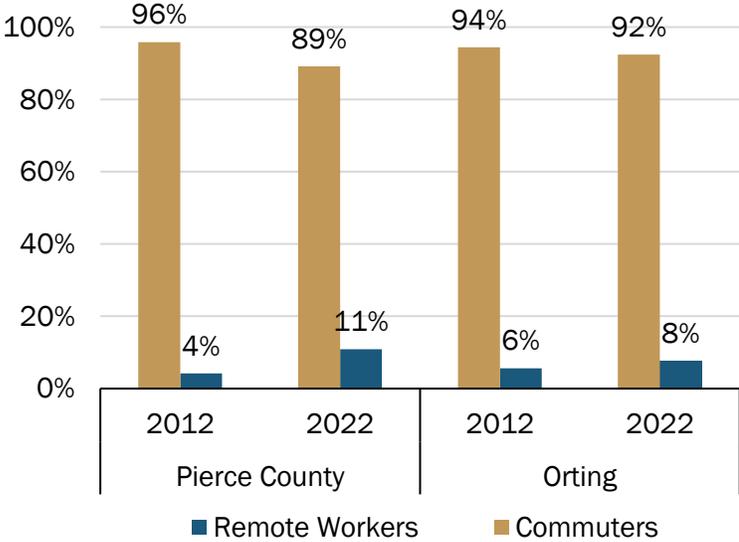
Source: U.S. Census Bureau; OnTheMap Application and LEHD Origin-Destination Employment Statistics. Note: The arrows are conceptual and do not show the exact direction of commute flows.



Figure ED- 10 shows that the majority of Orting residents commute to work (92%), and a small share of these residents work from home (8%). The COVID-19 pandemic accelerated remote work trends in major cities across the U.S.; however, Orting has experienced a subtle increase (2%) in remote workers since 2012. In contrast, Pierce County has seen a substantial increase (7%) in remote workers compared to Orting.

Figure ED- 10. Share of Workers Commuting to Work, Orting (2022)

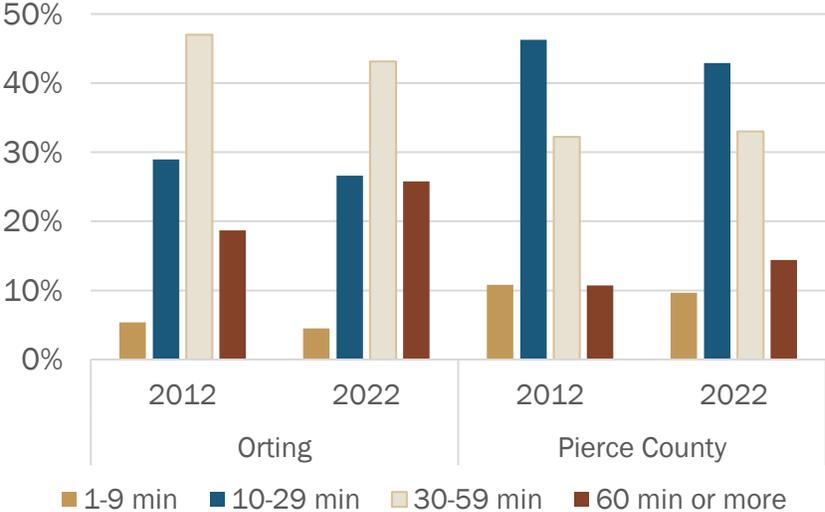
Source: U.S. Census Bureau, 2018-2022 ACS 5-Year Estimates



In 2022, a significant portion of Orting workers experienced long commutes, with 45% traveling 30-59 minutes and 26% commuting 60 minutes or more – an increase from 2012, where only 19% of workers commuted for 60 minutes or more. Comparatively, Pierce County residents generally had shorter commutes, with 43% traveling 10-29 minutes and only 14% commuting 60 minutes or more.

Figure ED- 11. Travel Time to Work, Orting (2022)

Source: U.S. Census Bureau, 2018-2022 ACS 5-Year Estimates



SECTION 2. MARKET POTENTIAL

Sales Tax Revenue

In 2023, Orting’s taxable retail sales per resident was the lowest among nearby cities at \$12,904, compared to Sumner’s \$82,761 and Puyallup’s \$68,606, indicating a relatively smaller retail sector. The top sectors driving Orting’s taxable sales and significant consumer spending included retail trade, accommodations & food services (restaurants), and construction¹. These trends suggest Orting experiences a lot of taxable sales leakage to nearby communities and underscores the importance of diversifying and expanding Orting’s retail offerings.

Smaller peer cities like Enumclaw and Milton exhibit higher sales per resident compared to Orting, partially attributed to their advantageous location alongside major highways. This high visibility and concentration of other retail stores is crucial to a thriving retail business and significantly contributes to their relative success.

Figure ED- 12. Taxable Retail Sales per Resident, Orting and Nearby Cities, (2023)

Source: Washington Department of Revenue

LOCATION	POPULATION (2023)	TAXABLE SALES	TAXABLE SALES PER RESIDENT
Sumner	10,800	\$893,821,393	\$82,761
Puyallup	43,420	\$2,978,860,550	\$68,606
Enumclaw	13,090	\$514,147,748	\$39,278
Bonney Lake	23,250	\$874,565,210	\$37,616
Milton	8,715	\$242,233,017	\$27,795
DuPont	10,180	\$167,567,521	\$16,460
Orting	9,110	\$117,553,978	\$12,904

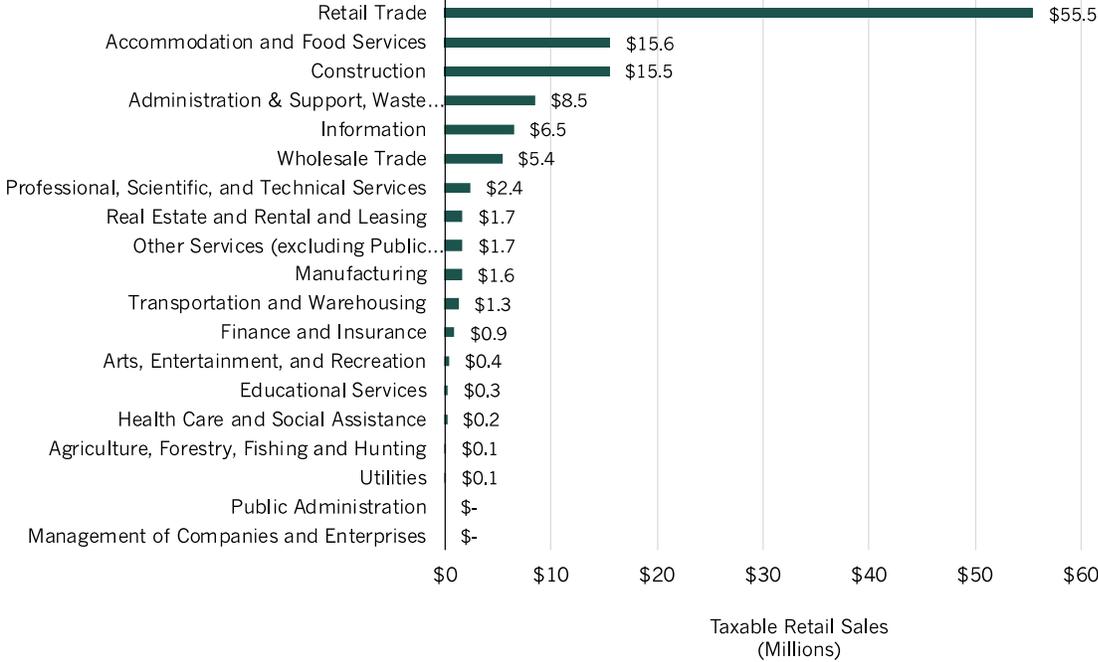
Sales Taxes by Industry

In 2023, retail trade businesses generated roughly 47% or \$55.5 million of Orting’s total taxable sales revenue. The accommodations and food services businesses as well as construction businesses both generated 13% of all taxable sales revenue equaling roughly \$15.6 and \$15.5 million each.

¹ RCW 82.08.0293. Washington law exempts most grocery type food from retail sales tax. However, the law does not exempt “prepared food,” “soft drinks,” or “dietary supplements.” Businesses that sell these “foods” must collect sales tax.

Figure ED- 13. Taxable Retail Sales by Industry, Orting (2023 Annual)

Source: Washington Department of Revenue



RETAIL SALES IN ORTING

Orting’s economy faces challenges in attracting diverse retail options due to its small population, remote location within Pierce County, and competition from established commercial centers in nearby cities. While Orting boasts a higher average household income than county and state averages, retailers prioritize high population density and visibility, which are lacking in Orting. As a result, residents often shop outside the city, contributing to lower retail sales per capita (\$7,165) compared to neighboring areas (Sumner with \$148,000 retail sales per capita, Puyallup \$54,000 retail sales per capita, and Bonney Lake with \$21,346 retail sales per capita). To meet growing demands, Orting may need to focus on personal services while relying on regional centers for broader retail options.

Note(s):

1. Retail sales per capita are from the 2017 American Community Survey Economic Census.
2. The term “Per Capita” in economics and statistics is used to express an average per person in a population.

Commercial Real Estate Trends

Retail

With more than 174,000 square feet of retail inventory, the retail sector accounts for most of the commercial real estate inventory in Orting. Compared to other peer cities, Orting’s retail inventory is small in size, and most residents shop outside of the city for a lot of their household retail spending. As of 2024 Q3, the retail market has maintained a healthy trajectory with a low vacancy rate of 2.5% and a rent of \$24.00 per square foot. As population increases in Orting, the new households will require additional retail services to support a growing population.

Office

Orting’s office space market is small with little more than 30,000 square feet of office inventory across a few buildings. According to CoStar, the office vacancy rate is 0.0% and with rents at \$24.00 per square foot. While there are no major employers in Orting that require a lot of office space, a 0.0% vacancy rate could indicate a constrained office market. This could lead to a near-term surge in rents to accommodate the demand for office space or prompt businesses to seek opportunities in areas with available vacancies. As Orting’s population continues to grow, there will be an increasing demand for personal services. Small-format office spaces, such as those for dental and insurance offices, can effectively meet this need and support the community’s evolving requirements.

Figure ED- 14. The State of Commercial Real Estate in Orting (2024 Q3)

Source: CoStar

	INVENTORY (SF)	INVENTORY (BLDGS)	UNDER CONSTRUCTION	VACANCY RATE	RENT (PSF)
Retail	174,588	26	0	2.5%	\$24.00
Office	30,853	10	0	0.0%	\$24.00

SECTION 3. EMPLOYMENT GROWTH TARGETS AND LAND DEMAND

Employment Forecasts

The Puget Sound Regional Council supplies employment and population forecasts to the counties and municipalities within King, Kitsap, Pierce, and Snohomish Counties. These forecasts help inform the updates to countywide planning policies and local comprehensive plans. Although they are not precise targets, they play a crucial role in shaping each county’s growth target process.

From 2020 to 2044, Orting’s employment is projected to grow by 196 jobs or 13% at an average annual growth rate of 0.52%. In comparison, Pierce County is projected to grow by 141,379 jobs or 41% at a larger average annual growth rate of 1.44% during the same time period.

Figure ED- 15. Total Employment and Employment Forecast, Orting (2020-2044)

Source: PSRC, LUV-it.

Note: The term AAGR refers to average annual growth rate.

LOCATION	2020 EMPLOYMENT	2044 EMPLOYMENT	NUMBER CHANGE	PERCENT CHANGE	AAGR
City of Orting	1,473	1669	196	13%	0.52%
Pierce County	346,255	487,634	141,379	41%	1.44%

Population to Employment Ratio

The population to employment ratio is an economic indicator that measures the proportion of population to employment within a city. Generally, a high ratio indicates that there is a larger proportion of residents compared to the number of available jobs in the City. Conversely, a low ratio indicates that there is a low proportion of residents compared to a higher proportion of jobs.

In 2020, Orting had a much higher population to employment ratio of 6.40 compared to Pierce County, indicating a high proportion of residents compared to the number of available jobs. This is consistent with commute trends where most Orting residents commute outside of the City for employment. By 2044, both Orting’s employment opportunities and population is projected to grow and have a population to employment ratio of 5.73. This suggests that employment is expected to grow slightly faster than population in the coming decades.

Figure ED- 16. Population to Employment Ratio, Orting (2002-2044)

Source: PSRC

LOCATION	2002	2010	2020	2044
City of Orting	6.49	6.30	6.40	5.73
Pierce County	3.04	3.05	2.44	2.45

Employment Forecasts by Industry

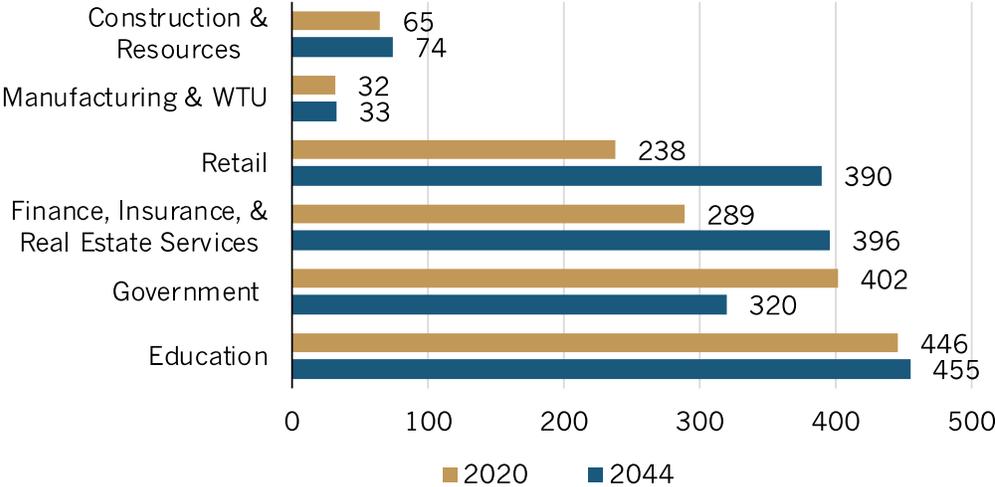
According to the PSRC LUV-it model, all industries except for government across the region are projected to grow by 2044. The retail sector is forecasted to see the most substantial growth, increasing by 64%, followed by the finance, insurance, and real estate sector which is forecasted to increase by 37%. Construction and resources, and manufacturing and wholesale trade and utilities sectors are projected to grow modestly by 14% and 3% respectively.

In contrast, the government sector is forecasted to decline by 20%, reflecting a shift in employment distribution. Although the education sector is forecasted to see only a slight growth of 2%, it will continue to make up a significant part of the workforce. The construction of approximately 5,000

homes in the Tehaleh, Uplands, Daybreak, and Sunrise developments by 2035 will likely draw over 2,500 students to the local school district—more than doubling current enrollment. This growth in enrollment will likely surpass employment forecast in the education industry by PSRC². Overall, these forecasted changes indicate increased diversification in Orting’s employment landscape, with significant growth in retail and service-oriented sectors—all of which tend to pay low to moderate wages.

Figure ED- 17. Employment Forecast by Industry, Orting (2020-2044)

Source: PSRC



Employment Capacity and Land Need

The Pierce County Buildable Lands Report (BLR, 2022) assesses housing and employment capacity within the Urban Growth Area (UGA) and Pierce County jurisdictions to meet the 20-year growth targets by 2044. The report concludes that Orting has sufficient capacity for 1,398 jobs within its designated zones, with the 2020-2044 employment forecast indicating that the city needs to have sufficient land supply to accommodate 196 additional jobs. Note that the Pierce County Buildable Lands Report does not account for home based businesses. Assuming some future employment will locate in residential areas implies the city has additional capacity for jobs beyond the 1,398 estimated in the BLR.

There have been some changes to the city’s Future Land Use and Zoning map since the analysis was conducted that impacts job capacity somewhat because the school district purchased land that was zoned Mixed Use Town Center North (MUTCN) and the land is now zoned Public Facilities. This means the specific job capacity count assumption values have likely shifted to an insignificant extent (because the assumed number of jobs per acre likely differ between those districts). Nonetheless Orting is well-positioned to support the projected employment growth over the next two decades by 2044.

² <https://komonews.com/news/local/education-funding-superintendent-classrooms-washington-education-projections-infrastructure-voters-87-over-capacity-orting-school-district-needs-voters-to-pass-bond>

Figure ED- 18. Employment Capacity Compared to Growth Targets, Orting (2020-2044)

Source: Pierce County Buildable Lands Report 2022

EMPLOYMENT CAPACITY	2020-2044 EMPLOYMENT NEED	DIFFERENCE
1,398	196	1,202

Figure ED- 19. City of Orting 2020-2044 Employment Capacity (Jobs)

Source: Pierce County Buildable Lands Report 2022. There was no employment capacity in the RC, RMF, and RU zones.

ZONING	VACANT	UNDERUTILIZED	PIPELINE	TOTAL
Light Manufacturing (LM)	0	0	0	0
Mixed Use – Town Center (MUTC)	65	72	0	137
Mixed Use – Town Center North (MUTCN)	646	0	0	646
Public Facilities (PF)	615	0	0	615
Residential Conservation (RC)	0	0	0	0
Residential Multi-Family (RMF)	0	0	0	0
Residential – Urban (RU)	0	0	0	0
<i>Total</i>	1,326	72	0	1,398

APPENDIX III: HOUSING DATA AND SUPPLEMENTAL ANALYSIS

This Appendix provides data which is assembled to assess potential Racially Disparate Impacts (RDIs) and Displacement Risk in Orting.

Background

In 2021, the Washington Legislature revised its housing planning requirements through House Bill 1220 (HB 1220). This legislation amended the Growth Management Act (GMA) to mandate that local governments actively “plan for and accommodate” housing that is affordable for all income levels, marking a significant enhancement over the previous directive to merely “encourage” affordable housing. Additionally, the new law compels local jurisdictions to assess the racially disparate impacts of their housing policies and regulations, as well as the risks of exclusion and displacement. They are now required to adopt measures aimed at addressing and reversing these harmful effects.

The Washington State Department of Commerce (Commerce) provided guidance for local governments on “how to integrate the new requirements related to racially disparate impacts, displacement, exclusion and displacement risk (hitherto “racially disparate impacts”) in their housing element updates” in their document: [Guidance to Address Racially Disparate Impacts](#) (April 2023).

According to Commerce, racially disparate impacts arise when policies, practices, or systems disproportionately affect specific racial groups. To effectively assess potential disparities within their communities, jurisdictions should incorporate a range of measures into their data analysis.

The following data charts provide some basic information that is useful for review. However, the data presented in the tables and charts below are insufficient on their own to draw a conclusion on racially disparate impacts, displacement risks, or exclusion that may be present within Orting.

The data and charts below are all sourced from Commerce’s “RDI Tool” with data for Orting which uses Census data (American Community Survey) and HUD's Comprehensive Housing Affordability Strategy (CHAS). ***Orting is a small community*** and the estimates below are based on a sample of the population, which is already limited by the small population and is therefore a limited sample size.

SECTION I. RACIAL COMPOSITION

Figure A.III- 1. Orting population by race and Hispanic ethnicity, 2020

Source: US Census Bureau, 2016-2020 American Community Survey 5-Year Estimates (Table DP05); Washington Department of Commerce, 2023

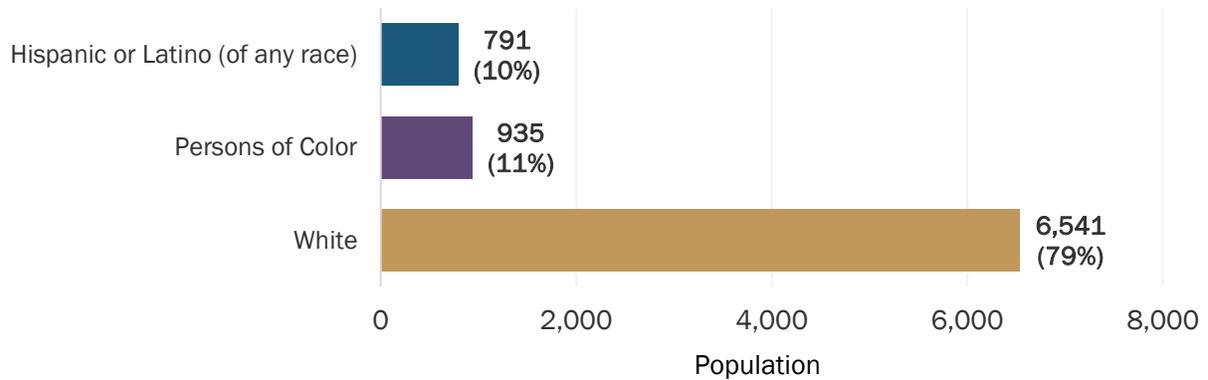


Figure A.III- 2. Racial composition percentage of Orting and Pierce County, 2015 and 2020

Source: US Census Bureau, 2016-2020 American Community Survey 5-Year Estimates (Table DP05); Washington Department of Commerce, 2023

Race or Ethnic Category	Orting		Pierce County	
	2015	2020	2015	2020
Asian	1%	2%	6%	6%
Black or African American	1%	1%	6%	7%
Hispanic or Latino (of any race)	7%	10%	10%	11%
Other Race	9%	8%	9%	10%
White	82%	79%	69%	66%

Figure A.III- 3. Racial composition of Orting and Pierce County, 2020

Source: US Census Bureau, 2016-2020 American Community Survey 5-Year Estimates (Table DP05); Washington Department of Commerce, 2023

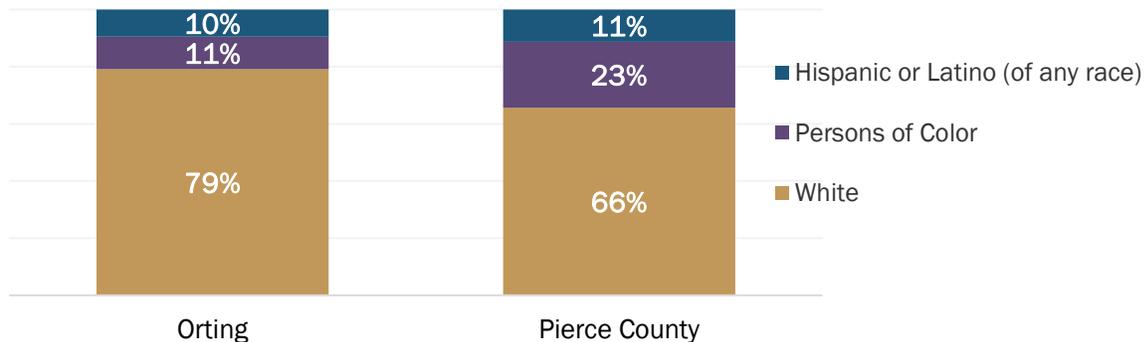
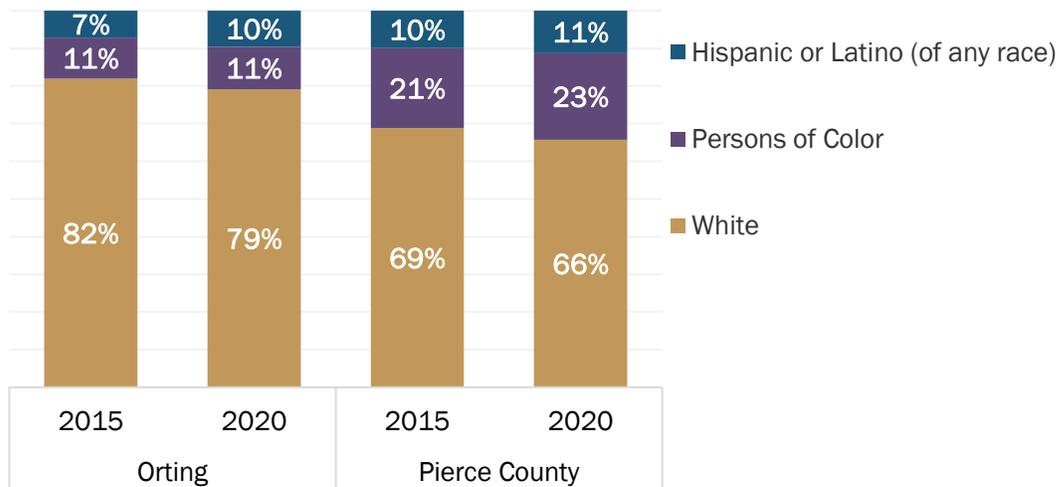


Figure A.III- 4. Racial composition of Orting and Pierce County, 2015 and 2020

Source: US Census Bureau, 2011-2015 and 2016-2020 American Community Survey 5-Year Estimates (Table DP05); Washington Department of Commerce, 2023



Key Observations from Figure A.III-1 through A.III-4:

1. Orting is less racially diverse in comparison to Pierce County (entire population within the County boundaries).
2. As Orting’s population has increased from 2015 to 2020, the racial makeup of the population has shifted and appears to be more racially diverse.

SECTION 2. COST BURDEN

According to Commerce, a household experiencing housing cost burden is paying more for housing than it can afford based on income. This means one or multiple of a houses' critical needs (i.e., food, physical health, mental health, education, and/or general well-being) are not being met. A household is considered cost-burdened if its monthly housing costs are greater than 30% of its monthly income. The threshold for households to be considered as experiencing cost-burden are classified as below:

- *Not cost-burdened* includes households paying less than 30% of their household income on housing costs.
- *Cost-burdened* includes households paying between 30% and 50% of their household income on housing costs.
- *Severely cost-burdened* includes households paying more than 50% of their income on housing costs.

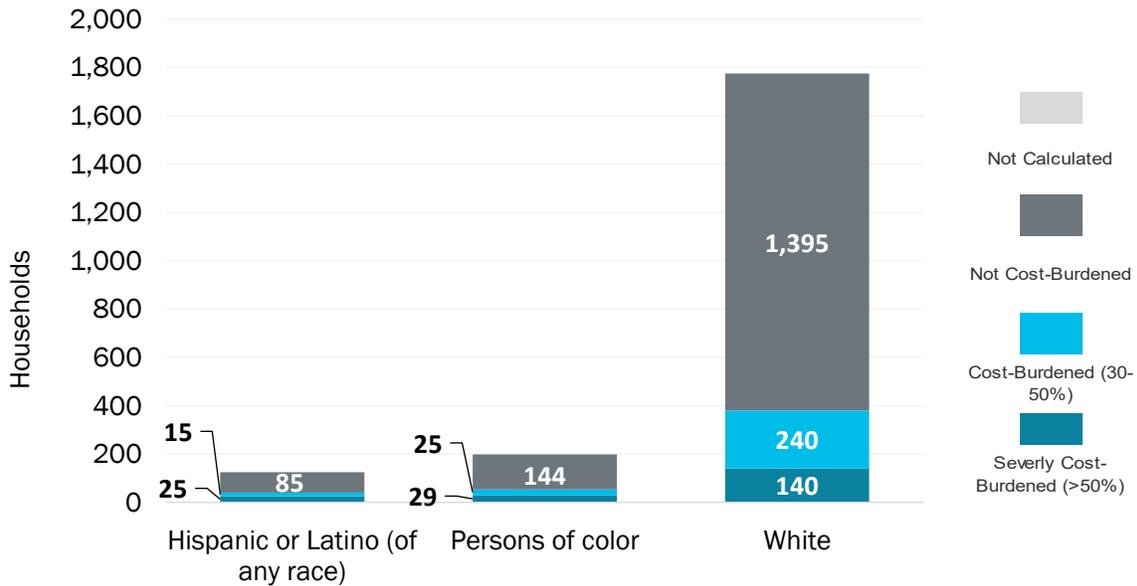
Figure A.III- 5. Orting number of households by housing cost burden, 2019

Source: US HUD, 2015-2019 Comprehensive Housing Affordability Strategy (CHAS) (Table 9); Washington Department of Commerce, 2023

	White	Black or African American	Asian	American Indian or Alaska Native	Pacific Islander	Other Race	Hispanic or Latino (of any race)	Total
Owner Households								
Not Cost Burdened	1,395	20	10	25	0	4	85	1,539
Total Cost-Burdened	380	10	0	0	0	4	40	434
Cost-Burdened (30-50%)	240	10	0	0	0	0	15	265
Severely Cost-Burdened (>50%)	140	0	0	0	0	4	25	169
Not Calculated	0	0	0	0	0	0	0	0
Total	1,775	30	10	25	0	10	125	1,975
Renter Households								
Not Cost Burdened	295	4	0	0	0	0	10	309
Total Cost-Burdened	215	0	0	0	0	65	0	280
Cost-Burdened (30-50%)	165	0	0	0	0	40	0	205
Severely Cost-Burdened (>50%)	50	0	0	0	0	25	0	75
Not Calculated	0	0	0	0	0	0	0	0
Total	510	4	0	0	0	65	10	589
Total Households	2,285	34	10	25	0	75	135	2,564

Figure A.III- 6. Orting number of households by race and housing cost burden, 2019

Source: US HUD, 2015-2019 Comprehensive Housing Affordability Strategy (CHAS) (Table 9); Washington Department of Commerce, 2023



Key Observations from Figure A.III-5 through A.III-6:

1. In 2019, there were 2,285 households categorized as white and non-Hispanic in Orting, and 279 other households (Persons of Color¹ and Hispanic or Latino of any race) in Orting.
2. In 2019, there were 434 Cost-Burdened Households for owner-occupied units, making up **22 percent** of all owner-occupied unit households. In 2019, there were 280 Cost-Burdened Households for renter-occupied units, making up **46 percent** of all renter-occupied unit households.
3. In 2019, there were 54 Cost-Burdened Households that were *Persons of Color and Hispanic or Latino of any race* where the residents owned the home, making up **27 percent** of all households that were *Persons of Color and Hispanic or Latino of any race living in owner-occupied units*. In 2019, there were 65 Cost-Burdened Households that were *Persons of Color and Hispanic or Latino of any race* where the residents were renting, making up **83 percent** of all households that were *Persons of Color and Hispanic or Latino of any race living in renter-occupied units*.
4. Based on the data presented above, it appears that households with *Persons of Color and Hispanic or Latino of any race* are slightly more likely to be cost-burdened in owner households and significantly more likely to be cost-burdened among renter households.

The data show that renter households with *Persons of Color and Hispanic or Latino of any race* may appear to be disproportionately experiencing housing cost burden when compared to other renters or owner households. However, it is important to note that there are a number of factors that we have not studied, which could be further explored in order to draw any substantial conclusions. Still, it will be important to continue tracking these trends when future comprehensive plan updates are performed.

SECTION 3. INCOME AND HOUSING TENURE

Data regarding household income and housing tenure can be useful in assessing risk of displacement and looking at potential indicators of exclusions in housing.

These terms are defined by Commerce (in this context) as follows:

Displacement: The process by which a household is forced to move from its community because of conditions beyond their control. Specific types of displacement include:

- Physical displacement: Households are directly forced to move for reasons such as eviction, foreclosure, natural disaster or deterioration in housing quality.
- Economic displacement: Households are compelled to move by rising rents or costs of home ownership like property taxes.

¹ Persons of Color includes people that self-identify as Asian, Black or African American, American Indian and Alaskan Native, Native Hawaiian and Other Pacific Islander, another race (Other), and Two or More Races and are Not Hispanic or Latino.

- Cultural displacement: Residents are compelled to move because the people and institutions that make up their cultural community have left the area.

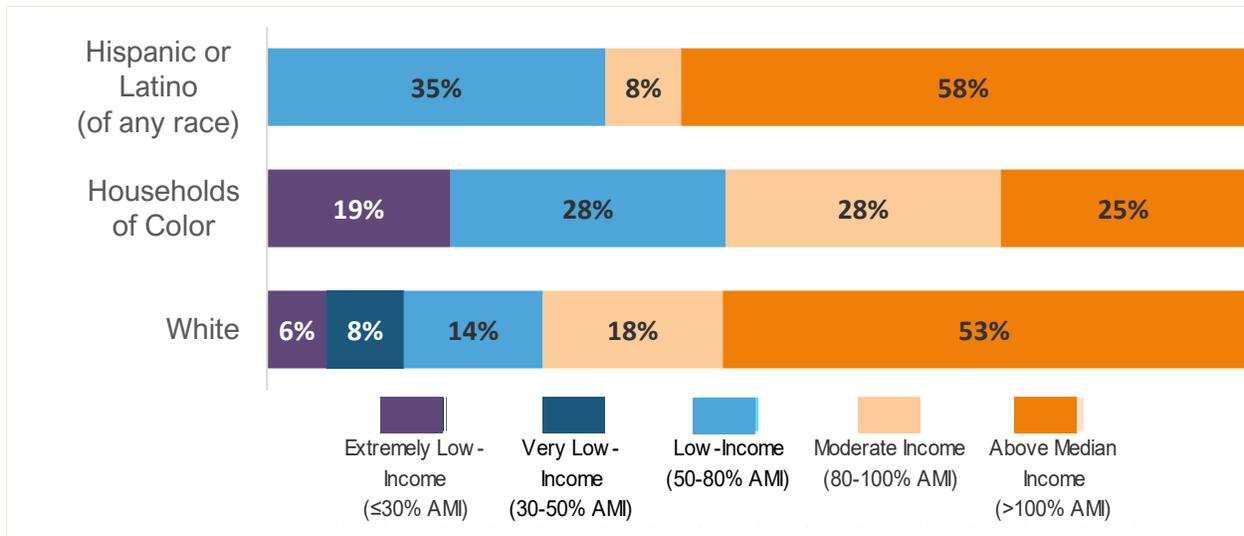
Displacement risk: The likelihood that a household, business or organization will be displaced from its community.

Exclusion in housing: The act or effect of shutting or keeping certain populations out of housing within a specified area, in a manner that may be intentional or unintentional, but which leads to non-inclusive impacts.

Figure A.III-6 shows the spectrum of households according to income levels, as organized by race or ethnicity.

Figure A.III- 6. Orting distribution of households by income and race or ethnicity, 2019

Source: US HUD, 2015-2019 Comprehensive Housing Affordability Strategy (CHAS) (Table 9); Washington Department of Commerce, 2023

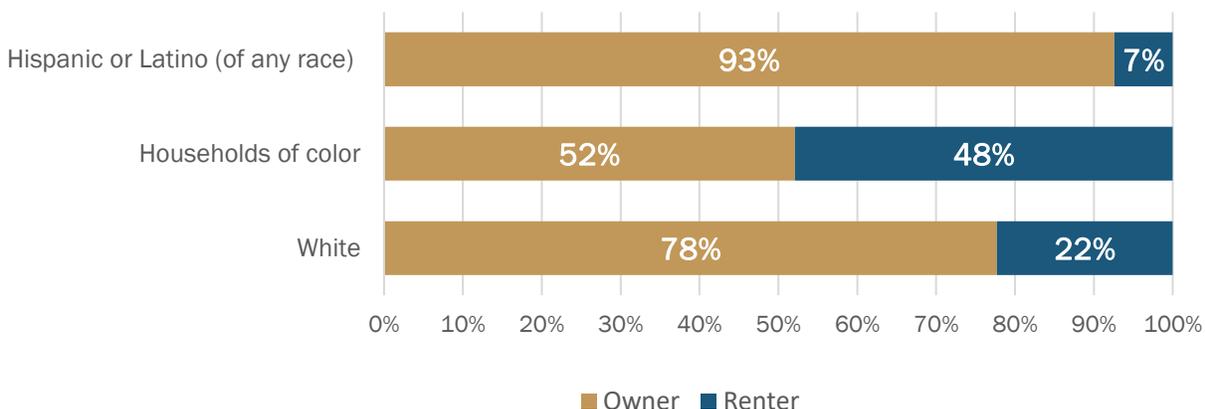


Key Observations from Figure A.III-6:

1. In Orting, households of color tend to have lower income as compared to white households. Further, households of color are three times as likely to be in the “extremely low income” category compared to white households.
2. Hispanic or Latino households have a higher percentage of households earning above the median income than white households, yet they also have a higher percentage of households that are below the combined income spectrum of “moderate income” and “above median income” compared to white households.

Figure A.III- 7. Orting percent owner and rental households by race and ethnicity, 2019

Sources: US HUD, 2015-2019 Comprehensive Housing Affordability Strategy (CHAS) (Table 9)



Key Observation from Figure A.III-7:

1. In Orting, the share of households that are renting is **48 percent** among households of color, **22 percent** among white households, and **7 percent** among Hispanic / Latino households.

The *Racial Restrictive Covenants Project for Washington State* is a project² by scholars and volunteers at the University of Washington and Eastern Washington University, who are identifying and mapping racial restrictions in property records which were used in American communities to prevent people who were not white from buying or occupying property. The project has identified such documents covering about 50,000 properties and the work is ongoing. As of October 31, 2024 their research team has found racial restrictions on more than 4,500 properties in Pierce County (including Tacoma).

On the project website, the impacts of racial restrictive covenants in Pierce County are described. The project team asserts that restrictive covenants significantly contributed to the challenges faced by people of color in Pierce County. The website also describes that the census recorded 3,343 Puyallup Tribe and other Indigenous peoples, yet the tribe had lost control of its reservation lands. Overall, Pierce County's population was 93% white. The project team concludes that this illustrates patterns of segregation and exclusion that have lingering effects today, and such historical injustices continue to shape disparities in homeownership, family wealth, and broader social inequalities in the region.

No records for properties with racially restrictive covenants in the city of Orting have been posted to the project website at <https://depts.washington.edu/covenants/>. Still, it will be important for city staff to monitor the project and determine if any property records are found, as the project website notes that available maps are still being added and revised.

The legacy of discriminatory housing and land use policies and practices (e.g., redlining, racially restrictive covenants, exclusionary zoning, and so forth) have led to significant racial and economic disparities in access to housing and neighborhoods of choice. As noted in VISION 2050, historical

² The project is in support of HB 1335, passed by the state legislature in 2021

land use and housing policies have played a role in creating and maintaining racial inequities. Today, these housing disparities continue to impact equitable access to well-funded schools, healthy environments, open space, and employment.

SECTION 4. DISPLACEMENT RISK

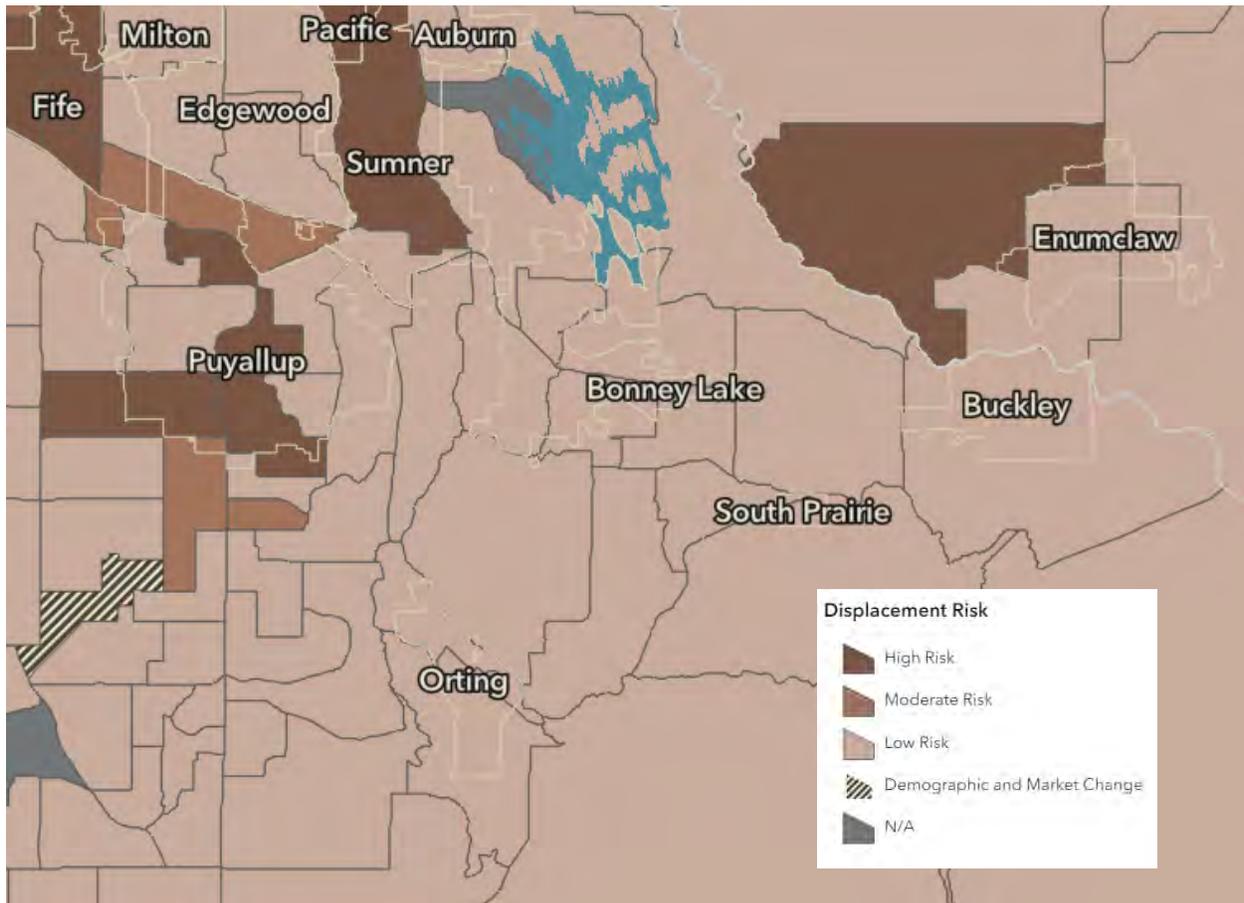
The City must assess and identify areas that may be at higher risk of displacement from market forces that occur with changes to zoning development regulations and capital investments.

Commerce developed a Draft Displacement Risk Map³ to support jurisdictions with the new housing element requirements. The purpose of the map is to help jurisdictions meet GMA requirements to “identify areas that may be at higher risk of displacement from market forces.”

Orting is mapped as a “Low Risk” community for Displacement Risk (shown below). This is similar to many other communities surrounding Orting and many other communities that are located far from the urban centers, and is also aligned with PSRC’s findings that areas with high-value investments (such as mass transit, of which Orting has none) is at higher risk of displacement⁴. While PSRC and Commerce have both studied and found Orting to be at low risk of displacement, Orting has still taken opportunities to review and amend its goals, policies, and regulations to address and, where applicable, reverse the risk of exclusion or displacement. Combined with the state laws that Washington has enacted providing eviction protections to tenants, risk of displacement in Orting is even further reduced. Orting expects to continue monitoring displacement risk over time as market conditions and other factors change.

³ The Puget Sound Regional Council also furnished a different version of a Displacement Risk map. Different data sets and/or methodology may have been used. The PSRC mapped lands among three categories for risk levels (Higher, Moderate or Lower) and indicated the City of Orting within the “Lower” category.

⁴ See page 67 of the “Guidance to Address Racially Disparate Impacts” document



Source: Department of Commerce (2023)

[Accessed at

https://experience.arcgis.com/experience/d26f4383cab3411cb45f39ddfc666b74/#data_s=id%3A83713d4b3ea34743bed49d3d61be4fb3-187dd75e9f2-layer-27-187dcfb6357-layer-4%3A499]

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(Chapter 254, Laws of 2021) [Accessed at [https://lawfilesexxt.leg.wa.gov/biennium/2021-](https://lawfilesexxt.leg.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/House/1220-S2.SL.pdf?q=20211209114015%20%20)

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APPENDIX IV: TRANSPORTATION PLANS AND STUDIES

This Appendix assembles the following Transportation Plans and Studies that provide an important basis for the City's Comprehensive Plan. These documents (and as amended) are adopted by reference into the Comprehensive Plan:

2025-2030 6-Year Transportation Improvement Program (TIP). [Adopted June 26, 2024 via Resolution No. 2024-13]

Non-Motorized Transportation Plan. June 2017. Parametrix.

Orting 2040 Transportation Plan. September 2019. Parametrix. [Adopted October 30, 2019 via Ordinance No. 2019-1040]

Pavement Management System (PMS). June 2024. SCJ Alliance.

Self-Evaluation and ADA Transition Plan. September 2024. SCJ Alliance.

Project #	Fund	Appendix A 2025-2030 Transportation Plan (TIP)								Project Costs
		Arterial Streets		2024	2025	2026	2027	2028	2029	
1	101/401/408/410	Whitehawk Boulevard Extension (WBE) Design								\$ 11,910,000
1	101/401/408/410	WBE Right of Way		\$ 910,000						
1	101/401/408/410	WBE Construction Phase 1			\$ 5,500,000					
1	101/401/408/410	WBE Construction Phase 2				\$ 5,500,000				
1	101/401/408/410	WBE Construction Phase 3								
2	101/401/408/410	Kansas Street SW Reconstruction (KSR) Design								\$ 5,475,000
2	101/401/408/410	KSR Final Design		\$ 75,000						
2	101/401/408/410	KSR Reconstruction Design			\$ 1,400,000	\$ 4,000,000				
3	State Grant	SR 162 Emergency Evacuation Bridge (EEB) Design								\$ 9,000,000
3	State Grant	EEB Construction	\$ 5,000,000	\$ 4,000,000						
Street Preservation & Maintenance Program			2024	2025	2026	2027	2028	2029	2030	
4	101	Annual Pavement Preservation Program	\$ 175,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	*Figure above omits Annual Pavement Preservation Program cost, from which individual projects will draw.
4	101	Chip Seal - Stone St (Headley Ave to Mellinger Ave)	\$ 14,747							
4	101	Chip Seal - Eldredge Ave (Calistoga St to Kansas St)	\$ 49,913							
4	101	Chip Seal - Tacoma Ave	\$ 25,200							
4	101	Chief Emmons Ln NW Overlay	\$ 30,000							
4	101	Chip Seal - Olive Street	\$ 10,219							
4	101	Chip Seal - Whitehawk Blvd (Washington Ave to Orting Ave)		\$ 75,619						
4	101	Chip Seal - Calistoga St (Kansas St to Corrin Ave)		\$ 56,203						
4	101	Overlay - Eldredge Ave (Whitesell St to Calistoga St)			\$ 63,000					
4	101	Overlay - Corrin Ave (Whitesell St to Bridge St)			\$ 179,000					
4	101	Reconstruction - Skinner Way (Calistoga St to Belfair Ave)				\$ 273,000				
4	101	Overlay - Anderson St (Williams St to Boatman Ave)				\$ 71,156				
4	101	Overlay - Deeded Lane (Calistoga St to Eldredge St)					\$ 145,000			
4	101	Orting Ave (Callendar St to Whitehawk Blvd)					\$ 44,988			
4	101	Overlay (Corrin Ave, S of Harman Way)					\$ 70,331			
4	101	Reconstruction - Train St. (Eldredge to Ammons)						\$ 154,400		
4	101	Reconstruction - Bowlin (Parker to Leber)							\$ 99,000	
Non-Motorized Projects			2024	2025	2026	2027	2028	2029	2030	
5	101	ADA Compliance Annual Program	\$ 50,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 65,000	\$ 440,000
5	101	Implement Programming								

PREPARED FOR:

JUNE 2017



NON-MOTORIZED TRANSPORTATION PLAN



Non-Motorized Transportation Plan

Prepared for

City of Orting
110 Train St SE
Orting, WA 98360

Prepared by

Parametrix
1019 39th Avenue SE, Suite 100
Puyallup, WA 98374
T. 253.604.6600 F. 1.855.542.6353
www.parametrix.com

CITATION

Parametrix. 2017. Non-Motorized Transportation Plan.
Prepared by Parametrix, Puyallup, WA. June 2017.

CERTIFICATION

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.


Prepared by Dallas Graham and 
Susan Devine


Checked by Erin Elfig



Approved by John Carl Hungerford, P.E.

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KEY TERMS

ADA	Americans with Disabilities Act
BLOS	Bicycle-Level-of-Stress
CBDG	Community Block Development Grant
EMPG	Emergency Management Performance Grant
EMS	Emergency Medical Services
FRC	Functional Road Class
GIS	Geographic Information System
GMA	Washington State Growth Management Act
LTS	Level of Traffic Stress
mph	miles per hour
NACTO	National Association of City Transportation Officials
ONMTP	Non-Motorized Transportation Plan
Orting	City of Orting
PLOS	Pedestrian-Level-of-Stress
Pol.	policy
PSRC	Puget Sound Regional Council
PUD	Public Utility District
RCW	Revised Code of Washington
SR	State Route
SRTS	Safe Routes to Schools
TAP	Transportation Alternatives Program
TIP	Transportation Improvement Program
WSDOT	Washington State Department of Transportation

1. PLANNING CONTEXT

1.1 Background and Compliance

The City of Orting (Orting) Non-Motorized Transportation Plan (ONMTP) is being created in response to conditional certification given by Puget Sound Regional Council (PSRC). This document is intended to fulfill the remaining requirements requested by PSRC and advance into a full certification. The ONMTP will address the PSRC “Areas for Further Work,” as it relates to non-motorized transportation.

Comments from PSRC are shown below in italics – the methods for meeting these criteria follow each Area of Work, as denoted by a check mark:

PSRC COMMENT

In addition to plan for future pedestrian and bicycle networks referenced in the condition for certification, the City should add additional detail to the pedestrian and bicycle component including:

- *A map of existing pedestrian facilities (e.g. sidewalks, crosswalks, multiuse paths) and bicycle facilities (e.g. bike lanes, shared use paths, paved road shoulders, bicycle crossings)*
 - *Identification of priority needs for improvements (e.g. gaps, locations with safety concerns or high travel demand)*
 - *A project list of priority bicycle and pedestrian improvements and programs, including stand-alone projects that address identified gaps, including a finance plan.*
- ✓ These items are addressed in Chapter 2, Existing Conditions ; Chapter 5, Planned Improvements; and Section 6.2, Recommended Improvements and Financial Strategy; of the ONMTP.

PSRC COMMENT

VISION 2040 calls for level-of-service standards to be focused on the movement of people and goods instead of only the movement of vehicles (MPP-DP-54), and for concurrency programs to address multimodal transportation options – both in assessment and mitigation (MMP-DP-55).

- ✓ The ONMTP includes both pedestrian and bicycle “Level of Stress” in order to assess the functionality of the City’s non-motorized system.

PSRC COMMENT

The city should work to develop policies and provisions that will ensure mobility choices for people with special transportation needs, including persons with disabilities, the elderly, youth, and low-income populations. For more information, see WSDOT’s Americans with Disabilities Act resource page and PSRC’s Special Needs Transportation website.

- ✓ The ONMTP will address non-motorized options for all groups, including special transportation needs and other Americans with Disabilities Act (ADA) concerns. See Section 6.1.4.

1.2 Promoting Safety: Towards Target Zero

The primary objectives of the ONMTP are to complete the requests of PSRC, and to improve non-motorized transportation planning in Orting. In addition to enhancing mobility, providing travel choice, and reducing emissions that can exacerbate greenhouse gas emissions and climate change, improving non-motorized modes also has the added benefit of improving safety for pedestrians and bicyclists. Therefore, this plan will also consider safety elements identified within the Washington State Department of Transportation (WSDOT) Strategic Highway Safety Plan (2016), also referred to as Target Zero. The primary goal of Target Zero is zero deaths and zero serious injuries by the year 2030. Target Zero addresses everything associated with highway safety: risk behaviors, crash types, road users, decision-making, and performance improvement. The ONMTP will draw upon aspects of Target Zero in terms of planned improvements, because a successful non-motorized plan is also a safe one.

The methods to approach achieving the daunting goal of Target Zero are based around the following categories:

Education

Give road-users the information to make good choices, such as driving unimpaired, wearing a seatbelt, and avoiding distractions.

Enforcement

Use data-driven analysis to help law enforcement officers pinpoint and address locations with a high number of behavior-driven fatal and serious injury crashes, such as speeding and impairment.

Engineering

Design roads and roadsides using practical solutions to reduce crashes, or to reduce the severity of crashes if they do occur.

Emergency Medical Services (EMS)

Provide high-quality and rapid medical response to injury crashes.

Leadership/Policy

Change laws, agency rules, or policies to support safer roads and driving.

1.3 Consistency with 2015 Comprehensive Plan

The 2015 Comprehensive Plan includes numerous overarching goals. Several of those goals are applicable to the ONMTP:

- Preserve open space and the character of the rural landscape.
- Preserve critical environmental resources.

Key Facts from Target Zero: Bicyclists

Speed is a critical factor in motor vehicle-bicycle crashes. Seventy percent of bicyclist fatalities where the posted speed of the roadway was 30 mph or more.

Men accounted for a disproportionate share of bicyclist fatalities and serious injuries, at 93% and 88% respectively.

Target Zero partners are working to gather more accurate information about the total number of people bicycling. Without this information, it is difficult to know if rates of bicycling – and therefore exposure – are changing.

- Preserve important agricultural lands.
- Foster a financially sound development pattern.
- Reduce reliance on the automobile and encourage establishment of pedestrian and bicycle-oriented development.
- Provide a place where citizens can both live and work.

The Comprehensive Plan also included future street improvement goals, one of which fits well with the intentions of the ONMTP:

- Increase safe, attractive pedestrian ways linked to the Foothills Trail and parks.

1.3.1 Transportation Goals

The ONMTP will be consistent with the following specific Comprehensive Plan Goals for the Transportation Element:

- Goal T 1:** Maintain a transportation system that accommodates the separation of through and local traffic, provides adequate internal circulation, and interconnects effectively to the regional highway, non-motorized, and public transportation systems, is responsive to the mobility needs of City businesses and neighborhoods, and guides future developments.
- Goal T 3:** Establish a safe and convenient pedestrian and bicycle circulation system linking residential communities with key destinations.
- Goal T 4:** Fund transportation facility improvements with federal, state, and local public and private sources.
- Goal T 5:** Realize the vision for Washington Avenue as Orting's main street, providing high quality aesthetic design in conjunction with multimodal mobility, pedestrian safety, and infill economic development.
- Goal T 6:** Meet federal and state air quality requirements and work with state, regional and other local agencies to develop transportation control measures and/or mobile source emission reduction programs that may be warranted to attain or maintain air quality requirements.

Key Facts from Target Zero: Pedestrians

The data showed that 14% of fatalities occurred on roads with a posted speed of 25 mph or less, 42% occurred on roads with a speed of 30-35 mph, 17% when the speed limit was 40-45 mph and 23% on roads with a speed limit of 50 mph or more.

Most of the pedestrian fatalities and serious injuries happened within cities, at 69% and 67% respectively.

Sixty percent of pedestrian fatalities and 62% of serious injury occurred while pedestrians were crossing the road.

These percentages echo how vehicle impact speed directly affects the severity of the injury and that crashes are more frequent when there are more areas of conflict.

The two major behavioral factors most commonly cited for pedestrian fatalities are driver distraction at 32% and pedestrian impairment at 43%.

1.3.2 Transportation Policies

The ONMTP will be consistent with the following specific Comprehensive Plan Vehicular Transportation Policies (Pol.) for the Transportation Element:

Street Design Standards

- Pol. T 10:** Maintain a comprehensive street improvement plan for city streets that implements the desired streetscape for each functional classification. Arterial street standards shall provide guidance on the width of lanes, driveway access, right-of-way width, sidewalks median treatments, setbacks, lighting, pedestrian facilities, landscaping, or other improvements.
- Pol. T 11:** Design street improvements to fit the character of areas they serve.
- Pol. T 14:** Use street design standards to minimize pavement widths while accommodating on-street parking, and allowing cars to pass, thereby slowing the speed of vehicles on local streets, improving pedestrian safety and allowing for landscaping.
- Pol. T 15:** Require safe, attractive sidewalks on all streets.
- Pol. T 16:** Provide comprehensive street lighting, including lights for pedestrians on sidewalks and trails, using such factors as adjacent land uses, hazardous street crossings, transit routes, schools, and parks.

Traffic Safety

- Pol. T 18:** Consider the use of devices that increase safety of pedestrian crossings such as flags, in-pavement lights, raised crosswalks, colored and textured pavements.

Pedestrian and Bicycle Policies

- Pol. T 32:** Promote pedestrian and bicycle networks that safely access commercial areas, schools, transit routes, parks, and other destinations within Orting and connect to adjacent communities, regional destinations and routes.
- Pol. T 33:** Require new development to ensure safety, comfort and convenience of pedestrians and bicyclists.
- Pol. T 34:** Designate and construct segregated internal pedestrian circulation systems in new or redeveloping commercial-retail districts. Provide connectivity to nearby transit stops using sidewalks, landscaping, covered walkways, or other treatments.
- Pol. T 35:** Promote a comprehensive and interconnected network of pedestrian and bike routes within and between neighborhoods.
- Pol. T 36:** Require trail routes and/or sidewalks where appropriate in Public Utility District (PUD), plat and short plat approvals.
- Pol. T 37:** Work progressively to provide and maintain sidewalks in established neighborhoods. Priority shall be given to all public facilities such as transit routes, schools and parks, and multi-family housing, commercial areas, and gaps in the existing sidewalk system.
- Pol. T 38:** Provide striped, on-street bicycle facilities on arterial streets on paved shoulders or within wide curb lanes to ensure safety for bicyclists.
- Pol. T 39:** Ensure that sidewalks meet requirements of the Americans with Disabilities Act.

- Pol. T 40:** Identify non-motorized facility improvements on school walk routes to increase pedestrian safety.
- Pol. T 41:** Require secure (racks and lighting) bicycle parking at commercial and institutional facilities along with automobile parking.



2. EXISTING CONDITIONS

This Chapter describes the existing conditions of the non-motorized network within the City of Orting, including roadways, trails, sidewalks and other facilities.

2.1 Motorized Facilities

Table 2-1 summarizes the City’s primary roadways, including functional classification, the presence and type of shoulders, parking, sidewalks, and bike lanes, as well as the posted speed limit. Many of these roadways serve as shared facilities between motorized and non-motorized users.

Table 2-1. City of Orting Primary Road Network

Roadway	Functional Classification	Shoulder	Parking	Sidewalks	Bicycle Lane	Speed Limit (miles per hour [mph])
SR-162/Pioneer Way	Principal arterial	Paved	No	Interrupted	No	50/35/25
Washington Avenue	Major arterial	Paved	Yes	Both	No	25
Orting- Kapowsin Highway	Major arterial	Gravel	No	No	No	35
Varner Avenue NE	Collector	Gravel/grass	Yes	Both	No	Not posted
Calistoga Street	Principal arterial	Paved/gravel	Yes	Both	No	25
Whitehawk Blvd	Proposed Minor Arterial	Paved	Yes	Both	No	25
Eldredge Avenue	Collector	Gravel/grass	Yes	Whitesell north– both sides; Safeway south – one side	No	Not posted
Whitesell Street	Collector	None	No	One side	No	Not posted
Corrin Avenue	Minor arterial	Paved	Yes (angle parking downtown)	Both	No	Not posted
Bridge Street	Collector	Gravel/grass	Yes	Both	No	Not posted
Kansas Street SW	Principal arterial	Paved	Yes	Both	No	Not posted
Harman Way	Principal arterial	Paved	Yes	Yes	No	Not posted

According to Target Zero, in Washington State, 15% of all serious roadway related injuries are inflicted upon pedestrians, and 5% were to bicyclists.

2.2 Non-Motorized Facilities

This section describes the facilities that are solely intended for pedestrian and bicycle use, including official trails as well as widely used pathways located along the City’s extensive levee system.

2.2.1 Foothills Trail

A completed paved section of the Foothills Trail runs parallel to State Route (SR) 162 through Orting, this is the reason for the characterization of road/trail, etc. This is a 12-foot wide non-motorized asphalt trail suitable for bicycles, walking, skating, and wheel chairs. It also has a soft shoulder path for horses. Once completed, the Foothills Trail will extend 26 miles from McMillin through Orting to Buckley. The trail continues to Sumner and Puyallup. From Sumner, the trail connects with the Interurban Trail that now extends through Kent and Auburn. The Puyallup connection will extend west through Puyallup and into Tacoma.

2.2.2 Levees

Orting is bordered by two rivers, the Puyallup River and the Carbon River. Although not official non-motorized facilities, the levees along these two rivers are commonly used as paths to cycle, run, walk, or ride horseback and because of their popularity are included in the ONMTP.



2.3 Evacuation Routes

This plan also specifically identifies the City’s evacuation routes, as the chance of a volcanic eruption and subsequent lahar, although rare, is a real possibility in Orting. The City has prepared for an emergency through several evacuation routes (Figure 2-1). These routes are often used in everyday life for other daily activities and should be assessed for both emergency and daily use.

The existing primary evacuation route for the schools is through the levee system.

Lahar Evacuation Routes Planning

Lahar Hazards

- Lahar Evacuation Routes
- School Lahar Evacuation Route
- Cities in Pierce County
- Case 1 – 500-1000 yr frequency
- Case 2 – Average 100 yr frequency
- Case 3 – 1-100 yr frequency

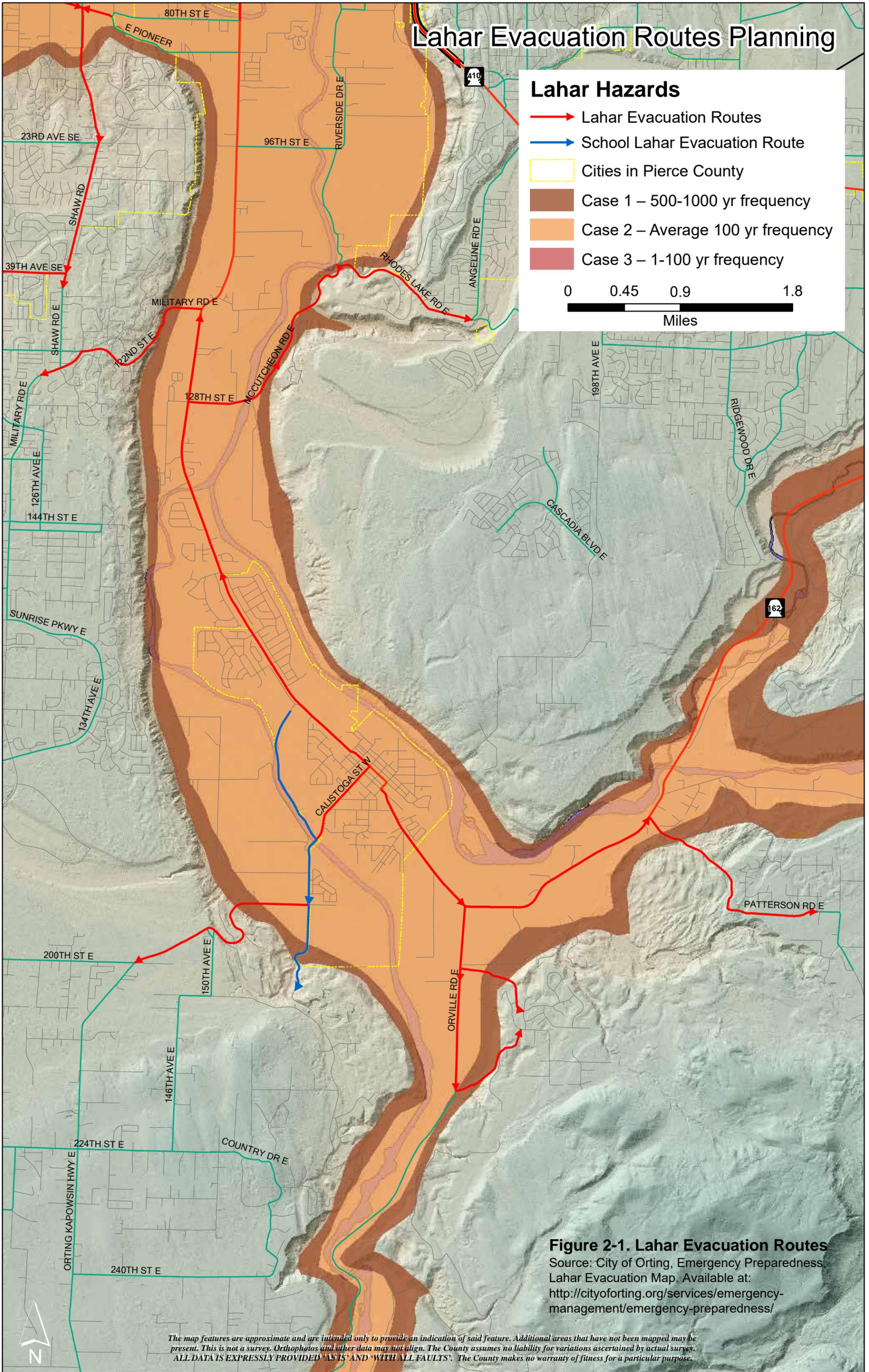
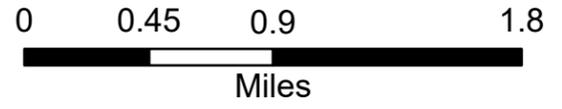


Figure 2-1. Lahar Evacuation Routes

Source: City of Orting, Emergency Preparedness, Lahar Evacuation Map. Available at: <http://cityoforting.org/services/emergency-management/emergency-preparedness/>

The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. The County assumes no liability for variations ascertained by actual survey. ALL DATA IS EXPRESSLY PROVIDED 'AS IS' AND 'WITH ALL FAULTS'. The County makes no warranty of fitness for a particular purpose.

2.4 Data Collection and Analysis

In order to assess the existing conditions of non-motorized facilities, two types of data was utilized: pedestrian and bicycle user counts, and Geographic Information System (GIS) data for roadway, trail, and sidewalk conditions. The count data indicates how the existing facilities are currently being utilized, while the GIS data reflects the actual existence of non-motorized facilities, as well as the extent to which the transportation network creates a “level of stress” on pedestrians and bicycles. Ideally a transportation system will be highly connected, low-stress, and create an environment of safety and ease. This is particularly important when referring to a non-motorized network as pedestrians and bicyclists are at a much higher risk for serious injury or fatality.

GIS data is used to both illustrate the motorized AND non-motorized network, as well as assess the *level of stress* the network creates for pedestrians and bicycles. The *level of stress* is different from the *level of service* that is associated with vehicular traffic conditions. Pedestrian and bicycle level of stress is a calculation based upon the comfort and safety felt by the non-motorized traveler, based upon the experience being created by the presence or absence of certain key factors.

2.5 Level of Stress and Level of Service Standards

The level of stress methodology is based upon research conducted by Mineta Transportation Institute which ultimately resulted in a way to measure traffic stress levels:

The Level of Traffic Stress (LTS) method measures low-stress connectivity, defined as ‘the ability of a network to connect travelers’ origins to their destinations without subjecting them to unacceptably stressful links.

Both Pedestrian-Level-of-Stress (PLOS) and Bicycle-Level-of-Stress (BLOS) have aims similar to LTS, acknowledging that one “weak link” (high stress in one area) in the non-motorized transportation system is a serious issue for the entire system. An interconnected system cannot be low stress overall, which it strives to be, if there is any area of high stress.

Level-of-stress is rated on a scale of 1-5. For the purposes of this document, it was determined that an acceptable and/or reasonable LOS was anything which scored between 1-3; and anything rated 4 or 5 is generally considered unacceptable. The facilities with 4 or 5 ratings are the areas that need to be addressed when planning non-motorized improvements.

- Level 1** – Very low level of stress, due to presence of sidewalks, low traffic volumes, and low posted speed limits. This condition is considered highly desirable, and therefore acceptable.
- Level 2** – Low level of stress. This condition is considered acceptable.
- Level 3** – Moderate level of stress. This condition is considered acceptable, although it could be improved.
- Level 4** – High level of stress. This condition is not considered acceptable and should be addressed.
- Level 5** – Very high level of stress, due to lack of bike lanes, insufficient lane width, on street parking, high speeds, or high functional classification. This condition is not considered acceptable and should be addressed when possible.

Within the ONMTP, sidewalk and trail are combined to sidewalk/trail because of the layout (interconnectivity) in the City. This refers to sidewalks which border trails, and the levees which are used as trails. The same is done for pedestrian road/trail and for bicycle road/trail.

For instance, there are 262,882 feet of sidewalk/trail in the entire city of Orting. Almost 97 percent of the sidewalk/trail lengths in Orting were given a score of 1-3. This means that the vast majority of the sidewalk/trail length in the City meets satisfactory LOS and just 3 percent is below acceptable standards.

2.6 Scoring Methodology

Figure 2-2 describes the scoring methodology and Figure 2-3 shows several examples of this method in practice. Level of Stress scoring was completed for all the roads, trails and sidewalks in the City of Orting. Each Level of Stress score is calculated based on a number of contributing factors. Each factor is given a slightly different weight based on Level of Stress caused. It is important to acknowledge that the pedestrian separation is being weighted slightly higher than the other factors.



Methodology Summary

The Level of Stress score is created in GIS using street attributes that are tied spatially to street and sidewalk centerlines. Different attributes are assigned point values based on the relevant effect on pedestrian and/or biker stress. Scores are aggregated from each attribute along each street segment to create a combined LOS score. The LOS Scores are broken out into classes based on Jenks Natural Breaks Classification Method - which is a data clustering method for best arrangement of values into classes.

What Factors into the Bike and Pedestrian LOS Scores

Sidewalk Width (Pedestrian Only): Width of sidewalk pavement. Wider sidewalks result in a lower level of stress (higher score) for pedestrians.

Sidewalk Buffer Width (Pedestrian Only): Distance from the edge of the sidewalk to the curb. A greater distance results in a gap between pedestrians and moving vehicles.

Curb Presence (Pedestrian Only): Presence of Curb. Creates an additional barrier between pedestrians and vehicles.

Street Width: Distance between outside striping or width of pavement where striping is not used. Wider streets result in more space between cars and bikes and pedestrians.

Number of Lanes: Total number of lanes in either direction. Three or more lanes is indicative of a busier, more stressful, street for bikes and pedestrians

Vehicle Speed: Typical speed of travelling vehicles (not posted speed limit). Lower vehicle speeds results in a safer environment for adjacent pedestrians and bikers.

Outside Lane Width: Width of lane closest to sidewalk on each side of the street. Width of outside lane affects amount of space for bikers and pedestrians

On Street Parking: Whether on street parking is permitted with signs, not allowed, or unsigned. Designated on-street parking spaces create an additional buffer between the street and bikes and pedestrians.

Street Buffer: The space between the outer street striping or pavement and the curb. Creates additional space for bikes and pedestrians.

FRC: Functional Road Class defines the type of roadway (arterial, collector, or local) and is indicitave of vehicle volumes.

**Scoring for each attribute is highlighted on page 2. Each score from the individual attributes is summed to create the combined Bike and Pedestrian Scores determining Level of Stress*

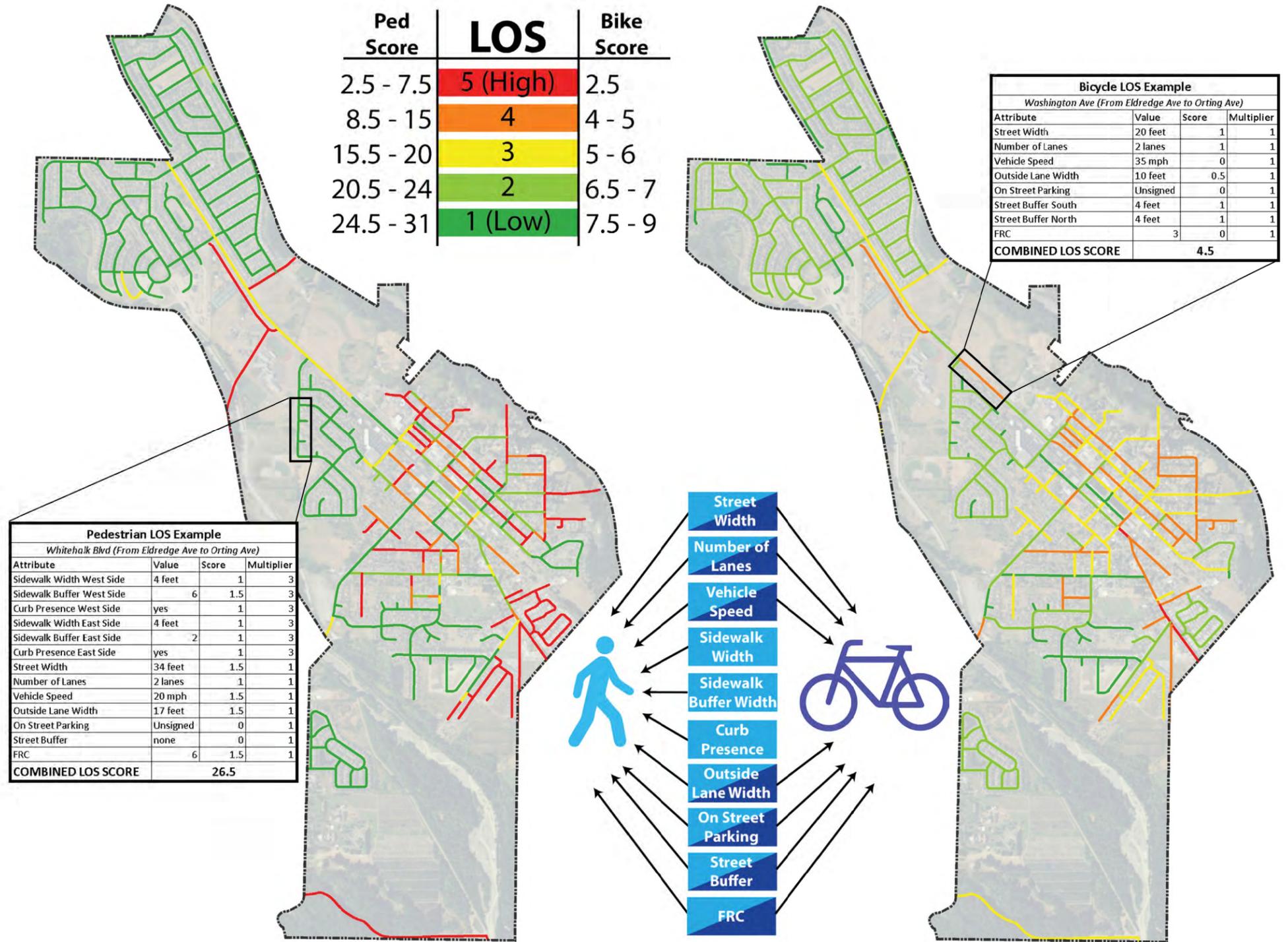


Figure 2-2

Methodology Summary

The Level of Stress score is created in GIS using street attributes that are tied spatially to street and sidewalk centerlines. Different attributes are assigned point values based on the relevant effect on pedestrian and/or biker stress. Scores are aggregated from each attribute along each street segment to create a combined LOS score. The LOS Scores are broken out into classes based on Jenks Natural Breaks Classification Method - which is a data clustering method for best arrangement of values into classes.

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Street Width: Distance between outside striping or width of pavement where striping is not used. Wider streets result in more space between cars and bikes and pedestrians.

Number of Lanes: Total number of lanes in either direction. Three or more lanes is indicative of a busier, more stressful, street for bikes and pedestrians

Vehicle Speed: Typical speed of travelling vehicles (not posted speed limit). Lower vehicle speeds results in a safer environment for adjacent pedestrians and bikers.

Outside Lane Width: Width of lane closest to sidewalk on each side of the street. Width of outside lane affects amount of space for bikers and pedestrians

On Street Parking: Whether on street parking is permitted with signs, not allowed, or unsigned. Designated on-street parking spaces create an additional buffer between the street and bikes and pedestrians.

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FRC: Functional Road Class defines the type of roadway (arterial, collector, or local) and is indicitave of vehicle volumes.

**Scoring for each attribute is highlighted on page 2. Each score from the individual attributes is summed to create the combined Bike and Pedestrian Scores determining Level of Stress*

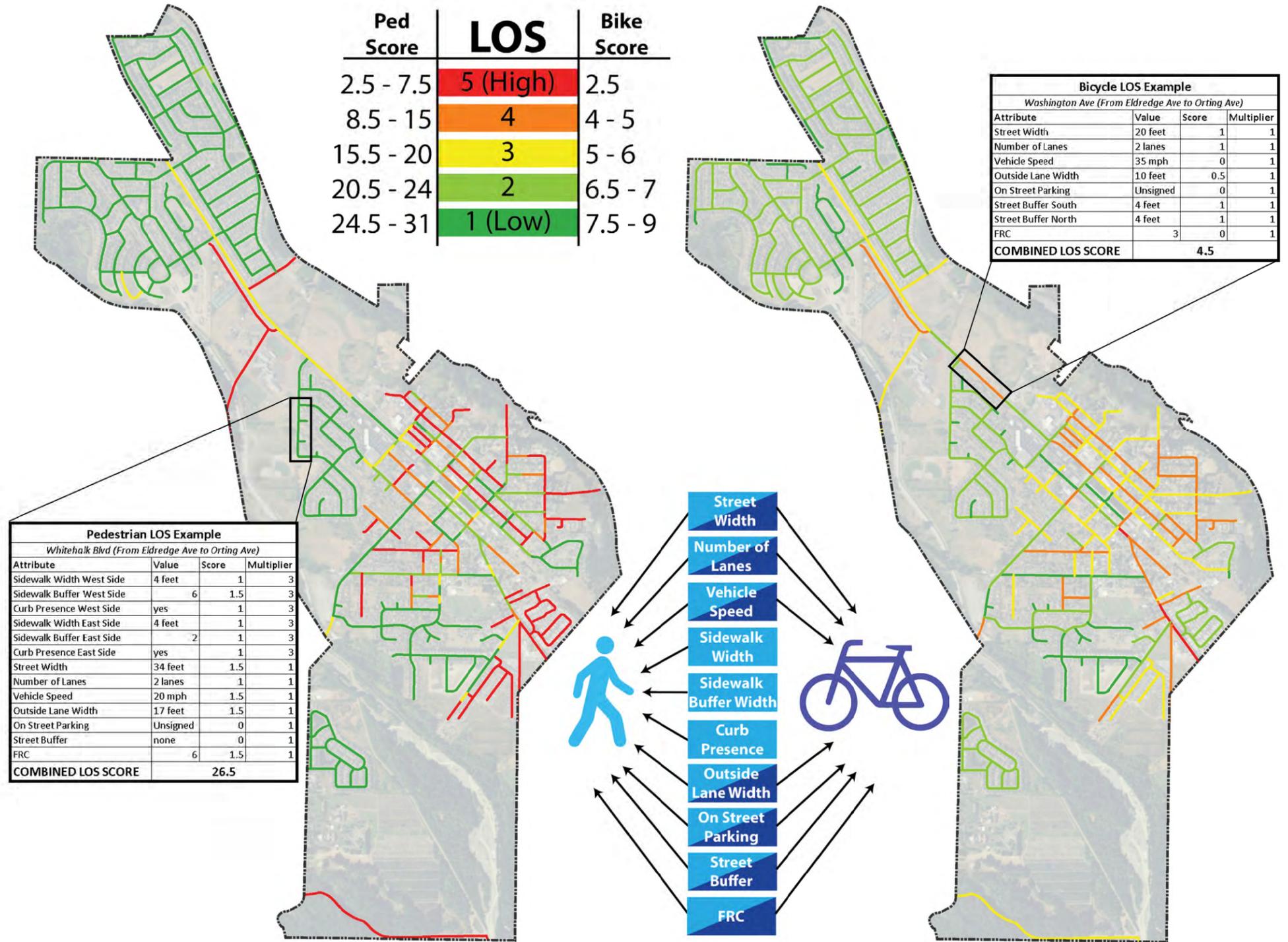


Figure 2-2

2.6.1 Methodology Summary

The Level of Stress score was created in GIS using street attributes that are tied spatially to street and sidewalk centerlines. Different attributes are assigned point values ranging from 1-5 based on the relevant effect on pedestrian and/or cyclists stress. Scores are combined from each attribute along each street segment to create a collective LOS score for individual streets, sidewalks, or trails. This form of classification is based on Jenks Natural Breaks Classification Method (a data clustering method which best arranges values into classes).

2.6.2 Factors in the LOS Score

Factors included in finding the level of stress were as follows, some attributes were only considered when scoring pedestrian level of stress:

- **Sidewalk Width (Pedestrian Only):** Width of sidewalk pavement. Wider sidewalks result in lower level of stress for pedestrians.
- **Sidewalk Buffer Width (Pedestrian Only):** Distance from the edge of the sidewalk to the curb. Greater distance creates an additional barrier between pedestrian and moving vehicles.
- **Curb Presence (Pedestrian Only):** Presence of a curb creates an additional barrier between pedestrians and vehicles.
- **Street Width:** Distance between outside striping or width of pavement where striping is not used. Wider streets result in more space between cars and bikes and pedestrians.
- **Number of Lanes:** Total number of lanes in either direction. Three or more lanes is indicative of a busier, more stressful street for cyclists and pedestrians.
- **Vehicle Speed:** Average speed of traveling vehicles (not posted speed limit). Lower vehicle speeds create a safer environment for non-motorized counterparts.
- **Outside Lane Width:** Width of lane closest to sidewalk on both sides of the street. The width of the lane affects the amount of space for pedestrians and cyclists.
- **On Street Parking:** Whether or not street parking is permitted with signs, not allowed, or unsigned. Designated on-street parking space creates an additional buffer between the street and pedestrians and cyclists.
- **Street Buffer:** The space between the outer edge of the street striping or pavement and the curb. Creates additional space between non-motorized users and traffic.
- **FRC:** Functional Road Class (FRC) defines the type of roadway (includes: arterial, collector or local) and is an indicator of vehicle volumes.

2.7 Pedestrian Level of Stress (PLOS)

Based upon the methodology as previously described, the Pedestrian Level of Stress (PLOS) scores for existing conditions are quite good in Orting, with only a small percentage of facilities creating an “unacceptable” PLOS. These results are illustrated on the map in Figure 2-6. The facilities shown in orange (PLOS 4) and red (PLOS 5) should be addressed and improvements made where possible (see Chapter 5).

The pedestrian level of stress on facilities with road/trail connections is acceptable on 78 percent of the network (Figure 2-4), meaning that 22 percent of the roadway is rated a PLOS of 4 or 5. The pedestrian level of stress on facilities with sidewalks is acceptable on 97 percent of those facilities (Figure 2-5), with only 3 percent rating a PLOS of 4 or 5.

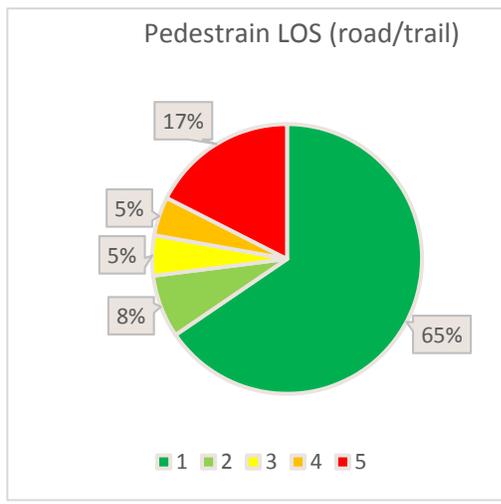


Figure 2-4. PLOS Scoring of Road/Trail

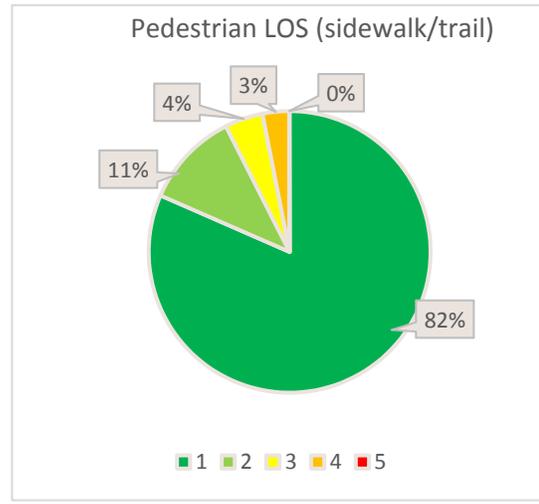


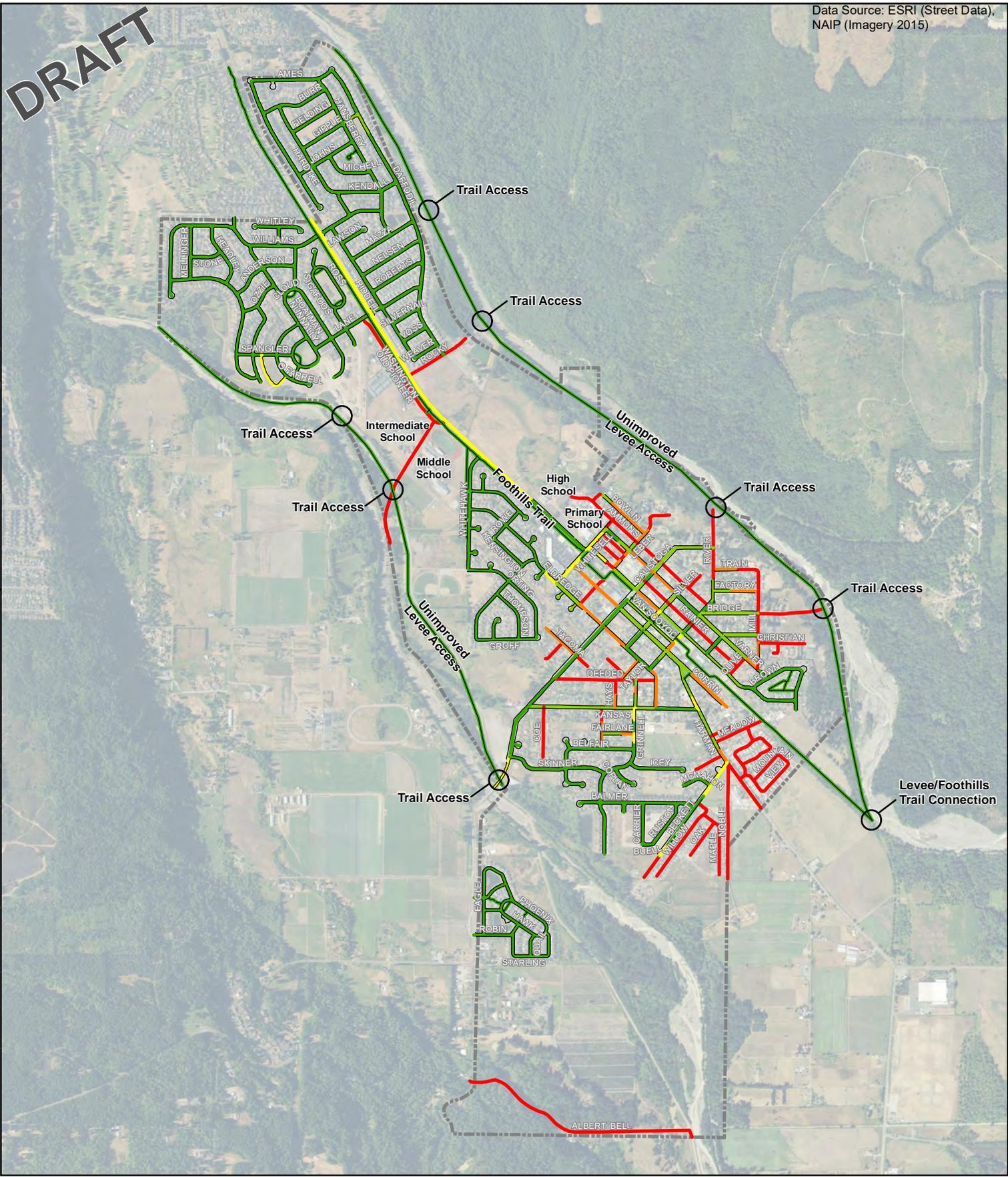
Figure 2-5. PLOS Scoring of Sidewalk/Trail



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Data Source: ESRI (Street Data), NAIP (Imagery 2015)

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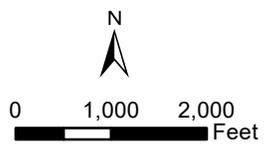


Parametrix

- Sidewalk
- ⬡ City Limit

- Pedestrian Level of Stress**
- Red line: LOS 5: 2.5 - 7.5 (High Stress)
 - Orange line: LOS 4: 8.5 - 15.0
 - Yellow line: LOS 3: 15.5 - 20.0
 - Light Green line: LOS 2: 20.5 - 24.0
 - Dark Green line: LOS 1: 24.5 - 31.0 (Low Stress)

Figure 2-6. Pedestrian Level of Stress Existing Conditions



Non-Motorized Transportation Plan Orting, WA

2.8 Bicycle Level of Stress (BLOS)

Variables considered when determining bicycle level of stress include: street width, the number of lanes, posted speed limits, outside lane width, on-street parking, and the functional classification of the roadway. Based upon the GIS data, there are just over 214,500 feet of road/trail in Orting (Figure 2-8). Of this, 87% of the road/trail facilities provide for an acceptable BLOS of 1, 2, or 3 and 13% of the road/trail score an unacceptable BLOS of 4 or 5 (Figure 2-7). The 13 percent of facilities that received a poor BLOS should be improved (see Chapter 5).

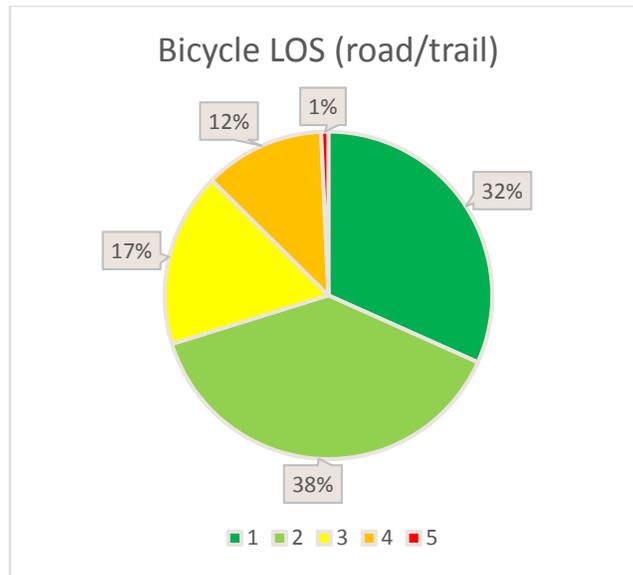


Figure 2-7. BLOS Scoring of Road/Trail



2.9 Foothills Trail Data

The foothills trail is the primary non-motorized transportation system in the City of Orting. The trail parallels SR-162 and it is the preferred transportation facility for pedestrians and bicyclists, in place of SR-162. The popularity of this trail is shown in Figure 2-9 and Figure 2-10 listed below. Counts were taken across two separate days (one weekday and one weekend day) at three different locations. Counts were taken in early May; it should be noted that trail usage is typically highest during summer months. Northwest-bound and Southeast-bound directions were also accounted for. The figures below are representative of the total non-motorized users at each location by weekday and weekend day. Trail usage for both pedestrians and bicyclists is higher on weekends compared to weekdays.

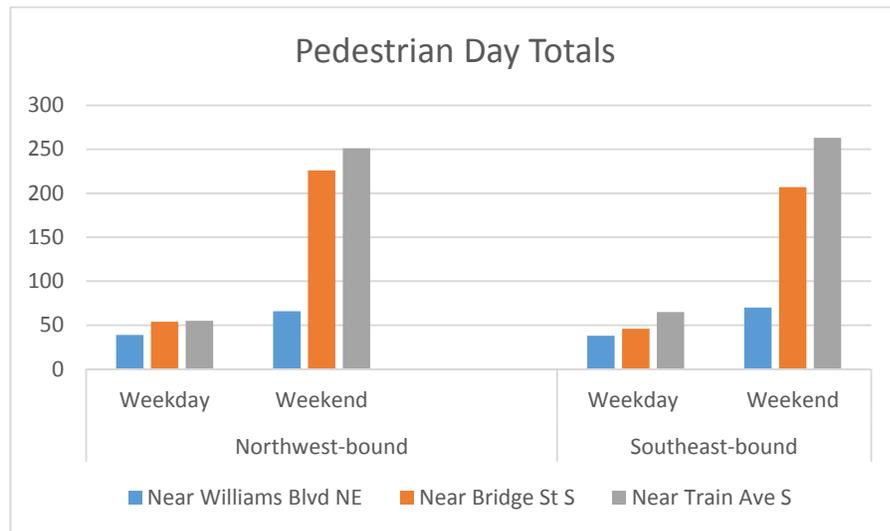


Figure 2-9. Pedestrian Day Totals

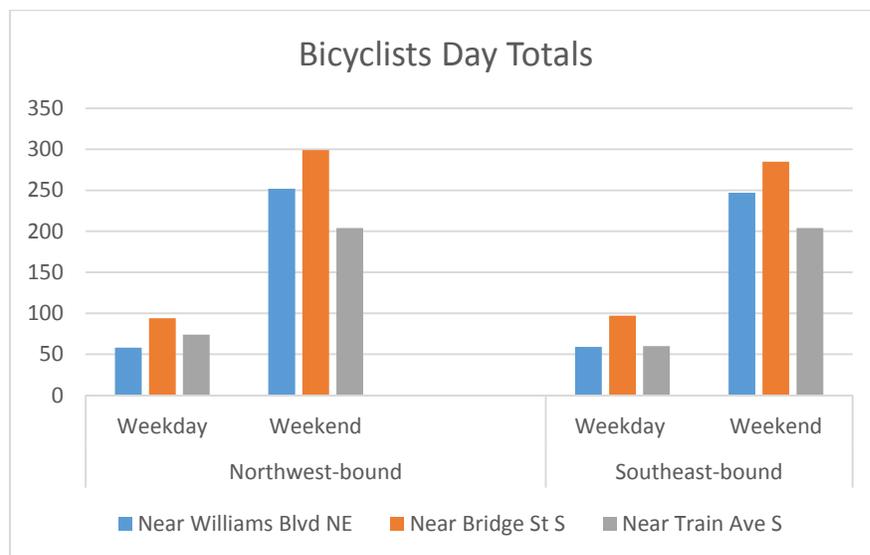


Figure 2-10. Bicyclists Day Totals

3. THE TARGET ZERO CONNECTION

In addition to understanding the Pedestrian and Bicycle levels of stress created by the transportation network of the City, it is also important to consider the broader safety issues for non-motorized users. Such safety issues are clearly outlined in the Washington State Department of Transportation’s (WSDOT) 2016 update to *Target Zero*, whose goal is to reach zero deaths and zero serious injuries on Washington roadways by 2030. The City of should consider implementing some of the *Target Zero* improvement strategies to increase pedestrian and bicyclist safety.

3.1 WSDOT Collision Summary

Table 3-1. WSDOT Collision Summary

Collision Date	Collision Location	Pedestrians Involved	Bicyclists Involved	Description
8/15/2012	Hawk Ave SW near Mockingbird St SW	1	None	Vehicle traveling straight collided with pedestrian
5/10/2011	Riddell Ave NE near Johns St NE	5	None	Vehicle backing collided with pedestrian
11/5/2011	SR 162/ Washington Ave N and Williams Blvd NW	None	1	Left turning vehicle collided with bicyclist at intersection
10/24/2013	SR 162/ Washington Ave N and Williams Blvd NW	None	1	Left turning vehicle collided with bicyclist at intersection
9/28/2011	SR 162/ Washington Ave N and Cardinal Ln NE	None	1	Left turning vehicle collided with bicyclist at intersection
10/10/2014	SR 162/ Bridge St NW and Corrin Ave	None	1	Left turning vehicle collided with bicyclist at intersection

WSDOT provided collision data for Orting for the past 5 years (January 2011 through December 2015). During this time period, there were six collisions involving non-motorized users, shown on Figure 3-2; four collisions with bicyclists and two collisions with pedestrians.

All of the collisions with bicyclists occurred at intersections along SR 162, which runs parallel to the Foothills Trail. Left-turning vehicles failed to see bicyclists in all of the collisions and the majority occurred after daylight hours (three out of four collisions). Two of the collisions with bicyclists occurred at same intersection located at SR 162 and Williams Blvd NW.

The two collisions involving pedestrians occurred in residential areas. The collision on Hawk Ave SW occurred near a neighborhood park. The collision on Riddell Ave NE occurred in a cul-de-sac between several pedestrians and a vehicle that was backing out from a driveway. Figure 3-2 shows where these collisions occurred in Orting.

3.2 Pedestrian Facilities

According to the 2016 *Target Zero* plan, 11 percent (93 of 814) of the fatal and serious injury crashes involved pedestrians in Pierce County between 2012-2014. Although this number is not specific to Orting, the City does have areas where pedestrian level of stress – and safety – could be improved, SR 162 is an example of this. Figure 3-1 and Figure 3-3 list several of the most common contributing factors. Vehicles going straight was one of the injuries listed in the WSDOT data, Table 3-1. Four out of six of the injuries recorded by WSDOT happened at intersections. *Target Zero* Figure 3-3 lists intersections as one of the highest contributing factors of fatality or serious injury.

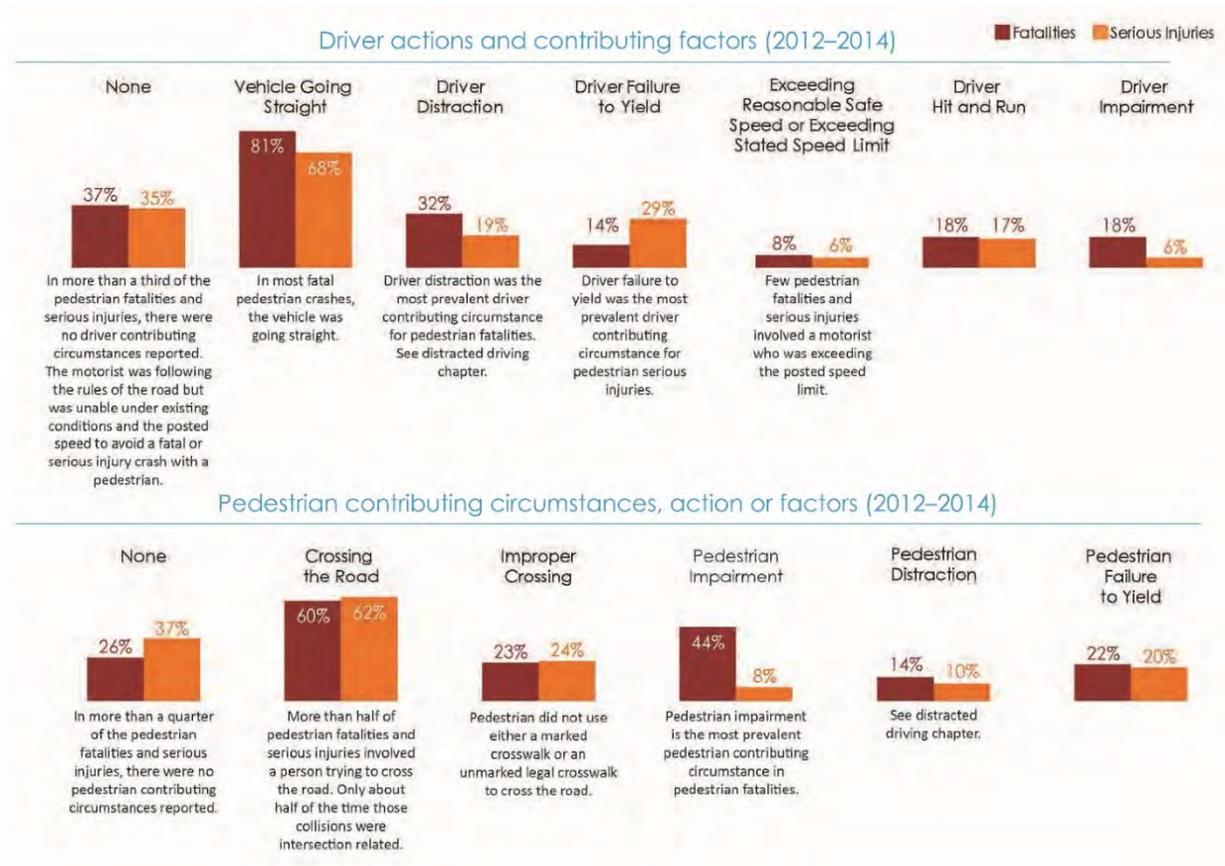
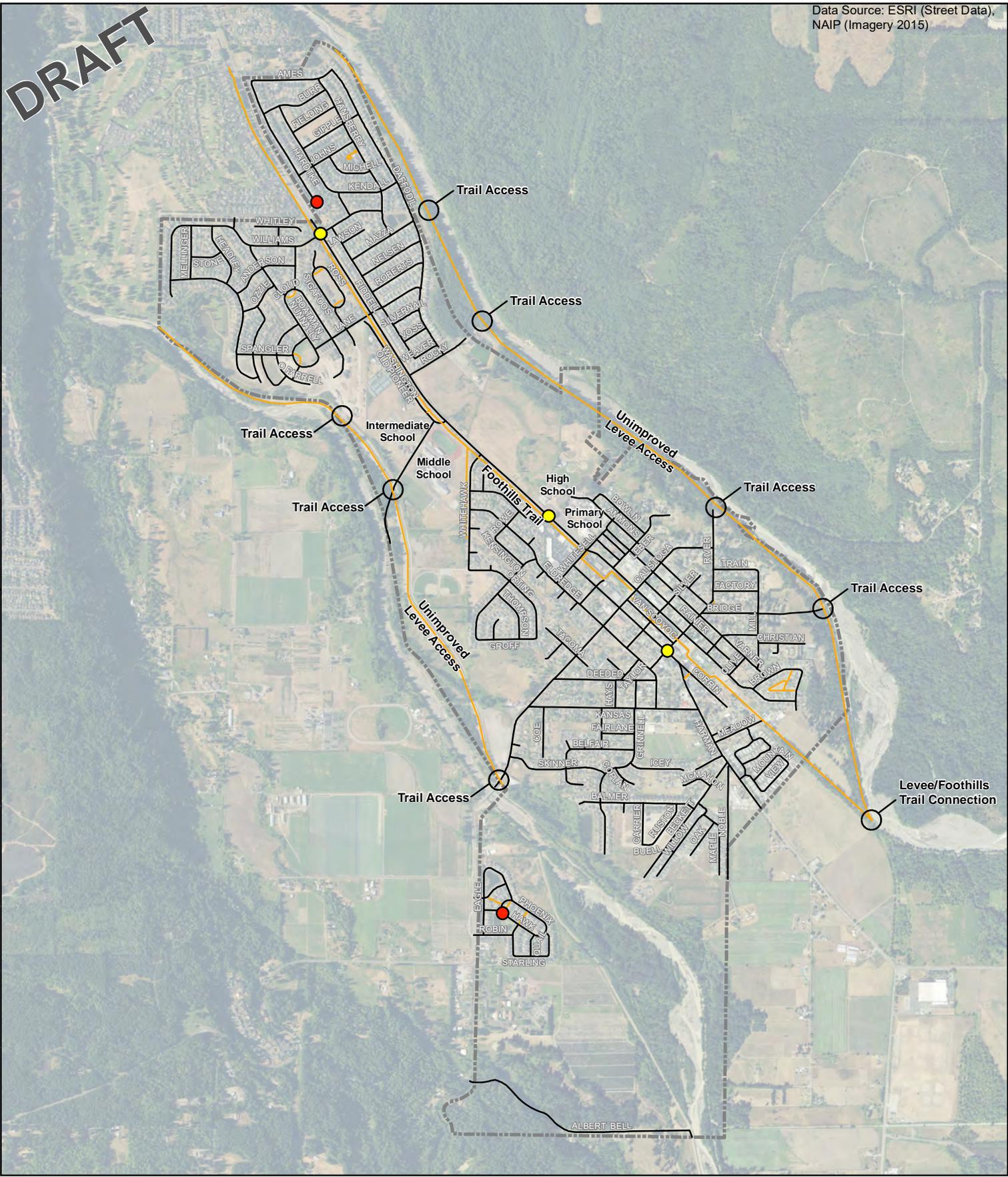


Figure 3-1. Contributing Factors in Pedestrian-Related Fatalities and Injuries
Source: *Washington State Strategic Highway Safety Plan 2016: Target Zero, Zero Deaths & Zero Serious Injuries by 2030*. Washington Traffic Safety Commission.

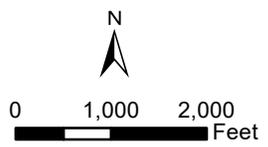
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Data Source: ESRI (Street Data), NAIP (Imagery 2015)

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Parametrix



- Bicycle Collision
- Pedestrian Collision
- Street
- Trail
- ⊘ City Limit

Figure 3-2. Non-Motorized Collisions 2011-2015

Non-Motorized Transportation Plan Orting, WA

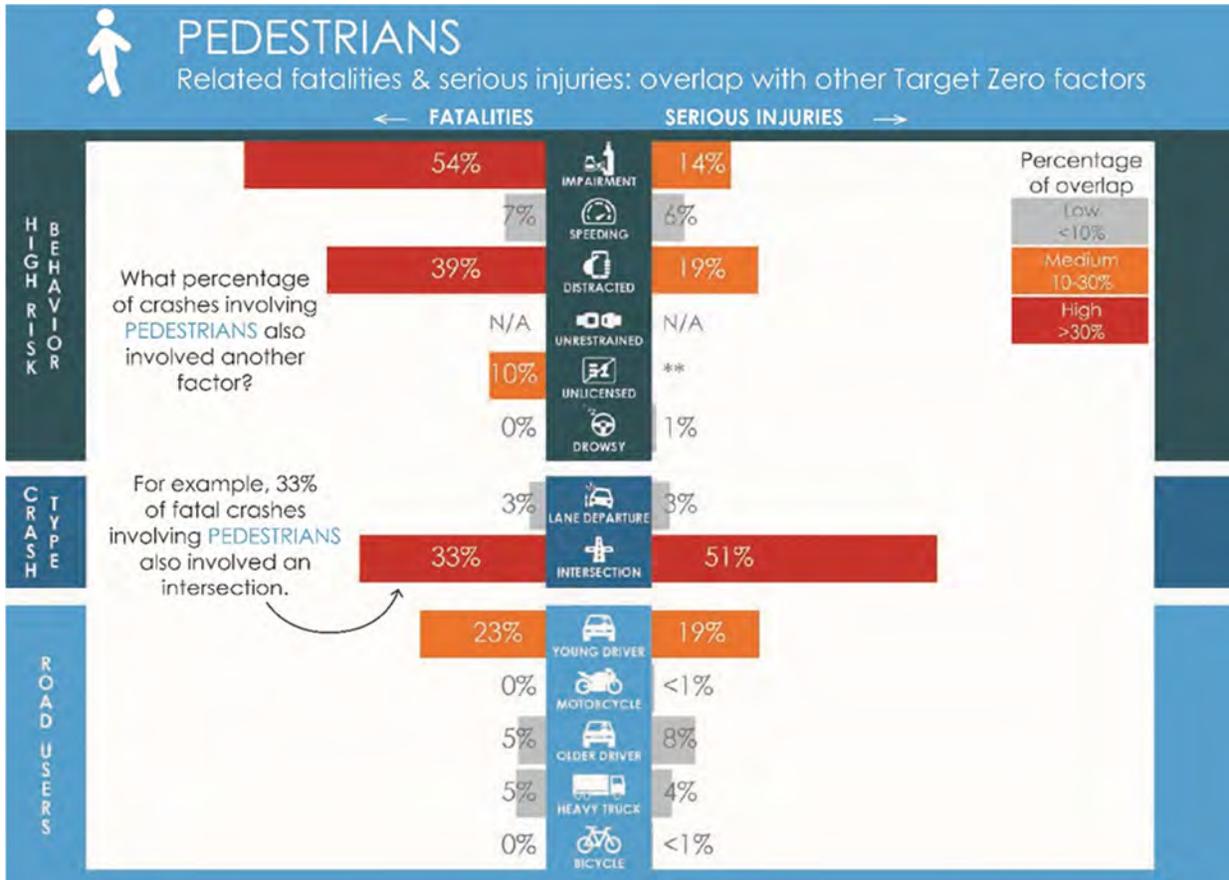


Figure 3-3. Contributing Factors in Pedestrian-Related Fatalities and Injuries
Source: Washington State Strategic Highway Safety Plan 2016: Target Zero, Zero Deaths & Zero Serious Injuries by 2030. Washington Traffic Safety Commission.

3.3 Bicycle Facilities

Target Zero also addresses bicycle safety, as well as the most common contributing factors in bicycle injuries and fatalities (Figure 3-4). Currently, 87 percent of the City of Orting’s transportation network has an acceptable level of stress on bicyclists, but there are areas where improvements can be made. These factors should be considered when determining how to best make those improvements. Vehicles making a left turn is listed as a Target Zero contributing factor to serious injuries or fatalities. All four of the recorded bicycle injuries over the last 5 years in Orting were caused by vehicles making a left turn.

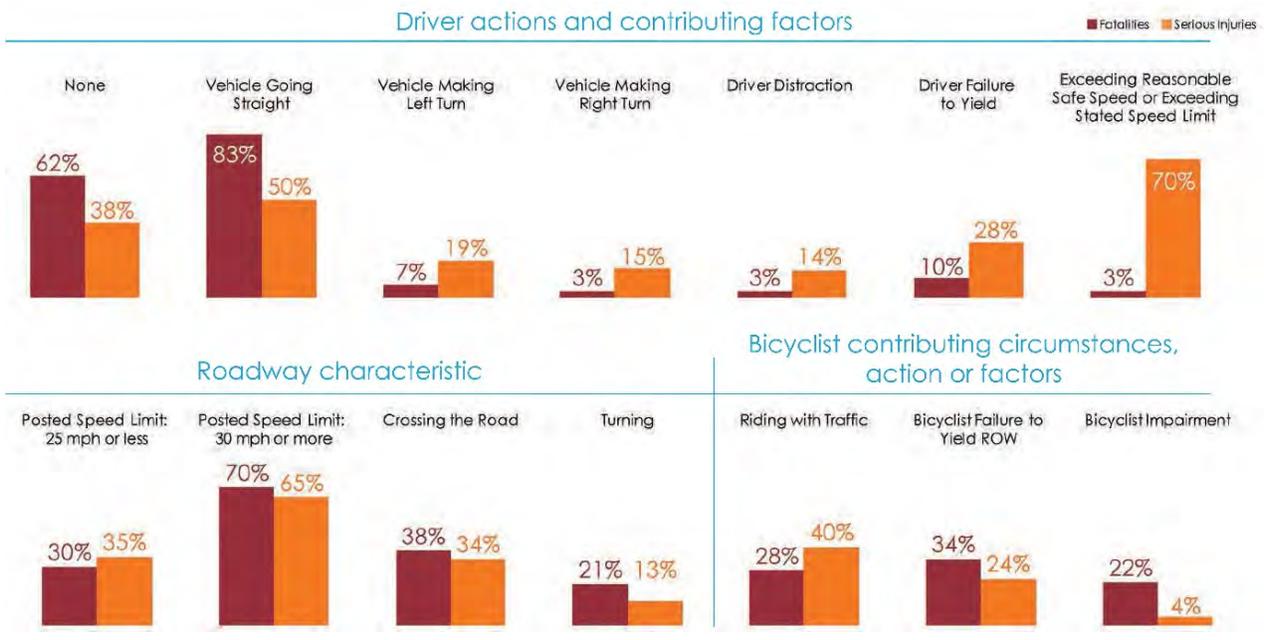


Figure 3-4. Contributing Factors in Bicyclist Fatalities and Injuries
 Source: Washington State Strategic Highway Safety Plan 2016: Target Zero, Zero Deaths & Zero Serious Injuries by 2030. Washington Traffic Safety Commission.

In addition, the National Association of City Transportation Officials (NACTO) created an Urban Bikeway Design Guide. The guide has chapters on bike lanes, cycle tracks, intersection treatments, bicycle signals, bikeway signing and marking, and bicycle boulevards. Each of these chapters has examples of successful implementation across the country. There are currently no bicycle lanes within the City of Orting; however, the City as a whole is relatively bicycle friendly. The Urban Bikeway Design Guide could be a useful tool in deciding if there are treatments the City would want to use to further improve the bicycle facilities within Orting.

4. EVACUATION FACILITIES

The City of Orting is located in an open valley, between the Puyallup and Carbon rivers, approximately 30 miles to the northwest of Mt. Rainier. Because Mt. Rainier is an active volcano, and Orting is located within the lahar hazard zone, the City has prepared for the chance of emergency evacuation. The evacuation routes are intended to move the greatest amount of people as fast as possible out of the lahar and flood danger zones. In the event of an emergency, it is entirely possible that people may evacuate by several modes, including walking. Therefore, these routes (see Figure 4-1) are referenced in the ONMTP, to ensure that emergency evacuation planning addresses all potential modes. This is particularly important should an event occur during the school day, when children may need to evacuate by bus or on foot.



5. PLANNED IMPROVEMENTS

In addition to addressing the existing deficiencies (the facilities creating high areas of pedestrian and bicycle levels of stress) in the non-motorized network, the City should also consider additional growth anticipated by 2030. The 2015 population estimate in Orting was 7,446, an increase of 10.4 percent from April 2010. By 2040, the City of Orting is expected to grow to 8,500 residents.

There are several key factors which present challenges for non-motorized travel in Orting:

Rural character of the City

The City of Orting, while compact along the downtown core, also has several areas that rate poorly for non-motorized travel primarily due to lack of sidewalks and bike lanes. Given that the City is small (less than 3 square miles) and largely rural in nature (as desired by residents), providing such facilities may not always be the best solution. The neighborhood roads have low posted speeds, which are conducive to safe non-motorized travel.

Major transportation facility (Washington Ave/SR 162) is a highway, and a main street

Washington Avenue is a major arterial and also has a paved shoulder, parking space, sidewalks, and a posted speed limit of 25 mph through the city core. The Foothills Trail runs parallel to Washington Avenue, making separate dedicated bike lanes on the roadway unnecessary, but this also affects the BLOS score.

Transit opportunities:

One factor impacting scores is the accessibility to transit facilities. Because of the population size, there are no transit options or opportunities within the City itself, although there are excellent bus and commuter rail options located in both Puyallup and Sumner there is no connectivity between Orting and those cities.

5.1 Pedestrian Facilities

5.1.1 Recommended Improvements

In order to address facilities with high pedestrian levels of stress, the suggested solutions are to complete gaps in the sidewalk and trail systems. The City is currently planning on replacing outdated ADA ramps in Old Town as well as widen sidewalks in Old Town. When these gap improvements and the suggested improvements are made, the resulting conditions should score acceptable PLOS scores of 1-3. Some areas will continue at a PLOS of 4-5 and do not need to be improved, simply due to the fact that these are subdivisions where sidewalks are not appropriate due to the rural character of those areas and the low posted speeds of the roadways. In these areas, a poor PLOS does not translate to a required improvement. It is recommended that some of the programs and policies included in Target Zero be considered (see section 5.1.2, Programs and Policies on page 5-5) for areas that desire an improved PLOS score. Other recommendations for the City are to:

- Widen evacuation route along Calistoga Street West towards Soldiers home.
- Widen the sidewalks on Calistoga Bridge.

- Improve City’s crosswalk safety.
- Pursue opportunities to work with Pierce County to provide ADA access to the levee system.

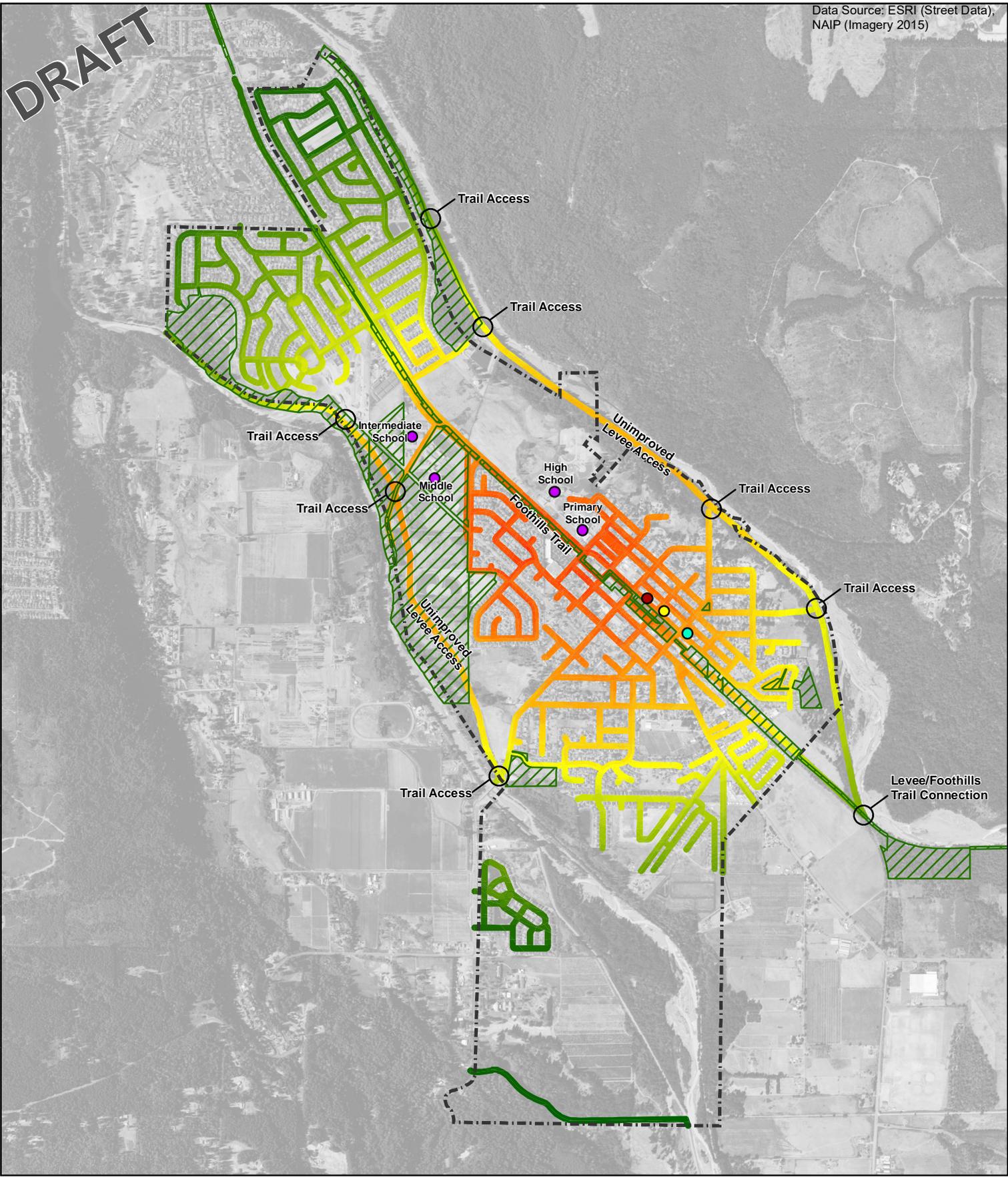
Non-motorized improvements could be prioritized in areas where pedestrian and bicycle activity is likely higher and supported by nearby land uses and destinations. This would include schools, parks, transit stops, downtown and areas with connections to the Foothills trail. These types of land uses and destinations are considered non-motorized generators and generally have a greater potential to encourage non-motorized travel. Figure 5-1 is a heat map which indicates via a color scale, places in Orting where non-motorized travel is likely to be higher. These areas of higher non-motorized travel could be prioritized for investments in non-motorized improvements and are indicated in red and orange. Areas shown in yellow or green are a lower priority for investment.



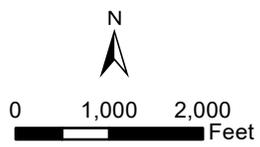
Date: 12/23/2016 Path: \\parametrix.com\pmx\PSO\Projects\Clients\1711-CityOfOrting\216-1711-020 On-Call 2014-2017\99Svcs\GIS\BikePed Service\mapdocs\Bike Ped\Figures\Orting_NonmotorizedImprovementPriorityAreas_V1.mxd

DRAFT

Data Source: ESRI (Street Data), NAIP (Imagery 2015)



Parametrix



- Downtown
 - Library
 - Orting Manor
 - School
 - City Limit
 - ▨ Park
- Non-Motorized Improvement Priority**
- High Priority
 - Low Priority

Figure 5-1. Non-Motorized Improvement Area Priority

Non-Motorized Transportation Plan
Orting, WA

5.1.2 Programs and Policies

Target Zero offers several categories of programs, project types, and policies that can be considered when making improvements to pedestrian facilities. Many of these are not capital improvements, but rather, steps that can be taken to increase overall awareness, improve travel behavior, and increase safety. In Target Zero, these strategies are broken out into education, engineering, enforcement, and policy. The City of Orting should determine which of these may be most appropriate in meeting their desired level of stress for pedestrians. Emergency Response is also addressed in Target Zero – due to unique conditions related to lahar and evacuation route planning in Orting, this topic is addressed separately (see Section 5.3 on page 5-8).

Some potential considerations include:

Education

- Promote the use of reflective apparel among pedestrians.
- Educate pedestrians about the dangers of distracted walking.
- Increase public awareness on the significance speed has on the severity of pedestrian injury.
- Improve training on pedestrian laws for law enforcement officials.
- Implement middle school pedestrian and bicycle safety training in school curriculum.
- Encourage campaigns such as Walking School Buses.

Engineering

- Safe Routes to School - the City has four different schools: Orting High School, Orting Middle School, Ptarmigan Ridge Elementary School, and Orting Primary School. Emphasizing safe routes to school would result in safer pedestrian pathways and sidewalks for everyone.
- Implement pedestrian safety zones, targeting geographic locations and audiences with pedestrian crash concerns.
- Improve safety at pedestrian crossings by installing refuge islands and shortening crossing distances with curb extensions where crosswalk enhancements are needed.
- Increase the use of rectangular rapid flashing beacons and pedestrian hybrid beacons where needed to enhance crosswalks.
- Implement programs that improve the built environment such as improving pedestrian connections to public transportation.
- Improve sight distance and visibility at pedestrian crossings by clearing vegetation to improve sight, extending crossing times, adding pedestrian scale illumination, etc.
- Provide more frequent pedestrian crossing options.
- Be sure pedestrian signing is consistent and appropriate for the zone it is in.

Enforcement

- Use enforcement and speed feedback signs to help motorists change speeding behavior.
- Expand targeted crosswalk enforcement and education for both motorists and pedestrians.

Leadership/Policy

- Implement Complete Streets policies to provide for all modes of transportation.
- Collect miles walked data, similar to collecting vehicle miles travelled.

More than half (57%) of pedestrian facilities and 67% of serious injuries occurred while the pedestrian was crossing the road.

In 2012–2014, there were no pedestrian fatalities on roads with a posted speed of 20 mph.

5.2 Bicycle Improvements

Overall, Orting rated well in the low levels of stress placed on bicyclists, with 87 percent of facilities meeting an acceptable level of stress. The single best way to achieve 100 percent acceptable level of stress for bicycles is to add bike lanes to any roadway with a BLOS of 4 or 5. However, bike lanes may not be desirable or reasonable on every local access or neighborhood road, where low traffic volumes and low speeds already provide a safe condition for non-motorized uses. Old Pioneer Way is an example of a street that scored a BLOS of 5 but will not need improvements because it is paralleled by the Foothills Trail, which is used by non-motorized road users in place of Old Pioneer Way. Programs and policies that promote and enhance bicycle travel should be considered, primarily in places where reasons for poor BLOS have a reasonable explanation, such as on Old Pioneer Way.

A focus on connectivity to the Foothills trail is one way to make bicycle improvements. The Foothills trail is a popular route for bicyclists and providing access points with a low Level of Stress would improve the City's overall BLOS. Figure 5-1 shown on page 5-3 under Pedestrian Facilities emphasizes that non-motorized generators, such as the Foothills trail, are generally a higher priority for improvement. In terms of bicycle use, trail access points in orange or red are areas that would benefit from improvement projects.

- Calistoga Street West
- Kansas Street Southwest
- Consider the addition of bike lanes on Calistoga Street and Kansas Street.
- Consider striping the trail with "fast" and "slow" lanes for bicycle and foot traffic.
- Removing mid-block crossings with Foothills trail.

5.2.1 Programs and Policies

Many of the following potential projects are also suggestions from Target Zero.

Education

- Promoting the use of reflective apparel and bicycle lights by bicyclists.
- Including bicycle safety awareness in drivers' education courses.
- Improving training on bicycle laws for law enforcement officers.
- Encouraging local schools to implement Safe Routes to School.

Engineering

In addition to bike lanes, a variety of treatments could be considered, including: narrower travel lanes, medians, chokers or pinch points, horizontal lane shift, vertical traffic calming, traffic diverter islands, roundabouts, two-way streets, trees, and tighter curb radii.

Near intersections and crossings, the engineering treatments could include: intersection crossings, green-colored pavement, bike boxes, two-stage turn boxes, bicycle signals, median refuge islands, active warning beacons and hybrid beacons. Many of these suggestions and successful implementation examples are listed in the *Urban Bikeway Design Guide*, including:

- Implement speed management using target speeds and context sensitive solutions.
- Utilize road diets/reconfigurations to improve safety for all roadway users.
- Follow national guidelines on the use of reflective markings and sign material.
- Construct more bike lanes, separate bicycle lanes, and separated bicycle facilities.
- Create bicycle boulevards on low volume, low speed streets.
- Install colored bicycle boxes at intersections.

Leadership/Policy

- Increase number of people bicycling because there is safety in numbers.
- Encourage bicycle helmet use for both children and adults.
- Implement Complete Streets policies to provide for all modes of transportation.
- Collect Bicycle Miles Traveled similar to collecting Vehicle Miles traveled.

5.3 Evacuation Routes

Evacuation and emergency planning and preparedness are covered by the City's Emergency Management team under a document called Emergency Preparedness. However, it is worth emphasizing in this ONMTP, to ensure that evacuation route planning also meets the needs of anyone traveling on foot or by mode other than car should a lahar occur. The City currently has several evacuation routes (see Figure 4-1, located on page 4-3).

5.3.1 Considerations

The ONMTP is not requiring specific evacuation route improvements, as these are being addressed in other areas of City planning. However, in order to support all modes, particularly during emergencies, it is worth noting a few key projects and areas that should be addressed in the City's hazard mitigation and emergency planning.

Orting Emergency Evacuation Bridge System

The Orting Emergency Evacuation Bridge System is a proposed an evacuation improvement, which was developed from a concerned group of parents. The fear was that in an actual emergency the current evacuation routes would be compact with vehicles slowing the evacuation process for pedestrians and vehicles alike. Out of this concern, a pedestrian only evacuation route, was born. The route is accessible to all four schools in the area and uses Rocky Road to lead pedestrians to higher and safer ground. This project is not currently fully funded, however preliminary design is complete and funding is being actively pursued.

Sidewalk Gaps/System Repairs

Repair/rebuild elements of current evacuation routes that may need to be improved, such as heavily used sidewalks and bridges along the routes.

6. IMPLEMENTATION

As with the city's Transportation Plan, the ONMTP needs to be consistent with several statewide and regional planning objectives. This chapter describes the ONMTP as it pertains to state and regional planning, and provides a proposed list of recommended projects with associated implementation timeline and possible funding sources.

6.1 Consistency with other Planning Efforts

6.1.1 Growth Management Act (GMA)

The Washington State Growth Management Act (GMA) was designed as a way for state and local governments to identify as well as protect natural resources when planning urban areas of growth. GMA, specifically Revised Code of Washington (RCW) 36.70A.070(6) expects several requirements to be met relating to the transportation element of a comprehensive plan. The GMA requires a financial analysis to include:

- An analysis of a jurisdiction's funding capability by comparing needs with likely funding sources.
- A multi-year financing plan based on the needs addressed in the most recent comprehensive plan. Pieces of the multi-year plan serve as the foundation for the development of the Transportation Improvement Program (TIP), a 6-year program covering street, road, or transit programs required by cities and other transit agencies.
- If possible funding does not meet all the needs, there needs to be an element of the financial plan dedicated to addressing how additional funding will be raised or how land use assumptions will be reassessed at a later time to ensure level of service standards are met.

6.1.2 VISION 2040

The objective of VISION 2040 surrounds the idea of active transportation, meaning bicycle and pedestrian planning. VISION 2040 is the Puget Sound region's long range growth management, economic, and transportation strategy. The plan calls for developing a transportation system that both creates a variety of travel choices and preserves open space and the environmental quality. Non-motorized transportation, including pedestrians and bicycles, play a substantial role in attaining these goals. The goals established should implement efficient and effective projects and programs.

6.1.3 Transportation 2040

Transportation 2040 is a 30 year plan intended as a course of action for the transportation quality in the central Puget Sound region. With an anticipated growth rate to 1.5 million people by 2040, this plan is critical to the region. There is also an expected 1.2 million new jobs. Both jobs and people will boost travel demand by an estimated 40 percent. With the increased need, Transportation 2040 outlines a financial plan that works to shift how transportation improvements are funded in the long-term. The plan also acknowledges the reliance on those using the improvements also paying for them as well as strategies to reduce transportation contributions to environmental changes.

6.1.4 Americans with Disabilities Act

Puget Sound Regional Council has a commitment to the Americans with Disabilities Act (ADA) and adopted the Coordinated Transit-Human Services Plan in 2014 to outline how transit agencies, social services, schools, and other transportation providers can work together to improve special needs transportation throughout multiple counties. Pierce, Snohomish, King and Kitsap Counties were all involved in this plan.

6.2 Recommended Improvements and Financial Strategy

Based upon the existing conditions, and the City’s desired level of stress standards for pedestrians and bicyclists, several projects have been identified that will allow the City to achieve their goals. Table 6-1 summarizes each recommended improvement project or program, as well as possible funding sources. An explanation of cost range is listed below.

Table 6-1. Non-Motorized Improvement Projects

Project/Program	Description/Timeline	Cost Range	(Potential) Funding Sources
Pedestrian			
Sidewalk Gap Closures and ADA Compliance	Widen sidewalks for ADA acceptable use and replace ADA ramps.	\$2,000 – \$6,000 per ADA ramp \$570 – \$650 per linear foot to construct sidewalks	CBDG (Community Block Development Grant)
Trail Enhancements	Add pavement markings/stripping, such as “fast” and “slow” lanes to separate bicycle traffic and foot traffic.	\$1 – \$2 per linear foot of stripping \$200 – \$600 per each marking symbol	TAP (Transportation Alternatives Program)
Safe Routes to School	Improve sidewalks and routes to school so that children can walk to school safely <i>*based off of sidewalk improvements listed in the TIP ranging from 5-foot sidewalks to 12-foot sidewalks.</i>	\$570 – \$650 per linear foot to construct sidewalks	Safe Routes to School Grant
Bicycle			
Trail Enhancements	Add pavement markings/stripping, such as “fast” and “slow” lanes to separate bicycle traffic and foot traffic.	\$1 – \$2 per linear foot of stripping \$200 – \$600 per each marking symbol	
Evacuation			
Orting Emergency Evacuation Bridge System	<i>**This project is included to highlight the importance of evacuation route planning for all modes. This project will likely be funded through multiple sources.**</i>	Phase 1 – \$7 million Phase 2 – \$40 million	Hazard Mitigation Grant
Evacuation Route Improvements	<i>Widen the sidewalks on the current evacuation route. Widen the west side of Calistoga to 8 – 12 feet. Widen the East side of the bridge sidewalk to 8 – 12 feet.</i>	\$287,400 – \$362,000	Grant (EMPG) Emergency Management Performance

All cost range estimates are derived from the Cost for Pedestrian and Bicyclist Infrastructure Improvements: a Resource for Researchers, Engineers, Planners, and the General Public Manual (2013) and from recently constructed projects in the region.

ADA Ramps: The cost to replace or construct ADA ramps is approximately \$2,000 to \$6,000 per ramp. This cost is estimated from *Cost for Pedestrian and Bicyclist Infrastructure Improvements Manual* (2013) and recently constructed projects in the region.

Sidewalk Gap Closures: Sidewalk gap closures are estimated to cost between \$570 and \$650 per linear foot depending on sidewalk widths, pavement types, and amount constructed. This cost is a high level planning cost that includes the major components of a sidewalk construction project, including clearing and grading, pavement and curb and gutter removal, traffic curb and gutter installation, storm drainage improvements, engineering/construction management fees, and contingencies.

Trails: Trail Enhancements were calculated from several different sources, including the *2015 City of Orting Parks, Trails and Open Space Plan*, the *Manual Cost for Pedestrian and Bicyclist Infrastructure Improvements: a Resource for Researchers, Engineers, Planners, and the General Public* (2013), and recently constructed projects in the region.

Currently, there are no proposals to construct or rebuild new portions of the Foothill's Trail in Orting. However, trail enhancements, such as adding "fast" and "slow" lanes, could be completed. This type of trail enhancement would include adding pavement markings and striping to the existing asphalt trail.

The average cost of striping the trail would be between approximately \$1 and \$2 per linear foot. Pavement marking symbols, which would be placed at intersections and approximately every 500 feet, would be approximately \$200 to \$600 each.

Safe Routes to School: Safe Routes to Schools (SRTS) projects primarily consist of sidewalk and bicycle improvements. Once SRTS routes are identified, typical improvements to make bicycling and walking safer can be completed:

- Stripe bicycle lanes: \$26,000 – \$53,000 per mile
- Construct sidewalk: \$570 – \$650 per linear foot
- Construct pedestrian crossings: \$500 – \$3,000 each
- Construct pedestrian safety island: \$10,000 – \$75,000 each

Other improvements can include general traffic calming measures, such as high visibility crosswalks, raised crosswalks, speed humps/tables, and signage.

Orting Emergency Evacuation Bridge System: The cost to construct the Orting Emergency Evacuation Bridge System is estimated to be \$47 million dollars. This facility could be completed in two phases, with the first estimated to cost \$7 million and the second estimated to cost \$40 million.

Emergency Evacuation Route: The costs to complete improvements to the emergency evacuation route include widening the sidewalks. Between Washington Ave S and the Puyallup River, Calistoga Ave is approximately 3,800 feet in length. It would cost between approximately \$2.3 to \$2.5 million to construct an 8- to 12-foot sidewalk on the west side of the street between Washington Ave S and the Puyallup River. The existing bridge over the Puyallup River is approximately 500 feet in length and the existing sidewalks are 6 feet wide. The sidewalks on the bridge could be widened to between 8 and 10 feet on either side by reducing the widths of the travel lanes to between 13 and 12 feet each (from 15 feet wide). Increasing the sidewalk width on one side of the bridge would cost approximately \$140,000 to \$150,000. Providing sidewalks wider than 10 feet would require expansion of the bridge structure, which would greatly increase construction costs. Expansion of the bridge could require additional girders and foundations to accommodate a wider and heavier structure.

Orting 2040 Transportation Plan

Prepared for



September 2019

Prepared by
Parametrix

Orting 2040 Transportation Plan

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CERTIFICATION

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.

Prepared by Erinn Ellig

Checked by Ryan LeProwse

Approved by JC Hungerford

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ACRONYMS AND ABBREVIATIONS

ADA	Americans with Disabilities Act
BLOS	Bicycle Level of Stress
City	City of Orting
FAST	Fixing America’s Surface Transportation
FGTS	Freight and Goods Transportation System
FHWA	Federal Highway Administration
GMA	Washington State Growth Management Act
LOS	level of service
mph	miles per hour
NMTP	Non-Motorized Transportation Plan
PLOS	Pedestrian Level of Stress
PSRC	Puget Sound Regional Council
RTCC	Rural Town Centers and Corridors
Sound Transit	Central Puget Sound Regional Transit Authority
SR	State Route
STIP	Statewide Transportation Improvement Program
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
WSDOT	Washington State Department of Transportation

1. INTRODUCTION

The Orting 2040 Transportation Plan defines the existing and future transportation vision for Orting and will replace the 2015 Transportation Element and Appendix from the Orting Comprehensive Plan published in June 2015. This transportation plan contains a description of existing transportation conditions, travel forecasts, service standards and analysis, and transportation recommendations. The following analysis and conclusions will inform the City of Orting 2040 Comprehensive Plan.

The City of Orting has a unique configuration with respect to transportation. The community lies in the Orting Valley between the Carbon and Puyallup Rivers. State Route (SR) 162 runs between the two rivers and links Orting with Sumner and Buckley. Orting is a small rural community of just under 8,000 residents—more than twice the population just 20 years ago. Many of the local city streets are quiet, tree lined, with low traffic volumes. The older portion of the City is laid out on a traditional grid system and some recent developments feature a curvilinear circulation pattern.

2. GOALS

- Goal T1** **Maintain a transportation system that accommodates the separation of through and local traffic, provides adequate internal circulation, and interconnects effectively to the regional highway, non-motorized, and public transportation systems is responsive to the mobility needs of City businesses and neighborhoods, and guides future developments.**

- Goal T2** **Coordinate with local, regional, state, and federal agencies in the development and operation of the transportation system. In particular, support City, County, and state implementation of comprehensive solutions to capacity, safety, and circulation problems with SR 162.**

- Goal T3** **Establish a safe and convenient pedestrian and bicycle circulation system linking residential communities with key destinations.**

- Goal T4** **Fund transportation facility improvements with federal, state, and local public and private sources.**

- Goal T5** **Realize the vision for Washington Avenue as Orting’s main street, providing high quality aesthetic design in conjunction with multi-modal mobility, pedestrian safety, and infill economic development.**

- Goal T6** **Meet federal and state air quality requirements and work with state, regional and other local agencies to develop transportation control measures and/or mobile source emission reduction programs that may be warranted to attain or maintain air quality requirements.**

2.1 Vehicular Transportation Policies

2.1.1 Street Network

- Policy T1** Periodically update traffic forecasts and levels of service analysis on all arterials in the City.

- Policy T2** Provide adequate, system-wide capacity on arterial streets to avoid diversion of excess traffic from congested arterials to neighborhood streets.

- Policy T3** Maintain truck routes on Principal Arterials and enforce truck use accordingly.

- Policy T4** Develop the local street system to ensure connectivity between adjacent developments and provide connections to arterials from neighborhood collectors.

- Policy T5** Existing non-through (dead-end) streets shall be linked together whenever practical.

- Policy T6 Minimize the use of cul-de-sacs, dead-end streets and other designs that reduce connectivity between neighborhoods.
- Policy T7 Protect street rights-of-way from encroachment by structures, fences, retaining walls, landscaping, or other obstructions to preserve the public's use of the right-of-way, and to ensure safety and mobility.

2.1.2 Street Classification

- Policy T8 Maintain a consistent classification of streets as Principal-, Minor-, and Collector Arterials, Neighborhood Collector Streets and Local Streets according to function, based on federal, state, and regional guidelines so that needed traffic capacity may be preserved and planned street improvements will be consistent with those functions.
- Policy T9 Limit the number of residences that can be served by a dead end/ cul-de-sac street.

2.1.3 Street Design Standards

- Policy T10 Maintain a comprehensive street improvement plan for city streets that implements the desired streetscape for each functional classification. Arterial street standards shall provide guidance on the width of lanes, driveway access, right-of-way width, sidewalks median treatments, setbacks, lighting, pedestrian facilities, landscaping, or other improvements.
- Policy T11 Design street improvements to fit the character of areas they serve.
- Policy T12 Maximize and maintain the capacity of arterial streets through the provision of turn lanes and other auxiliary lanes rather than street widening solutions.
- Policy T13 Encourage shared use of driveways served by arterials.
- Policy T14 Use street design standards to minimize pavement widths while accommodating on-street parking, and allowing cars to pass, thereby slowing the speed of vehicles on local streets, improving pedestrian safety and allowing for landscaping.
- Policy T15 Require safe, attractive sidewalks on all streets.
- Policy T16 Provide comprehensive street lighting, including lights for pedestrians on sidewalks and trails, using such factors as adjacent land uses, hazardous street crossings, transit routes, schools, and parks.

2.1.4 Traffic Safety

- Policy T17 Monitor traffic accidents, citizen input/complaints, traffic violations, and traffic growth to identify and prioritize locations for safety improvements.
- Policy T18 Consider the use of devices that increase safety of pedestrian crossings such as flags, in-pavement lights, raised crosswalks, colored and textured pavements.

2.1.5 Neighborhood Traffic Control

Policy T19 Consider design options for application of neighborhood traffic calming devices such as median barriers, speed humps, speed tables, raised crosswalks, raised intersections, traffic circles, roundabouts, chicanes, chokers, neckdowns, and textured pavements on local streets where traffic and pedestrian safety is of concern. Neighborhood Collectors shall receive the first priority followed by other local streets. Installation of neighborhood traffic control devices shall be avoided on arterials.

2.1.6 Property Access

Policy T20 Minimize local property access on Principal and Minor arterials.
Policy T21 Consolidate existing access driveways on arterials when street improvements are implemented, or redevelopment proposals are made.

2.1.7 Environmental

Policy T22 Participate in regional efforts to improve air quality by promoting alternatives to the single occupant vehicles; use of cleaner fuels; implementing transportation demand management goals and policies and maintaining or improving the operating efficiency of the transportation system.
Policy T23 Mitigate noise impacts when designing future roadway improvements.
Policy T24 Reduce the amount of impervious surfaces (e.g., streets, driveways) to the extent practicable.
Policy T25 Minimize harmful pollutants generated by transportation-related construction, operations, and maintenance activities from entering surface and groundwater resources.

2.1.8 Level of Service

Policy T26 Maintain intersection level of service (LOS) according to the following standards:

- LOS E on arterial intersections in the Mixed-Use Town Center
- LOS D on all other arterial intersections

Policy T27 Transportation improvement projects, strategies and actions needed to serve new developments shall be in place at the time new development occurs or be financially committed and scheduled for completion within six years of permit approvals.

2.1.9 Land Use/Transportation

Policy T28 Consider the effect of the City's growth and transportation improvement programs on other adjacent jurisdictions through coordination with county, state, and regional agencies

2.1.10 Development Impact Mitigation

- Policy T29 Maintain and apply standardized transportation impact mitigation procedures and strategies, including payment of traffic impact fees.
- Policy T30 Require dedication of right-of-way as a condition of development approval when the need for such right-of-way is determined in the permit approval process
- Policy T31 Maintain a right-of-way use permit process to minimize environmental and traffic impacts during construction.

2.2 Pedestrian and Bicycle Policies

- Policy T32 Promote pedestrian and bicycle networks that safely access commercial areas, schools, transit routes, parks, and other destinations within Orting and connect to adjacent communities, regional destinations and routes.
- Policy T33 Require new development to ensure safety, comfort and convenience of pedestrians and bicyclists.
- Policy T34 Designate and construct segregated internal pedestrian circulation systems in new or redeveloping commercial-retail districts. Provide connectivity to nearby transit stops using sidewalks, landscaping, covered walkways, or other treatments.
- Policy T35 Promote a comprehensive and interconnected network of pedestrian and bike routes within and between neighborhoods.
- Policy T36 Require trail routes and/or sidewalks where appropriate in PUD, plat and short plat approvals.
- Policy T37 Work progressively to provide and maintain sidewalks in established neighborhoods. Priority shall be given to all public facilities such as transit routes, schools and parks, and multi-family housing, commercial areas, and gaps in the existing sidewalk system.
- Policy T38 Provide striped, on-street bicycle facilities on arterial streets on paved shoulders or within wide curb lanes to ensure safety for bicyclists.
- Policy T39 Ensure that sidewalks meet requirements of the Americans with Disabilities Act.
- Policy T40 Identify non-motorized facility improvements on school walk routes to increase pedestrian safety.
- Policy T41 Require secure (racks and lighting) bicycle parking at commercial and institutional facilities along with automobile parking.

2.3 Regional and Local Coordination Policies

- Policy T42 Ensure coordination and consistency with state, regional and local transportation plans.
- Policy T43 Coordinate the Six-Year Transportation Improvement Program with adjacent jurisdictions' where City projects have regional implications.
- Policy T44 Participate in regional transportation planning to ensure that the City's interests are reflected appropriately.

2.4 Funding and Implementation Policies

2.4.1 Funding

- Policy T45 Maintain a street utility for the purpose of supporting preservation and ongoing maintenance and operations of its transportation systems pursuant to RCW 82.80.
- Policy T46 Maximize outside funding from regional, County, State, or Federal sources.
- Policy T47 Emphasize multimodal enhancements to the transportation system in funding transportation programs.
- Policy T48 Ensure the adopted impact fee rate schedule reflects the current land use and transportation forecasts and needs.
- Policy T49 Update the six-year Transportation Improvement Program (TIP) annually to implement the Long-Range Capital Facility Plan.

2.4.2 Implementation

- Policy T50 Maintain and monitor a scheduled street maintenance program including regular street sweeping to ensure that all arterial and neighborhood collector streets shoulders and/or designated bike lanes are clear of sand, glass, and debris.

2.5 System Air Quality Policies

- Policy T51 The City's transportation system shall conform to federal and state Clean Air Acts by maintaining conformity with the Metropolitan Transportation Plan of the Puget Sound Regional Council and by following the requirements of Chapter 173-420 of the Washington Administrative Code.
- Policy T52 Travel in modes other than single-occupant vehicles shall be encouraged. Transportation demand management strategies will be employed to discourage the use of single-occupant vehicles and to encourage non-motorized transportation.
- Policy T53 Consider air quality effects of future development when considering annexations, amendments to the Comprehensive Plan and development regulations, and during project review processes.
- Policy T54 Establish standards for the control of particulate matter on paved public roads.

3. EXISTING CONDITIONS

This section summarizes the existing (2017) transportation system for all modes of travel in Orting. This information supports the city's comprehensive planning process, which must, among other things, contain travel forecasts, a level of service standard, be regionally coordinated, and meet concurrency requirements. The transportation element for the City of Orting must meet the requirements of the GMA and will be certified by the Puget Sound Regional Council. The element will contain a description of existing transportation conditions, travel forecasts, service standards and analysis, and transportation recommendations, all of which will be coordinated with the county and the state.

3.1 Transportation Network Overview

The roadway network in Orting consists of corridors serving different travel needs. The main thoroughfare is SR 162, which runs northwest/southeast through the center of Orting. Calistoga Street W is the other significant arterial in the city that provides an east/west link across the Puyallup River and to the Orting-Kapowsin Highway. There are minimal east/west regional connections into and out of Orting.

3.1.1 Roadway Functional Classification

As Orting continues to grow, the internal street network will continue to be developed. City streets are classified into different categories to guide development and define the degree to which they provide through movement and land access functions. Roadway classification is based upon guidelines prepared by the Federal Highway Administration (FHWA) and administered by the Washington State Department of Transportation (WSDOT). City streets in Orting are classified into four functional classifications that are accompanied by different land use policies and street standards. The four classifications are:

- **Principal Arterials**, which are streets and highways that carry the greatest portion of through or long-distance traffic. Such facilities serve the high-volume travel corridors that connect major generators of traffic. The selected routes provide an integrated system for complete circulation of traffic, including ties to the major rural highways entering urban areas.
- **Minor Arterials**, which are streets and highways that connect with remaining arterial and collector roads that extend into the urban area. Minor arterial streets and highways serve less concentrated traffic-generating areas, serve as boundaries to neighborhoods, and collect traffic from collector streets. Although the predominant function of minor streets is the movement of through traffic, they also provide for considerable local traffic that originates or is destined for points along the corridor.
- **Collectors**, which are streets that provide direct services to residential areas, local parks, churches, and areas with similar land uses. To preserve the amenities of neighborhoods, they are usually spaced at about 0.5-mile intervals in order to collect traffic from local access streets and convey it to major and minor arterial streets and highways. Collector streets are typically 1 to 2 miles in length. Direct access to abutting land is essential.
- **Local Access Streets**, which are the remaining streets that allow access to individual homes, shops, and similar destinations. They provide direct access to abutting land and to the higher classification of roadways. Through traffic is discouraged.

Figure 3-1 shows the functional classification of the roadways within the City.

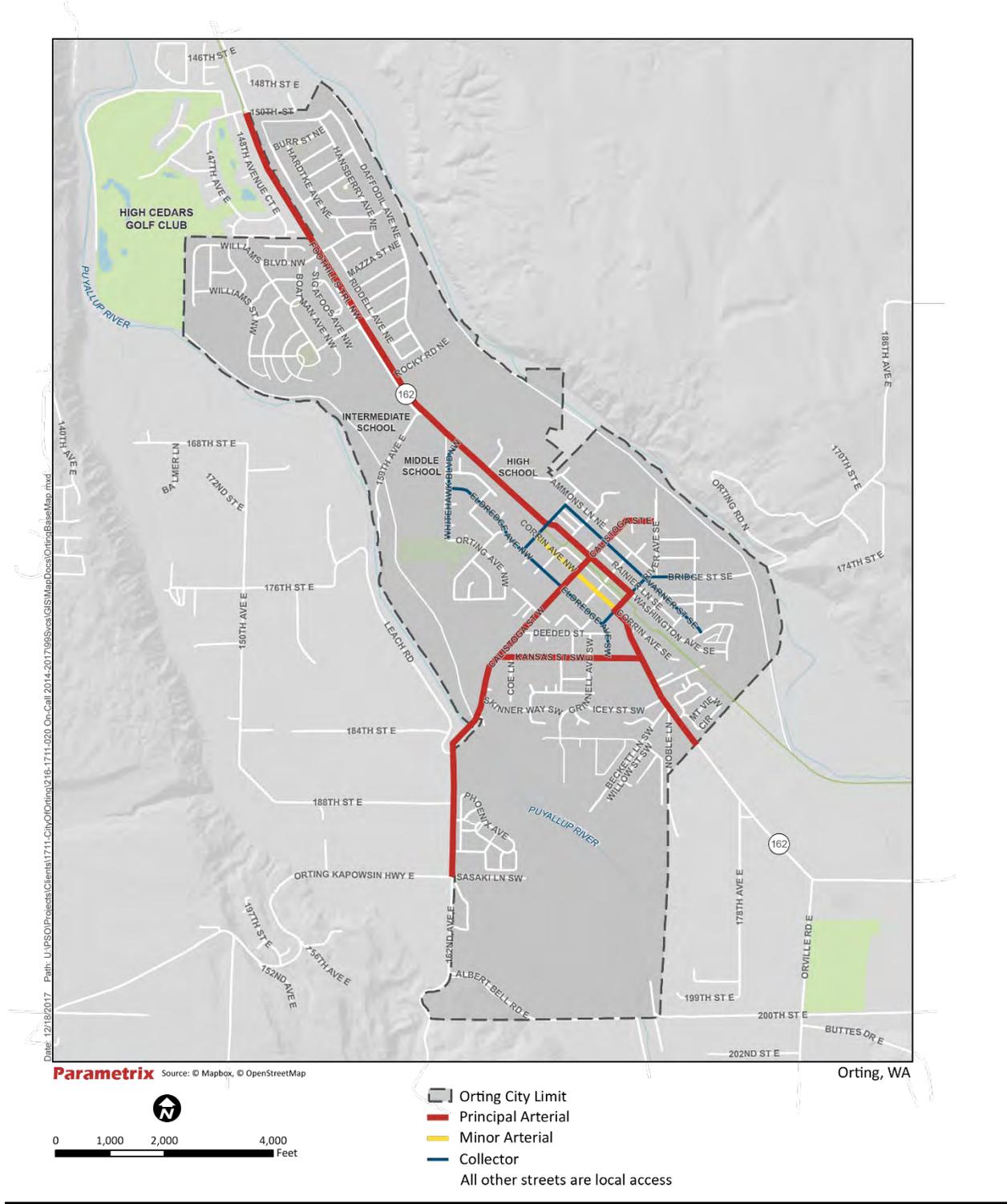


Figure 3-1. Orting Roadway Functional Classification

State-owned Transportation Facilities and Highways of Statewide Significance

In 1998, the Washington State Legislature enacted the “Level of Service Bill” (House Bill 1487) that amended the GMA to include additional detail regarding state-owned transportation facilities in the transportation element of comprehensive plans. PSRC, in 2003, adopted level of service standards for regionally significant state highways. Regionally significant state highways are state transportation facilities that are not designated as highways of statewide significance. Within Orting, no roadways have been designated as a Highway of Statewide Significance in WSDOT’s Highway System Plan. SR 162, which links Orting with Sumner and Buckley, is the only state-owned facility within the planning area and is designated as a Regionally Significant State Highway. WSDOT completed a study of SR 162 in June 2017 to identify strategies to increase mobility and improve safety in the corridor. Although the scope of the study was outside of the Orting City limits, potential improvement options could improve traffic flow and safety for vehicles exiting and entering Orting. Improvement strategies identified in the study will be incorporated in WSDOT’s Corridor Sketch Phase II for SR 162 and prioritized for funding on a statewide basis.

3.1.2 Roadway Network

The primary roadway network in Orting comprises the following:

- **State Routes:** SR 162 runs northwest/southeast through Orting, providing the primary connection to SR 512 and Interstate 5. Outside of the city limits, SR 162 is a two-lane principal arterial with limited shoulders and a posted speed limit of 50 miles per hour (mph). Within the city limits, the roadway is known as Washington Avenue N and is a two-lane principal arterial with a narrow painted median and paved shoulders and has parking on both sides of the road in the downtown core. The posted speed limit is 35 mph and reduces to 25 mph near Orting High School.
- **Pierce County Roadways:** Orting-Kapowsin Highway is a two-lane major arterial, with a posted speed limit of 35 mph along most of its length. Shoulders have a gravel surface, with a walking path along the east side of the road in some areas. It runs adjacent to the city limit line for a short distance south of the Puyallup River before turning into Calistoga Street W.
- **Local Transportation System:** Calistoga Street W is the primary local street that provides east/west travel. Calistoga Street W is a two-lane roadway with intermittently paved or graveled shoulders and sidewalks on the north side. Other local streets in the city provide access to the downtown area of Orting, and commercial and residential areas.

Table 3-1 provides an existing conditions inventory of many of the roadways in the area, including functional classification, shoulder type, parking, sidewalks, bicycle lanes, and posted speed limits.

Table 3-1. Roadway Inventory – Existing Conditions

Roadway	Functional Classification	Shoulder	Parking	Sidewalks	Bicycle Lane	Speed Limit (mph)
SR-162/ Pioneer Way	Principal arterial	Paved	No	Interrupted	No	50/35/25
Washington Avenue N	Principal arterial	Paved	Yes	Both	No	25
Orting-Kapowsin Highway	Principal arterial	Gravel	No	No	No	35
Varner Avenue NE	Collector	Gravel/grass	Yes	Both	No	Not posted

Table 3-1. Roadway Inventory – Existing Conditions (continued)

Roadway	Functional Classification	Shoulder	Parking	Sidewalks	Bicycle Lane	Speed Limit (mph)
Calistoga Street W	Principal arterial	Paved/gravel	Yes	Both	No	25
Whitehawk Boulevard	Collector	Paved	Yes	Both	No	25
Eldredge Avenue	Collector	Gravel/grass	Yes	Whitesell north—both sides; Safeway south—one side	No	Not posted
Whitesell Street	Collector	None	No	One side	No	Not posted
Corrin Avenue	Minor arterial	Paved	Yes (angle parking downtown)	Both	No	Not posted
Bridge Street	Collector	Gravel/grass	Yes	Both	No	Not posted
Kansas Street SW	Principal arterial	Paved	Yes	Both	No	Not posted
Harman Way	Principal arterial	Paved	Yes	Yes	No	Not posted

3.2 General Purpose Traffic

General purpose traffic volumes during the PM peak hour were collected at 19 intersections throughout Orting in April 2017:

- Intersection A: Washington Avenue N and Williams Boulevard NW
- Intersection B: Washington Avenue N and Lane Boulevard NW
- Intersection C: Washington Avenue N and Rocky Road NE
- Intersection D: Washington Avenue N and Old Pioneer Way NW
- Intersection E: Washington Avenue N and Whitehawk Boulevard NW
- Intersection F: Washington Avenue N and Ammons Lane NE
- Intersection G: Washington Avenue N and Cardinal Lane
- Intersection H: Washington Avenue N and Whitesell Street S
- Intersection I: Washington Avenue S and Calistoga Avenue W
- Intersection J: Washington Avenue S and Train Avenue S
- Intersection K: Washington Avenue SE and Bridge Street S
- Intersection L: Bridge Street S and Harman Way S and Corrin Avenue E
- Intersection M: Harman Way S and Kansas Street SW
- Intersection N: Calistoga Avenue W and Corrin Avenue SW
- Intersection O: Calistoga Avenue W and Eldredge Avenue SW

- Intersection P: Calistoga Street W and Kansas Street SW
- Intersection Q: Train Street SW and Van Scoyoc Avenue East
- Intersection R: River Avenue SE and Varner Avenue SE and Bridge Street SE
- Intersection S: Eldredge Avenue NW and Whitesell Street S

Figure 3-2 summarizes the intersection counts. Traffic volumes during the PM peak hour represent the highest hourly volume of vehicles passing through an intersection during the 4:00 to 6:00 PM peak period. Because the PM peak hour volumes represent the highest volumes of the average day, these traffic volumes were used for the base year operations analysis, and as the basis for future year traffic volume projections.

3.2.1 Intersection Level of Service

Intersection level of service (LOS) is a term used to describe the operating conditions and amount of delay a driver will experience while traveling through an intersection or along a roadway. LOS ranges from A (very little delay) to F (long delays and congestion). **Table 3-2** summarizes the amount of delay in seconds associated with each LOS designation. The LOS/delay criteria for stop-sign-controlled intersections are different than for signalized intersections because driver expectation is that a signalized intersection is designed to carry higher traffic volumes and experience greater delay. For signalized intersections, the LOS ranges from A with a delay of less than 10 seconds to F with a delay of more than 80 seconds. For stop-sign-controlled intersections, LOS A also has a delay of less than 10 seconds, while LOS F has a delay of more than 50 seconds.

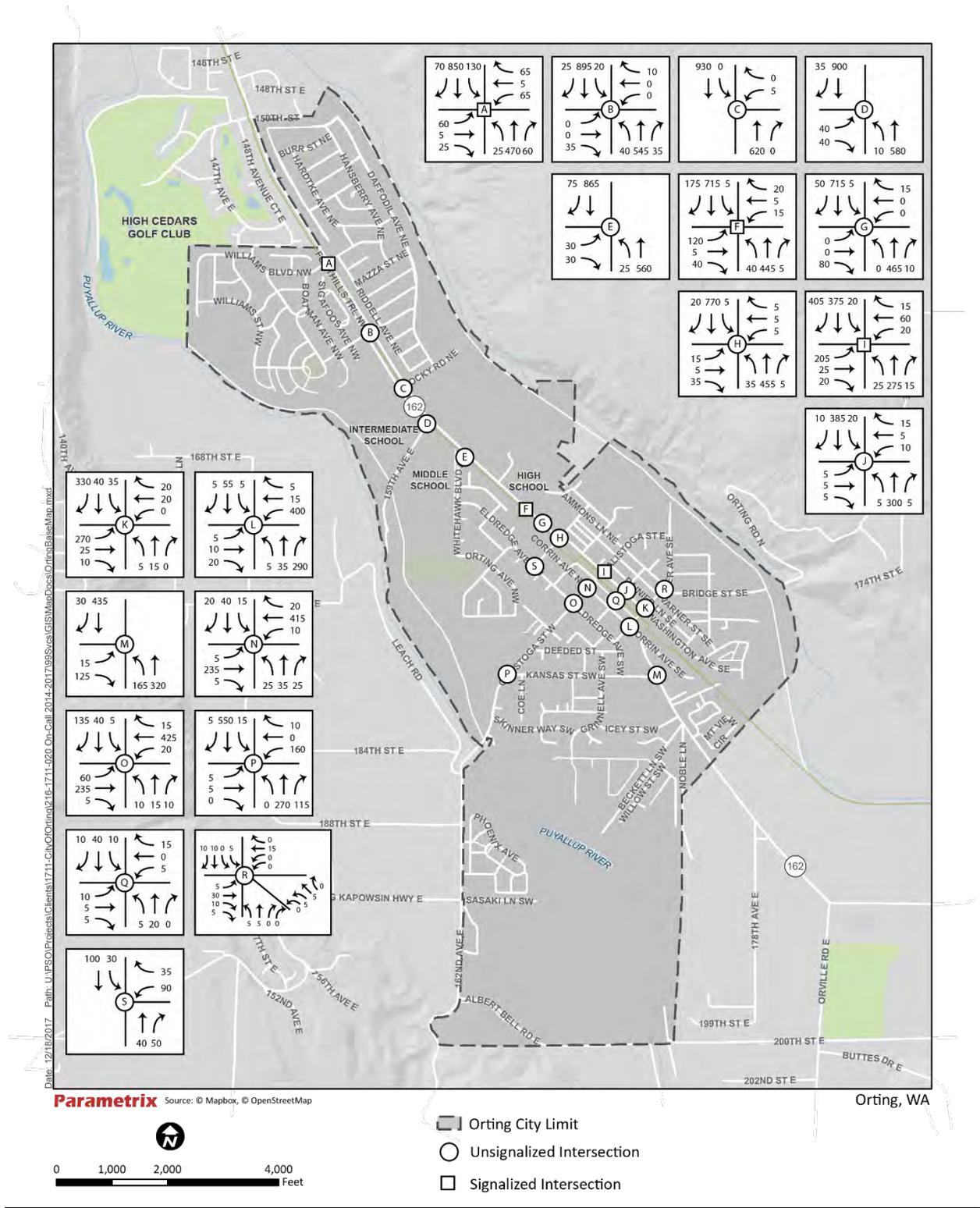


Figure 3-2. Existing (2017) PM Peak Hour Intersection Traffic Counts

Table 3-2. Vehicle Level of Service and Delay

Level of Service	Description	Signalized Intersection Delay (sec/veh)	Unsignalized Intersection Delay (sec/veh)
A	Free flowing	<10	<10
B	Little delay	>10 and ≤20	>10 and ≤15
C	Some delay	>20 and ≤35	>15 and ≤25
D	Some driver frustration; moderate delay	>35 and ≤55	>25 and ≤35
E	High level of frustration; high levels of delay	>55 and ≤80	>35 and ≤50
F	Severe congestion; excessive delays	>80	>50

For unsignalized intersections, delay is reported for the worst-operating approach (typically, the minor street left turn). For signalized intersections, the average delay is reported for all vehicles. LOS D is the concurrency standard adopted by the City of Orting. **Figure 3-3** shows the overall existing intersection LOS at the study intersections in Orting during the PM peak hour. Most of the intersections in the City meet the concurrency standard adopted by the City of Orting. However, Washington Avenue N and Rocky Road NE (intersection C) and Calistoga Street W and Kansas Street SW (intersection P) exceed the threshold and operate at LOS E. At Washington Avenue N and Rocky Road NE (intersection C), the delay is experienced by very few vehicles, approximately five vehicles during the PM peak hour as summarized in **Figure 3-2**. The Washington Avenue N and Whitehawk Boulevard NW intersection (intersection E) operates acceptably but at the City’s concurrency threshold of LOS D.

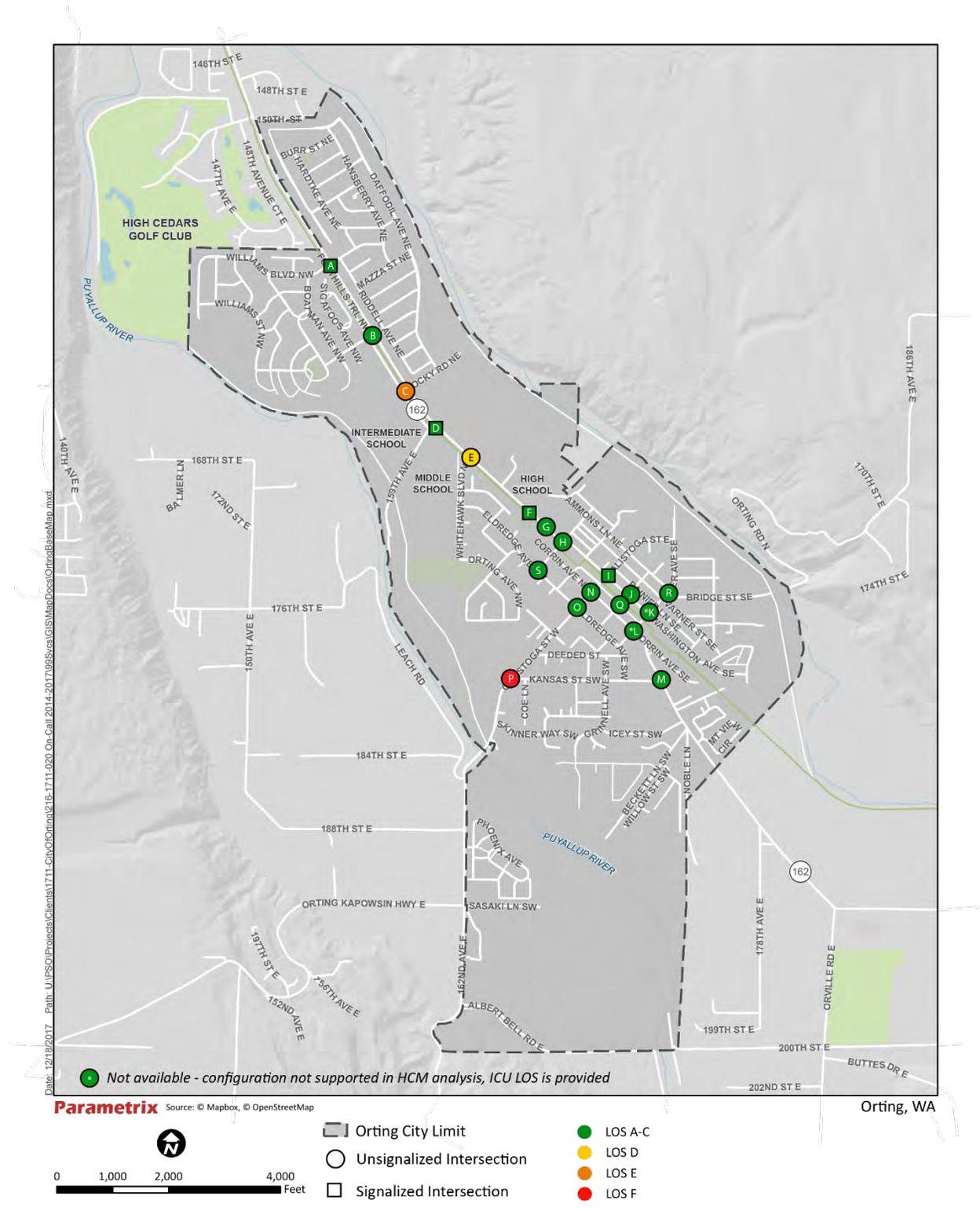


Figure 3-3. Existing (2017) PM Peak Hour Intersection Operations

3.2.2 Collision History

WSDOT provided a history of reported collisions that occurred within the city limits of Orting for the period of January 1, 2012, through December 31, 2016. **Figure 3-4** summarizes the locations where the collisions occurred in Orting. Total accidents averaged approximately 37 per year with a total of 186 over the 5-year collision period. Nearly 70 percent of collisions were property damage only. There were no fatal collisions and only three collisions were serious injury collisions. Five collisions involved non-motorized users. Most accidents (approximately 60 percent) were at intersections or driveways.

Table 3-3 summarizes collisions by severity in the entire street network. As shown, most of the collisions along the roadways resulted in property damage only (135 of 186 total collisions). The remaining 51 collisions resulted in an injury.

**Table 3-3. Summary of Collisions by Severity for Entire Street Network
(January 2012 to December 2016)**

Location	Collision Severity			
	Fatality	Injuries	Property Damage Only	Total
SR 162 (Washington Avenue N)	0	34	58	92
SR 162 (Bridge Street S and Harman Way S)	0	4	17	21
Calistoga Street W	0	5	22	27
Kansas Street SW	0	1	1	2
Other (minor, collector, local access streets)	0	7	37	44
Total	0	51	135	186

Source: WSDOT Transportation Data and GIS Office

Disclaimer: Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

In addition to summarizing the collision data by severity, the 51 injury collisions were summarized by type in **Table 3-4**. For the entire roadway network, the majority of the injury collisions were rear end. Rear-end collisions often occur in congested locations. The other collision types along the entire network were entering at angle, fixed object, pedestrian and/or cyclist involvement, sideswipe, and turning (opposite direction) and none of these had more than five collisions over the 5-year period.

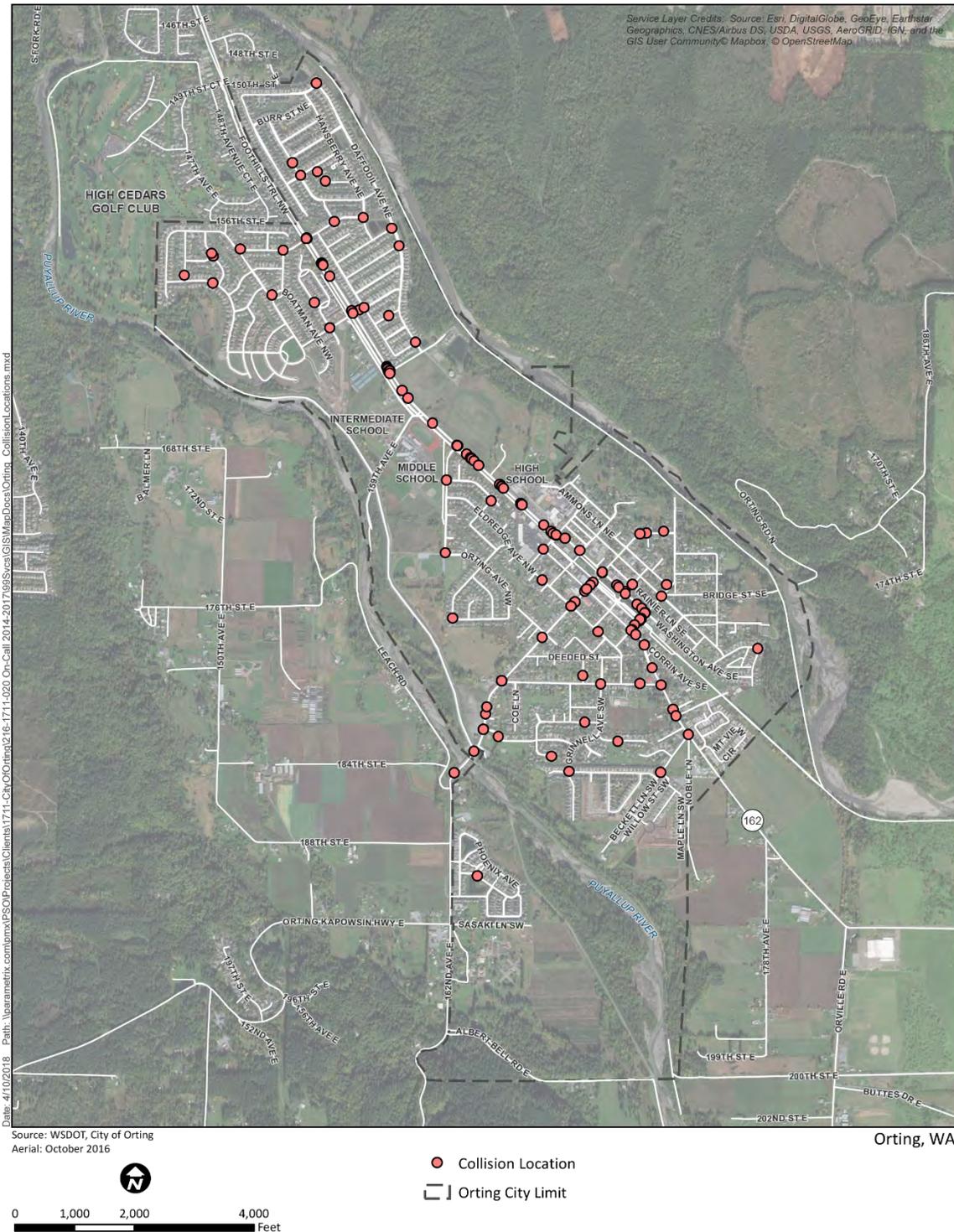


Figure 3-4. All Collisions in the City of Orting (January 2012 to December 2016)

Table 3-4. Summary of Injury Collisions by Type for Entire Street Network (January 2012 to December 2016)

Location	Collision Type									
	Entering at Angle	Fixed Object	Other	Parking	Pedestrian/ Cyclist Involved	Rear End	Sideswipe	Turning (Opposite Direction)	Vehicle Overturned	Total
SR 162 (Washington Avenue N)	3	3	2	1	2	20	2	1	0	34
SR 162 (Bridge Street S and Harman Way S)	0	0	1	0	1	2	0	0	0	4
Calistoga Street W	1	0	0	0	1	1	1	1	0	5
Kansas Street SW	0	1	0	0	0	0	0	0	0	1
Other (minor, collector, local access streets)	1	0	0	2	1	1	1	0	1	7
Total	5	4	3	3	5	24	4	2	1	51

Source: WSDOT Transportation Data and GIS Office

Disclaimer: Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

Additionally, the collision history was reviewed for the study area intersections by severity and type. **Table 3-5** summarizes the study area intersection collisions by severity. As shown, most of the collisions at the study intersections resulted in property damage only (75 of 107 total collisions). The remaining 32 collisions at study area intersections resulted in an injury.

Table 3-5. Summary of Collisions by Severity at Study Intersections (January 2012 to December 2016)

ID	Location	Collision Severity			
		Fatality	Injuries	Property Damage Only	Total
A	Washington Avenue N and Williams Boulevard NW	0	6	12	18
B	Washington Avenue N and Lane Boulevard NW	0	0	5	5
C	Washington Avenue N and Rocky Road NE	0	3	5	8
D	Washington Avenue N and Old Pioneer Way NW	0	0	0	0
E	Washington Avenue N and Whitehawk Boulevard NW	0	3	5	8
F	Washington Avenue N and Ammons Lane NE/Driveway	0	5	2	7
G	Washington Avenue N and Cardinal Lane	0	0	1	1
H	Washington Avenue N and Whitesell Street S	0	3	7	10
I	Washington Avenue S and Calistoga Avenue W	0	3	10	13
J	Washington Avenue S and Train Avenue S	0	1	2	3
K	Washington Avenue SE and Bridge Street S	0	3	4	7
L	Bridge Street S and Harman Way S and Corrin Avenue E	0	2	4	6
M	Harman Way S and Kansas Street SW	0	0	1	1
N	Calistoga Avenue W and Corrin Avenue SW	0	2	4	6
O	Calistoga Avenue W and Eldredge Avenue SW	0	1	5	6
P	Calistoga Street W and Kansas Street SW	0	0	6	6
Q	Train Street SW/Train Avenue S and Van Scoyoc E	0	0	0	0
R	River Avenue SE/Verner Avenue SE and Bridge Street SE	0	0	2	2
S	Eldredge Avenue NW and Whitesell Street S	0	0	0	0
Total		0	32	75	107

Source: WSDOT Transportation Data and GIS Office

Disclaimer: Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

The 32 injury collisions that occurred at study intersections were summarized by type in **Table 3-6**. The majority of the injury collisions were rear end, specifically on the main arterial, Washington Avenue N/Bridge Street/Harman Way (SR 162). Rear-end collisions often occur at congested locations. The other collisions types at study intersections were entering at angle, fixed object, pedestrian and/or cyclist involvement, sideswipe, and turning (opposite direction). Other than rear-end collisions, there were no more than five collisions of any type over the 5-year period.

Table 3-6. Summary of Injury Collisions by Type at Study Intersections (January 2012 to December 2016)

ID	Location	Collision Type									Total
		Entering at Angle	Fixed Object	Other	Parking	Pedestrian/ Cyclist Involved	Rear End	Sideswipe	Turning (Opposite Direction)	Vehicle Overturned	
A	Washington Avenue N and Williams Boulevard NW	0	1	1	0	1	2	0	1	0	6
B	Washington Avenue N and Lane Boulevard NW	0	0	0	0	0	0	0	0	0	0
C	Washington Avenue N and Rocky Road NE	0	0	0	0	1	2	0	0	0	3
D	Washington Avenue N and Old Pioneer Way NW	0	0	0	0	0	0	0	0	0	0
E	Washington Avenue N and Whitehawk Boulevard NW	2	0	0	0	0	0	1	0	0	3
F	Washington Avenue N/Ammons Lane NE and Driveway	0	0	0	0	0	5	0	0	0	5
G	Washington Avenue N/ Cardinal Lane	0	0	0	0	0	0	0	0	0	0
H	Washington Avenue N and Whitesell Street S	0	1	0	0	0	2	0	0	0	3
I	Washington Avenue S and Calistoga Avenue W	0	1	0	0	0	2	0	0	0	3
J	Washington Avenue S and Train Avenue S	1	0	0	0	0	0	0	0	0	1
K	Washington Avenue SE and Bridge Street S	0	0	0	0	0	3	0	0	0	3
L	Bridge Street S/Harman Way S and Corrin Avenue E	0	0	1	0	1	0	0	0	0	2
M	Harman Way S and Kansas Street SW	0	0	0	0	0	0	0	0	0	0
N	Calistoga Avenue W and Corrin Avenue SW	0	0	0	0	0	1	1	0	0	2
O	Calistoga Avenue W and Eldredge Avenue SW	0	0	0	0	0	0	0	1	0	1
P	Calistoga Street W and Kansas Street SW	0	0	0	0	0	0	0	0	0	0
Q	Train Street SW/Train Avenue S and Van Scoyoc E	0	0	0	0	0	0	0	0	0	0
R	River Avenue SE/Verner Avenue SE and Bridge Street SE	0	0	0	0	0	0	0	0	0	0
S	Eldredge Avenue NW and Whitesell Street S	0	0	0	0	0	0	0	0	0	0
Total		3	3	2	0	3	17	2	2	0	32

Source: WSDOT Transportation Data and GIS Office

Disclaimer: Under 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

3.3 Freight Traffic and Network

Providing freight access to and through Orting is important in supporting economic activity and providing goods to residents. In Orting, the primary freight routes are along SR 162 and Calistoga Street to the Orting-Kapowsin Highway. WSDOT uses the County Road Freight and Goods Transportation System (FGTS) to classify state highways, county roads, and city streets according to the tons of freight that are carried on them each year. SR 162, between the northern city limits and Calistoga Street, is classified as a T-2 Route, carrying 4 million to 10 million tons per year. To the southeast of Calistoga Street, SR 162 is a T-3 Route, carrying 300,000 to 4 million tons per year. Calistoga Street W and the Orting-Kapowsin Highway are classified as T-3 Routes.

3.4 Non-Motorized Travel

In June 2017, the City of Orting adopted the Non-Motorized Transportation Plan (NMTP), which includes detailed information on non-motorized facilities, volumes, and policies for the City of Orting. For additional information on non-motorized travel in Orting, please see the NMTP.

3.5 Transit

There is no public fixed-route transit service in Orting. Pierce County Transit does provide vanpool services that serve groups traveling to and from work, whose trip origin or destination is within Pierce County.

Sound Transit Sounder commuter rail service is provided nearby in Puyallup and Sumner with service south to Lakewood and north to Seattle and Everett. Fixed-route bus transit is also provided in nearby Sumner and Puyallup to other destinations.

3.6 Air and Rail Service

There are no public or private airports or rail lines within the city of Orting. The Meeker Southern Railroad, which is a Class III, private rail line, travels near Orting between Puyallup and McMillan.

4. PLANNED TRANSPORTATION IMPROVEMENTS

This section summarizes the planned transportation improvements that would affect travel in Orting.

4.1 Pierce County Six-Year Transportation Improvement Program

The prioritization process for transportation projects in unincorporated Pierce County is implemented through the Pierce County Transportation Improvement Program (TIP). The 2017-2022 TIP does not include projects within Orting. However, the following projects are included in the TIP and are located near the city of Orting:

- 176th Street E Extension: Construct a new roadway and roadway improvements between Calistoga Avenue E and Sunrise Boulevard E.
- Orting-Kapowsin Highway E/200th Street E: Construct a traffic signal and provide turn lanes.
- 112th Street S/112th Street E: Widen roadway to provide turn lanes, pedestrian facilities, and illumination.

4.2 Orting Six-Year Transportation Improvement Program

The City of Orting's Six-Year Transportation Improvement Program 2016-2022 includes regrading, paving, parking, curb/gutter, sidewalks, and water, sewer, and storm improvements in the city of Orting. The following projects, listed in order of priority, are included in the Orting 2016-2022 TIP:

- SR 162 (Washington Avenue) Two-Way Left-Turn Lane: Provide a two-way left-turn lane and complete minor widening on SR 162 between Cardinal Lane and Leber Street beginning in 2017.
- Kansas Street SW Regrade: Complete regrading, and storm, sewer, and sidewalk improvements on Kansas Street between Harman Way S and Calistoga Street W beginning in 2019.
- Calistoga Street W: Complete regrading, curb and gutter, parking, and sewer, storm, and water improvements, and provide sidewalks and planter strips between Corrin Avenue NW and the Puyallup River Bridge beginning in 2020.
- Eldredge Avenue NW Regrade: Complete regrading, paving, parking, storm, sewer, and sidewalk improvements between Whitesell Street NW and Calistoga Street W beginning January 2019.
- Whitehawk Boulevard/SR 162 Intersection Improvement: Signalize intersection with existing lane configurations beginning in 2020.
- Bridge Street Regrade: Complete regrading, paving, parking, and curb and gutter improvements; provide sidewalks; and replace water main between Washington Avenue S and the River Avenue SE curve beginning in 2022.
- River Avenue SE Regrade: Complete regrading, paving, parking, sewer, and storm improvements; provide sidewalks; and replace the water main beginning in 2023.
- Orting Emergency Evacuation Bridge System at Gratzner Avenue NW: Construct pedestrian bridge over SR 162/Washington Avenue beginning in 2020.
- Whitehawk Extension: Construct two- to three-lane arterial from Orting Avenue NW to Calistoga Street at Kansas Street SW including water, sewer, storm, curb and gutter, and sidewalks beginning in 2020.

The remaining projects included in the TIP are chip seal projects on various streets in Orting.

4.3 Washington State Department of Transportation Improvement Program

The following projects in or near Orting are included in WSDOT's Statewide Transportation Improvement Program (STIP) during the 2018–2021 planning timeframe:

- **Whitehawk Boulevard Extension:** This project will extend Whitehawk Boulevard NW between Orting Avenue NW to the intersection of Calistoga Street W and Kansas Street SW. The roadway will be one lane in each direction with a median in some locations and turning lanes at each end. A sidewalk or trail will also be provided along the length of the corridor and a signal will be installed at the intersection with SR 162. This project is scheduled to begin preliminary engineering in 2019. This is the same project that is included in the City's TIP.
- **Orting-Kapowsin Highway E:** This project includes resurfacing and restoring approximately 3.4 miles of the Orting-Kapowsin Highway E from Orville Road E to 246th Street E. The project is scheduled to start preliminary engineering in 2018 and construction in 2020.

4.4 Rhodes Lake Road East

The Rhodes Lake Road East project would widen 128th Street East from SR 162, north of Orting, and would construct a new arterial roadway from the Puyallup River to Falling Water Boulevard East. The purpose of the project is to improve east-west mobility in the plateau area of Bonney Lake and east of the Puyallup River. The new roadway will accommodate travel to and from the planned community called the Cascadia Employment-Based Planned Community, which calls for nearly 10,000 jobs and over 6,000 homes. It is possible that some of the traffic traveling to and from the Bonney Lake Plateau will also travel through Orting. It is anticipated that the project will be complete in 2030.

5. CONCURRENCY

The City of Orting requires that the capacity of public facilities and services is equal to or greater than the capacity required to maintain the LOS standards established by the City. The test for concurrency is not passed and a proposed project may be denied if the capacity of the public services or facilities is less than the capacity required to maintain the adopted LOS D standards after the impacts associated with the requested permit are added to the existing capacity utilization. The City will prohibit approval of any development that causes the level of service to fall below adopted standards, unless necessary improvements are made concurrently with the development. This concurrency requirement means that improvements or strategies must be in place at the time of the development or that a financial commitment must be in place to complete the improvements or strategies within 6 years. Methods for the City to monitor these commitments include:

- Annual monitoring of transportation facilities within updates to the Six-Year TIP
- Assessing level of service
- Reviewing the comprehensive transportation plan and other related studies for necessary improvements
- Making appropriate revisions to the Six-Year TIP

6. FUTURE TRANSPORTATION CONDITIONS

This section summarizes the future year (2040) transportation system for all modes of travel in Orting.

6.1 General Purpose Traffic

Traffic forecasting is a means of estimating future traffic volumes based on the expected growth in population and employment within an area. To estimate future traffic volumes resulting from growth, forecasts were prepared using current traffic counts, traffic growth described in the 2015 Orting Comprehensive Plan, and estimates of population and employment developed for the City's Comprehensive Land Use Plan. Future transportation conditions were evaluated for the year 2040.

The projected 2040 PM peak hour traffic volumes are provided on **Figure 6-1**.

6.2 Intersection Level of Service

Most intersections within the city are unsignalized (controlled by a stop sign). As traffic increases in Orting, turning onto the major streets from a side street will become increasingly difficult. As described earlier, the LOS criteria for stop-controlled intersections is typically determined by the minor street left-turn movement.

The LOS results for the study intersections are provided for the year 2040. Similar to existing conditions, LOS is described for the worst approach for unsignalized intersections. For signalized intersections, the average delay for all vehicles is reported.

Figure 6-2 shows the 2040 PM peak hour traffic operations for the study intersections in Orting. The same two study intersections that surpass the threshold under existing conditions are forecast to exceed the threshold in 2040. Washington Avenue N and Rocky Road NE (intersection C) and Calistoga Street W and Kansas Street SW (intersection P) are forecast to operate at LOS F in 2040. Similar to existing conditions, the side street delay at Washington Avenue N and Rocky Road NE (intersection C) would be experienced by very few vehicles as summarized in **Figure 6-1**. Four other study intersections (D, H, M, and O) are expected to operate acceptably but at the LOS threshold in 2040. It should also be noted that traffic operations at Washington Avenue N and Whitehawk Boulevard NW (intersection E) would improve because of the planned signal (see Section 4.3).

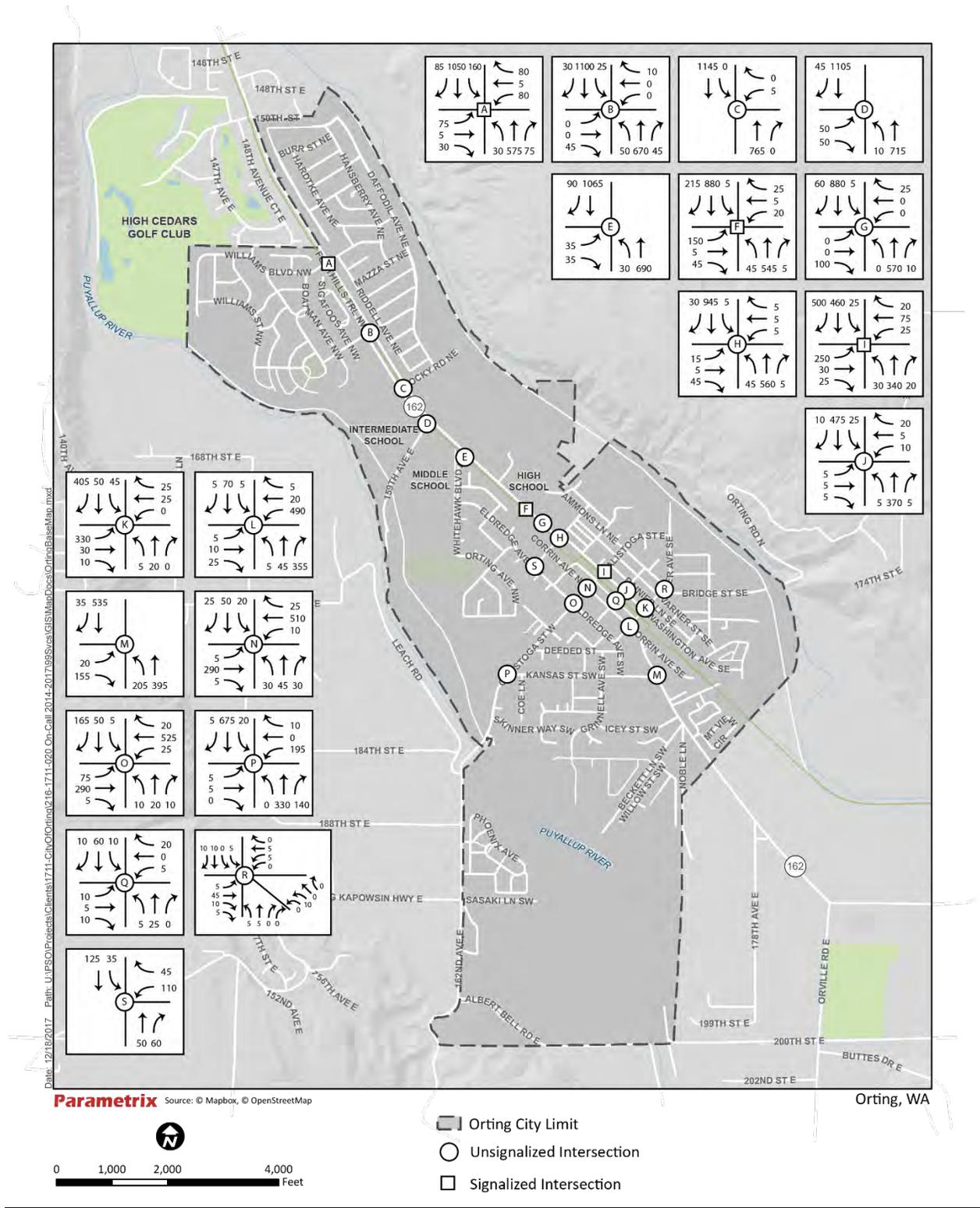


Figure 6-1. 2040 PM Peak Hour Intersection Traffic Volumes

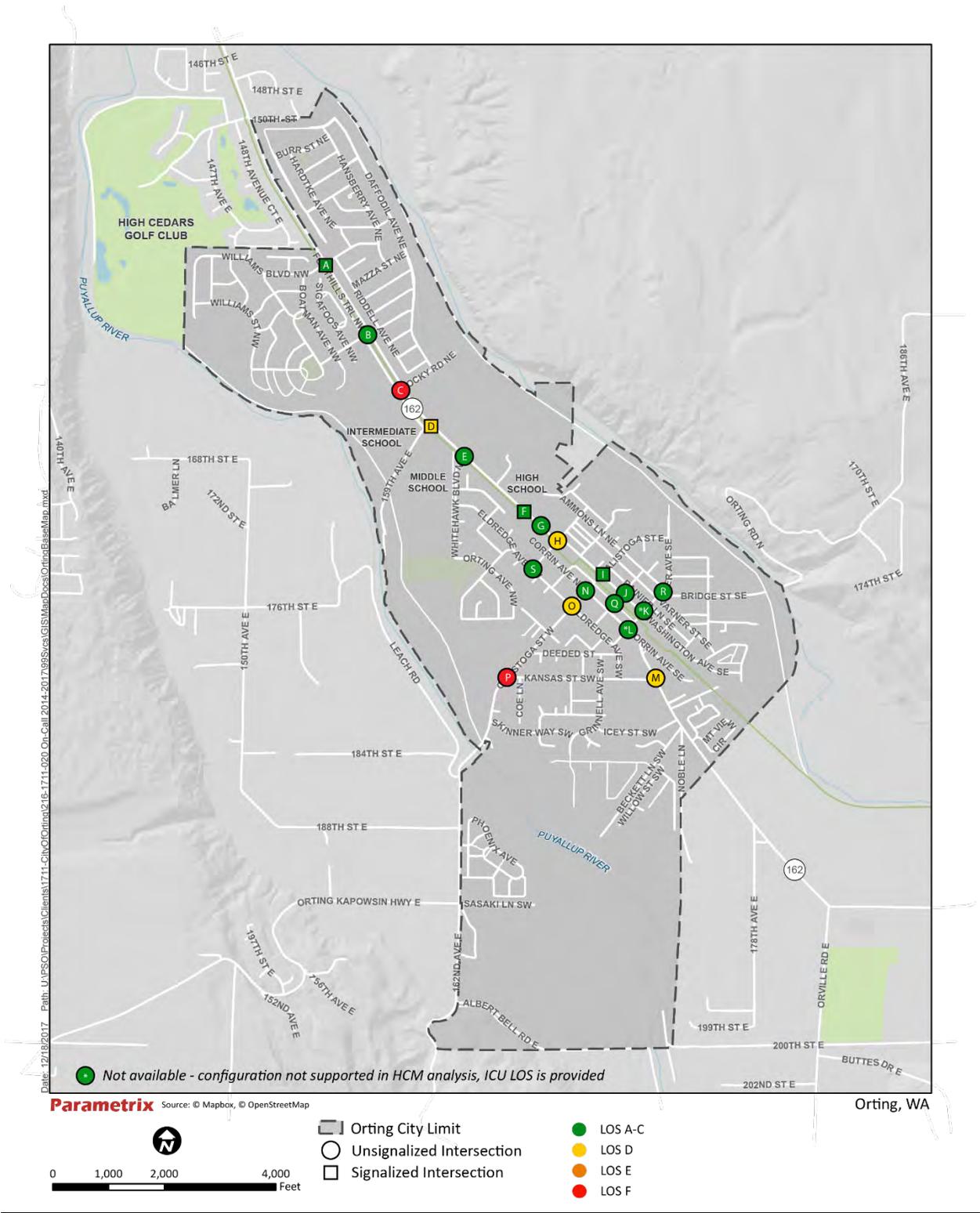


Figure 6-2. 2040 PM Peak Hour Intersection LOS

6.3 Freight

Freight travel corridors would be expected to remain similar in 2040 compared to existing conditions. SR 162 and Calistoga Avenue W would be expected to carry most freight traffic through Orting. Intersection operations in 2040 along both major freight routes would operate at LOS D or better except for Calistoga Street W and Kansas Street SW (intersection P). Although the intersection at Washington Avenue N and Rocky Road (intersection C) is located along a freight corridor and is expected to operate at LOS F, the delay would not be experienced by freight traffic traveling on SR 162/Washington Avenue N.

6.4 Non-Motorized Travel

The future non-motorized transportation network is described in the NMTP. It is anticipated that non-motorized facilities would be similar to existing conditions except in locations where there are planned improvements to the sidewalk system, as identified in Section 4.3 and the NMTP.

6.5 Transit

Transit is expected to be similar in Orting in 2040. No public fixed-route transit service would be provided within Orting. Vanpool services would continue to be provided by Pierce Transit.

Pierce Transit and Sound Transit would continue to provide nearby transit service, including higher frequency transit to Puyallup and Sumner. Both agencies have developed long-range plans that describe future transit growth in Pierce County, which could include additional service for fixed-route bus service as well as commuter rail in nearby communities, such as Sumner and Puyallup.

6.6 Air and Rail Service

There would continue to be no public or private airports or rail lines within the city of Orting. The Meeker Southern Railroad would continue to operate near Orting between Puyallup and McMillan.

Sound Transit is currently examining a potential commuter rail connection between Orting and the Sounder south line service in Sumner. The study is a future investment study and any potential commuter rail connections between Orting and Sumner would not be included in this funding package.

7. FUTURE TRANSPORTATION VISION

To address the identified deficiencies in 2040, a list of potential improvements has been identified. Improvements are summarized by transportation mode.

7.1 General Purpose Traffic

Deficiencies for general purpose traffic were identified at intersections that would fail to meet the City of Orting's level of service goal of LOS D. Constructing a traffic signal is a common method for improving the LOS at a stop-controlled intersection. However, traffic signals should not be constructed unless certain factors are present, such as sufficient traffic volumes over long periods of the day, high levels of pedestrian traffic, or preventable accident history.

As summarized in Section 6.2, Washington Avenue N and Rocky Road NE (intersection C) and Calistoga Street W and Kansas Street SW (intersection P) are forecast to exceed LOS D in 2040. No improvements are recommended for Washington Avenue N and Rocky Road NE (intersection C) because this delay would be experienced by very few vehicles (approximately five) on the stop approach.

At Calistoga Street W and Kansas Street SW (intersection P), a roundabout intersection control is recommended and should be considered during design. The roundabout would improve traffic operations from LOS F to LOS A in 2040 conditions. Calistoga Street W and Kansas Street SW (intersection P) will also become the eastern terminus of the Whitehawk Boulevard Extension. It is estimated that a roundabout at Calistoga Street W and Kansas Street SW (intersection P) would be approximately \$1.7 million to construct.

Although Harman Way S and Kansas Street SW (intersection M) is forecast to operate acceptably at the City's LOS D threshold, it is recommended that an eastbound left-turn lane be constructed on Kansas Street SW to improve intersection operations on the stop-controlled approach. This improvement would improve intersection operations from LOS D to LOS C in 2040 conditions. This improvement would cost approximately \$450 thousand to construct.

The school district has also indicated that Ammons Lane NE and Washington Avenue N (intersection F), the entrance to the Orting High School and Orting Primary School, gets congested during pick up and drop off times. Congestion in the school property can create traffic queues on SR 162/Washington Avenue N for vehicles attempting to turn right and left into the school property. To address this issue, the City could convert Ammons Lane NE (intersection F) to an exit only. Vehicles entering the school property could use Whitesell Street S or other neighborhood streets to then access the schools. This improvement would reduce queuing onto SR 162/Washington Avenue N and potentially improve safety along SR 162/Washington Avenue N. This improvement would cost approximately \$530 thousand to construct and likely would be funded primarily by Orting School District.

Figure 7-1 shows the LOS at study intersections following these proposed improvements to the study intersections.

7.2 Freight Traffic

Deficiencies for freight traffic were identified at intersections along freight corridors that would fail to meet the City of Orting's level of service goal of LOS D. The improvements described in Section 7.1 would improve operations for freight traffic traveling through Orting.

7.3 Non-Motorized Travel

Deficiencies in the non-motorized transportation system have been identified using Pedestrian Level of Stress (PLOS)¹ and Bicycle Level of Stress (BLOS)². Future improvements to the non-motorized network in Orting to address deficiencies are described in more detail in the NMTP.

As described in the NMTP, the City will work to address areas with high PLOS (scores 4 to 5) by completing gaps in the sidewalk and trail system. Pedestrian improvements would be prioritized in areas where pedestrian activity is higher and where pedestrian-oriented land use and destinations are located. Other pedestrian improvements include:

- Widen evacuation route along Calistoga Street W towards Soldiers home
- Widen the sidewalks on Calistoga Bridge
- Improve City's crosswalk safety
- Pursue opportunities to work with Pierce County to provide Americans with Disabilities Act (ADA) access to the levee system
- Complete the Orting Emergency Evacuation Bridge System

Also described in the NMTP, BLOS is low for most facilities in Orting. Improvements to the bicycle network would include the following:

- Improve connectivity to the Foothills Trail at Calistoga Street W
- Improve connectivity to the Foothills Trail at Kansas Street SW
- Construct bicycle lanes on Calistoga Street W and Kansas Street SW
- Restripe trail with 'fast' and 'slow' lanes for bicycle and foot traffic
- Relocate intersection crossings with the Foothills Trail to be in front of the stop bar at intersections

¹ Pedestrian Level of Stress is a measure used to evaluate how well a transportation system accommodates pedestrian travel. Facilities are evaluated based on a number of different criteria, such as sidewalk width, curb presence, and vehicle speed, and assigned a score from 1 to 5 with 1 being low level of stress to 5 being high level of stress.

² Bicycle Level of Stress is a measure used to evaluate how well a transportation system accommodates bicycle travel (also called Level of Traffic Stress, or LTS). Similar to Pedestrian Level of Stress, facilities are evaluated based on different criteria, such as street width, presence of on-street parking, and number of lanes, and assigned a score from 1 to 5 with 1 being low level of stress to 5 being high level of stress.

7.4 Transit

There are no recommended improvements for transit service.

7.5 Air and Rail Service

There are no recommended improvements for air and rail service.

7.6 Other Strategies and Programs

Other strategies and programs can be used to help improve travel in Orting include Transportation Demand Management.

7.6.1 Transportation Demand Management

Transportation Demand Management (TDM) strategies can be implemented to decrease the amount of drive-alone vehicle trips, which can help to reduce congestion and delay. Viable travel alternatives help to mitigate impacts of growth in vehicular traffic and provide feasible options for more people. TDM strategies include:

- Improving land use accessibility by promoting mixed-use zoning with housing, shopping, schools, and employment within localized areas to encourage short vehicle trips and/or use of other travel modes, such as bicycling and walking.
- Encouraging ridesharing and vanpooling to reduce drive-alone vehicle trips.
- Working with the Orting School District to implement School Trip Management; School Trip Management includes promoting and implementing strategies to encourage non-vehicle travel to and from school.
- Encouraging bicycle and pedestrian travel by providing inviting, safe, convenient, and connected routes; education and incentive programs; and support services such as bicycle racks, showers, and lockers.
- Maintaining and improving a network of highways, streets, and roads that moves people, goods, and services safely and efficiently; minimizes social and environmental impacts; and supports various modes of travel.
- Providing adequate connections and access among all transportation modes, especially non-motorized and transit.
- Limiting the number of access points and driveways on major streets in Orting.

8. FUNDING THE TRANSPORTATION VISION

The GMA requires that a jurisdiction’s transportation plan contain a funding analysis of the transportation projects it recommends. The analysis should cover funding needs and funding resources, and it should include a multi-year financing plan. The purpose of this requirement is to ensure that each jurisdiction’s transportation plan is affordable or achievable. If a funding analysis reveals that a plan is not affordable or achievable, the plan must discuss how additional funds will be raised, or how land use assumptions will be reassessed.

Table 8-1 summarizes the proposed 2040 Improvement Program as was described in Chapter 7 and Chapter 4.

Table 8-1. 2040 Improvement Program

Roadway	Improvement		Cost Estimate (\$1,000)	Funding Source
	Type	Description		
Calistoga Street W/Kansas Street SW Roundabout	Capacity	Construct roundabout	\$2,380	City/Grants
Harman Way S/Kansas Street SW Left-Turn Lane	Safety and Circulation	Construct left-turn lane on Kansas Street SW	\$715	City/Grants
Ammons Lane NE/Washington Avenue N Exit Only	Safety and Circulation	Convert Ammons Lane NE to exit only	\$635	City/WSDOT/OSD
Whitehawk Boulevard Extension	Capacity and Circulation	Extend Whitehawk Boulevard to Calistoga Street W	\$5,400	City/Grants

Other City of Orting transportation improvement projects are adopted on an annual basis in the City of Orting Six-Year Transportation Improvement Program.

8.1 Federal Funding

Federal funding for transportation projects includes FHWA’s Surface Transportation Block Grant Program funded through the Fixing America’s Surface Transportation (FAST) Act. Many types of projects are eligible, including bicycle/pedestrian, safety, traffic monitoring/management, and planning projects along with more traditional road and bridge projects. These funds are distributed by PSRC through a competitive grant application process.

PSRC also distributes Surface Transportation Program funds through the Rural Town Centers and Corridors (RTCC) program. The RTCC program was established to recognize and support the needs of the region’s rural areas. Funds are distributed through a competitive grant process that includes two stages: a Countywide stage and a Regional stage.

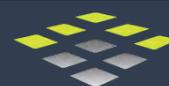
Orting relies heavily on these funding sources to complete transportation projects.

2024 Pavement Management System (PMS)



ORTIG
Washington

June 2024



SCJ ALLIANCE
CONSULTING SERVICES

2024 Pavement Management System

Project Information

Project: 2024 Pavement Management System (PMS)

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Project Reference: SCJ #21-000838, Phase 05, Task 01
Path: <N:\Projects\4270 City of Orting\21-000838 Orting 2021-24 On-Call PE Services\Phase 05 - Pavement Management\05.01 2022 Street Condition Assessment\Reports>



PROJECT ENGINEER'S CERTIFICATION

I hereby certify that this Pavement Management System for the City of Orting has been prepared by me or under my supervision and meets the minimum standards of the City of Orting and normal standards of engineering practice.



Patrick Holm, PE
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06-11-2024



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1. EXECUTIVE SUMMARY

The City of Orting believes in the importance of well-maintained public infrastructure and wants to ensure that the public traveling throughout the City continue to have safe and well-maintained roads to navigate. This pavement maintenance program will be developed and adopted to maximize the efficiency and value of maintaining the city's largest and most valuable form of infrastructure, its roadways.

2. INTRODUCTION

2.1 ORTING'S PAVEMENT INFRASTRUCTURE

The City of Orting is in Pierce County, Washington and encompasses an area of approximately 1,730 acres. The City of Orting is responsible for maintaining approximately 62 lane-miles of roadways consisting of asphalt concrete pavement (ACP), Portland cement concrete (PCC) and gravel roadways. This infrastructure was assessed and rated in conjunction with this program in 2022, and this report is shown in Appendix A.



2.2 INTRODUCTION TO PAVEMENT MANAGEMENT SYSTEM

This report summarizes the City of Orting’s Pavement Management System (PMS) and identifies a 6-year program of preservation and maintenance activities that will provide cost-effective approaches to maintain pavements in serviceable conditions. The purpose of the PMS is to maintain City, resident, and business operations without impacts resulting from degrading roadways. Early investment in a well-planned PMS has proven to be the most cost-effective solution for management of a system of roadways, especially as opposed to a program that simply waits for failures then repairs or reconstructs pavements to correct issues. Actions that help to slow the rate of deterioration and delay major rehabilitation activities are considered preservation. Preservation impacts performance life, durability, lifecycle costs, construction, and materials use. Identifying and addressing specific deficiencies that contribute to overall deterioration can prolong or extend the life of pavements or structures. It is important to apply the right treatment to the right pavement at the right time.

Pavement networks require significant, recurring investments to maintain pavement integrity. Spending money earlier in a pavement’s life cycle allows for a significant extension in the pavement’s life at a much cheaper cost than if this maintenance work is delayed (see Figure 1). This shows the importance of timely maintenance, rather than just waiting until roads reach a poor quality. This program’s goal is to maintain and preserve the overall condition of their street network in a state of good repair rather than just reacting in a worst first manner. This will allow the roadway network to stay sustainable while using funds in the most effective manner possible.

Applying a pavement preservation treatment at the right time (when), on the right project (where), with quality materials and construction (how) is a critical investment strategy for optimizing infrastructure performance. The “when and where” component supports preservation by managing pavements proactively. Whole-life planning defines expectations for the long term and provides more stability to the cost of operation and maintenance. Identifying preservation strategies at the network level reduces the need for frequent or unplanned reconstruction. The “how” component promotes quality construction and materials practices, including treatment options that apply to flexible and rigid pavements. These practices contribute to improved pavement performance, providing smoother, safer roads and delaying the need for rehabilitation. FHWA, Everyday Counts, EDC-4

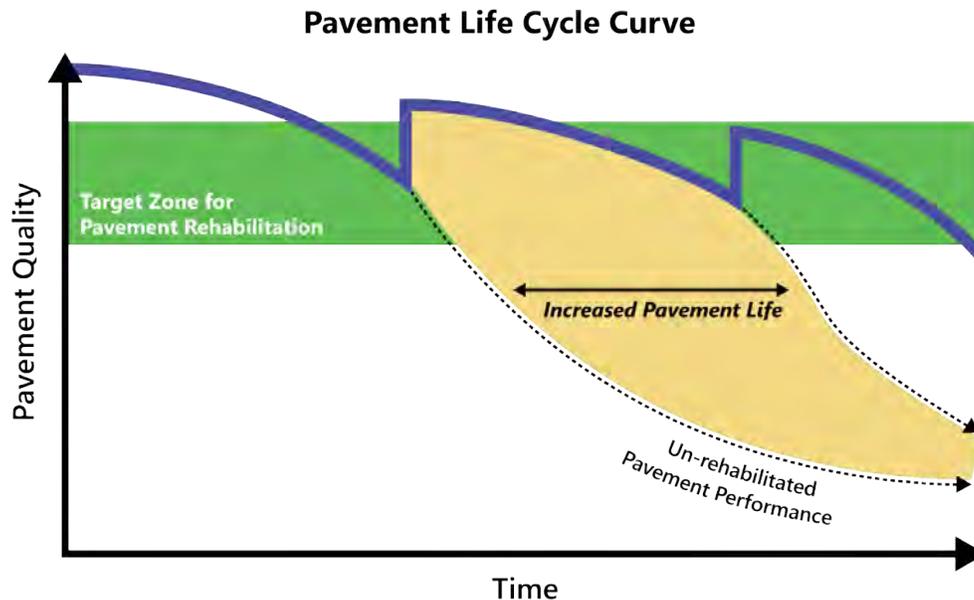


Figure 1. Pavement Rehabilitation Target Zone

2.3 PRINCIPLES OF A PMS

The main priority of this PMS is to maximize the effectiveness of maintenance funds to preserve and maintain the City's pavement infrastructure. Often this will prioritize maintaining higher quality streets rather than reconstructing lower quality streets due to the difference in costs associated with different repair options. Arterials and collectors will generally have a higher importance than local access roads due to a higher volume of traffic loading and the repairs benefiting more people.

This program should coordinate with other street projects when possible. Other street projects provide an ideal time to address necessary maintenance due to the decreased mobilization costs as well as the decreased negative effects on residents (less road closures, less waste, fewer damage claims, etc.).

It is important to prioritize communication to the public with this program. Residents may see a good road being maintained and a poor road being seemingly ignored and feel this is unfair. Communicating that the poor road is waiting on grants or other forms of outside funding, and that it is much cheaper to ensure good roads stay good than to make poor roads good again, may be necessary to ensure the program is not viewed negatively.

2.4 PAVEMENT PRESERVATION

Pavement preservation is defined as "a program employing a network level, long-term strategy that enhances pavement performance by using an integrated, cost-effective set of practices that extend pavement life, improve safety and meet motorist expectations". This PMS accomplishes these goals by assessing the quality of roads and then using the ratings to determine appropriate and timely treatments.

Pavement preservation programs commonly include multiple treatment activities and focus on the preventive maintenance level. Preventive maintenance is defined as "a planned strategy of cost-effective treatments to an existing roadway system and its appurtenances eliminate age-related, top-down surface cracking that develops in flexible pavements due to environmental exposure or to restore



functionality of concrete pavements.” This is generally the most effective use of funds, although some roads necessitate reconstruction or overlays as well (Geiger, 2005).

2.4.1 Distress Types

The following pavement distresses were used in the 2022 evaluation of pavement conditions throughout the City (see Appendix A). The bullets below describe what causes the distresses as well as typical preservation treatments that can address each distress condition.

- **Rutting** and wear is caused by repeated traffic loads along the same path and are characterized by surface depressions in the wheel path. Ruts due to wear just need to be paved in. Ruts due to subgrade failure require rehabilitation that will improve the base materials such as in-place recycling or full depth reconstruction.
- **Alligator cracking** is generally caused by repeated traffic loading. The methods to fix it rely on fixing the support for the pavement through milling and filling (for minor cases) or full depth reconstruction.
- **Longitudinal, transverse, and block cracking** all have several causes but are present similarly on the surface. All can be crack sealed to prevent moisture from infiltrating the pavement. One method to fix the cracks is to mill and fill, although some may need full depth reconstruction.
- **Raveling and aging** occur when the aggregate or binder, respectively, wear away from the pavement. This can be fixed by microsurfacing, crack sealing, chip sealing, or milling and filling.
- **Flushing and bleeding** occur when excessive binder shows on the pavement surface. This can be fixed by applying sand to absorb the excess binder or a mill and fill.
- **Patching**, when in need of fixing, generally requires localized full depth reconstruction to ensure the same distresses do not reoccur.
- **Sags and humps** can occur due to settlement, tree roots, or frost heave, and it is important to determine which before repairing it. They can be repaired by mill and fill or in-place recycling, depending on the root cause of the issue.
- **Edge raveling** happens often near gravel driveways, and it can temporarily be fixed by surface edge patching. Edge potholes and lanes less than 10 feet can be fixed by full depth edge patches.

2.4.2 Pavement Treatment Types

There are many pavement treatments that can be used in a PMS. Common preservation and maintenance treatments are included below (all costs are in 2024 dollars):

Preservation treatments are used to maintain existing pavement assets and extend usable life. These treatments are typically low cost to implement, with \$12 per LF of 11’ wide lane being repaired serving as a rough assumption of construction cost in general.

- Chip or Crack Seal
- Micro-surfacing
- Sand Application



Methods used in large scale maintenance activities or involved where pavement assets require preservation or rehabilitation. These treatments can trigger adjacent ADA improvement requirements depending on the scope of the treatment. Neglecting these potential ADA improvements, treatments in this category can be assumed to cost roughly \$45 per LF of 11' wide lane being replaced.

- Full-depth or Surface Patching
- Mill and Fill
- Overlay without Grinding/Fill

In some cases, the pavement asset is beyond maintenance and will require full depth replacement or repair. Note that full depth reconstruction could be the pavement or the pavement and subgrade. Reconstruction treatments can trigger adjacent ADA improvement requirements as well, and these costs need to be considered when implementing these treatment types. Ignoring ADA improvements, reconstruction may cost \$142 per LF of 11' wide lane being replaced.

- In-Place Recycling
- Full-Depth Reconstruction – Pavement Only
- Full-Depth Reconstruction – Pavement and Subgrade



3. PAVEMENT MANAGEMENT SYSTEM

3.1 INTRODUCTION

This Pavement Management System (PMS) includes all activities involved in maintaining the City's roadway including data, procedures, analysis, and a 6-Year Workplan. This Workplan is shown in Chapter 4 of this Program and shows a six-year list of projects and includes both construction, and non-construction, activities. Updates to the Workplan are necessary bi-annually.

3.2 ELEMENTS OF A PMS

- 6-Year PMS Workplan Development (2024 to 2029)
 - Baseline Pavement Condition Assessment (2022)
 - Construction Activity Planning & Prioritization
 - Pavement Condition Overall Ratings
 - Prioritization of Segments
 - Determining Preservation and Maintenance Treatments Needed
 - Costs to Repair
 - Annual Budget
 - Analysis of the System
 - 6-year Workplan
 - Non-Construction Activities
 - Inspection
 - Overall Rating by Section
 - Prioritization
 - Updating Treatments if Necessary
 - Updating Program Costs
 - Revising TIP (Transportation Improvement Plan) as Needed
- Annual Workplan Implementation
 - Construction
 - Plan Sets and Engineering
 - Bidding
 - Coordination with Other Agencies
 - Construction Management
 - Non-Construction
 - Pavement Condition Assessment Updates
 - TIP Updates
 - PMS Updates
 - Administrative Updates
 - Funding Activities
 - GIS Updates



4. 6-YEAR PMS WORKPLAN

4.1 BASELINE PAVEMENT CONDITION ASSESSMENT (2022)

The pavement condition assessment SCJ Alliance performed in 2022 rated roads based on visual inspection. This inspection led to overall ratings for each roadway, which were then used to develop this 6-year Workplan. Bi-annual updates to this system will be performed and reviewed to make sure there are no substantial condition changes that require reprioritization of which roadways to treat.

4.2 CONSTRUCTION ACTIVITY PLANNING & PRIORITIZATION

Prioritization strategies used in the report develop a targeted list of segments with current distresses and provides a snapshot status of the pavement network. From this, project planning is done to maximize the value of pavement maintenance operations given the condition of the City's infrastructure and to coordinate with nearby or currently planned improvement projects.

4.2.1 Pavement Condition Overall Ratings

Pavement condition ratings were recalculated (relative to the 2022 assessment in Appendix A) for this Pavement Management Program following the Washington State Department of Transportation's (WSDOT's) "Streetwise: A Simplified Local Agency Pavement Management System" (1995). This allows for reasonable treatments to be recommended. The previous rating system led to much more drastic, and expensive, repairs being recommended.

4.2.2 Prioritization of Segments

Projects were prioritized by treatments needed (based on segment conditions), timing of other projects, and with the goal of minimizing the overall cost of the program. Preventative work is prioritized over maintenance in order to maximize the efficiency of dollars spent. Costs are balanced over the years to be more manageable by the City. Finally, projects with the same treatment are grouped into the same year when possible, to allow for the lowest prices based on the economy of scale.

4.2.3 Determining Preservation and Maintenance Treatments Needed

Different distresses are better addressed with different maintenance treatments. While this program uses chip sealing, mill and fill, and full-depth reconstruction as the 3 fundamental reconstruction methods for cost estimating purposes, the repair methods shown in Table 1 are still included so they can be examined once a project has been selected and is in more in-depth planning.



Table 1. Distresses and Associated Preservation/Repair Methods

Distress	Chip Seal***	Mill and Fill**,***	Full-Depth Reconstruction**,***	Crack Seal	Microsurfacing	Sand Application	Surface Patching	Full-Depth Patching**	In-Place Recycle**
Rutting and Wear			●				●	●	●
Alligator Cracking	● *	● *	●	● *	● *			●	●
Cracking	●	●	●	●	●				
Raveling and Aging	●	●		●	●				
Flushing and Bleeding		●				●			
Patching								●	
Sags and Humps		●							●
Edge Raveling							●	●	
Edge Potholes							●	●	

*Low severity alligator cracking

**Triggers ADA requirements (FHWA, 2019)

***Fundamental maintenance method of this PMS

Several of the preservation and repair methods listed in Table 1 trigger a requirement to make adjacent ADA improvements. It is important to understand which will trigger this requirement, as this could alter the cost estimate and perhaps require rescheduling repairs. These repairs include full-depth reconstruction, in-place recycling, milling, and filling, and, sometimes, full-depth patching.

4.2.4 Preservation Costs

One of the goals of this maintenance program is to schedule roadway repairs on a frequent, recurring basis. Scheduling annually will allow yearly funds to be used efficiently and will ensure roads do not slip between the cracks and worsen before treated. Scheduling rehabilitation methods annually ensures there is budget to address the minor issues before they become more significant. Costs were spread out over the 6-year period, and excessively expensive projects were labeled as pending grant funding. Projects are considered excessively expensive when they would overwhelm the city's approximate \$200,000 annual pavement preservation program budget in the city's 2024-2029 TIP. If projects can secure grant funding that needs a city match, as well as when projects are identified in future inspections, the scheduling and budget should be updated and reprioritized.



Costs of different treatment options can vary significantly. The following total costs of treatment were used in this analysis. These costs are shown per lane-foot (per linear-foot in length of 11-foot-wide lane). Appendix C includes the calculations for each treatment:

- Chip Seal Coat – \$12/LF of 11’ lane
- Mill and Pavement Overlay – \$45/LF of 11’ lane
- Reconstruction – \$142/LF of 11’ lane

In addition to the basic construction costs, the total costs include all contingency, engineering, administration, and inflation costs. The following percentages, shown in Table 2, were used to calculate total costs for each treatment.

Table 2. Total Cost Elements

Cost Element	% Construction	Description
Design Contingency	10% of itemized construction costs	Estimates the construction costs of minor design elements that have not yet been identified (e.g., pavement markings, minor ADA improvements)
Inflation/Year	3% of itemized construction costs	Escalates the construction costs from 2024 to the year of construction.
Permitting	3% of total construction cost	Estimates permit costs for the City. Does not include environmental documentation.
Design	15% of total construction cost	Estimates costs to prepare PS&E and environmental documentation.
City PM/Administration	3% of total construction cost	Estimates City costs for administration and oversight of the project.
Construction Management	15% of total construction cost	Estimates construction inspection and management for the project.
Management Reserve	10% of total construction cost	Overall contingency for the project – reduces as the project definition progresses.

4.2.5 Analysis of the System

Roads were analyzed using their PCR rating from the WSDOT Streetwise guide. Kansas Street Reconstruction, a project included in the city’s 2024-2029 TIP and currently in design, is a major reconstruction project the city has already taken on. Another strong candidate for reconstruction is the Leber Street and Van Scoyoc Avenue project. This, and other future candidates for reconstruction projects, are shown in Table 3. All projects are assumed to need grant funding to progress, and as such, the projects are not scheduled for a specific year and all costs are given in 2024 dollars.



Table 3. Recommended Reconstruction Projects

Project	Project Cost (in 2024 dollars)	Linear Feet of Lanes	Curb Ramps Needing Repair	Year Scheduled
Ammons Lane Reconstruction (West of Cardinal, East of parking lot)	\$256,000	1,118	0	Pending Grant Funding
Whitesell Street Reconstruction (North of Ammons Lane, South of Bowlin Avenue)	\$79,000	272	2	Pending Grant Funding
Eldredge Avenue Reconstruction (East of Whitesell Street, West of Calistoga Street)*	\$696,000	2,618	12	Pending Grant Funding
Leber Street/Van Scoyoc Avenue Reconstruction (North of Corrin Avenue, West of Calistoga Street)	\$723,000	3,056	3	Pending Grant Funding
Leber Court Reconstruction (South of Eldredge Avenue, cul-de-sac)**	\$209,000	769	4	Pending Grant Funding

*Sections of Eldredge need reconstruction, while some are in better shape. This program recommends holding off on reconstruction for the entire segment to address other projects.

**The Leber Court reconstruction should be aligned with the Eldredge reconstruction to minimize mobilization costs.

Although it is good to keep in mind the poor roads that will need to be reconstructed, due to their high funding needs relative to their length, it is more efficient to spend money on roads that have not yet reached this level of disrepair. Due to this, roads were analyzed next to determine ideal cases for an overlay project. Train Street, as well as other candidates for overlay projects, are shown in Table 4. Some of these projects are expensive enough they would overwhelm the city’s pavement maintenance budget. These projects are presumed to need grant funding, and they are not scheduled for a specific year and costs are given in 2024 dollars.



Table 4. Recommended Overlay Projects

Project	Project Cost (in 2024 dollars or year constructed dollars)	Linear Feet of Lanes	Curb Ramps Needing Repair	Year Scheduled
Old Pioneer Way Overlay (West of School Driveway, East of Turn Around)	\$222,000	2,842	2	Pending Grant Funding
Calistoga Street Overlay (South of Van Scoyoc Avenue, North of Eldredge Avenue)	\$317,000	2,942	13	Pending Grant Funding
River Avenue Overlay (South of Factory Street, North of Ammons Lane)	\$44,000	516	0	2028
Bridge Street Overlay (North of Eldredge Avenue, South of Corrin Avenue)	\$139,000	1,300	4	2027
Train Street Overlay (South of Ammons Lane, North of Eldredge Avenue)	\$600,000	4,636	33	Pending Grant Funding
Calistoga Street Overlay (East of Calistoga Lane, West of River Avenue)	\$111,000	1,138	2	2028
Cardinal Lane/Ammons Lane/Whitesell Street Overlay (South of Bowlin Avenue, North of Varner Avenue)	\$205,000	2,306	1	2029
Corrin Avenue Overlay (East of Train Street, West of Bridge Street)	\$243,000	2,473	8	Pending Grant Funding

Finally, the most efficient use of funding is to keep good roads good. Chip sealing is a cheap and effective maintenance method that can help keep good roads good. Chip sealing would be appropriate along Grinnell Avenue, between Kansas Street and Balmer Street. Chip sealing projects are shown in Table 5.



Table 5. Recommended Chip Seal Projects

Project	Project Cost (in Year Scheduled dollars)	Linear Feet of Lanes	Year Scheduled
Grinnell Avenue Chip Seal (South of Kansas Street, North of Balmer Street)	\$132,000	6,670	2024
Skinner Way Chip Seal (East of Belfair Avenue, West of Grinnell Avenue)	\$41,000	1,978	2024
Varner Ave Chip Seal (East of Train Street, West of River Avenue)	\$24,000	1,123	2025
Christian Lane Chip Seal (East of Mill Avenue, West of Christian Court)	\$11,000	488	2025
Van Scoyoc Avenue Chip Seal (East of Corrin Avenue, West of River Avenue)	\$75,000	3,488	2026
Skinner Way/Belfair Avenue Chip Seal (East of Calistoga Street, West of Grinnell Avenue)	\$161,000	7,905	2025
Rocky Road Chip Seal (North of Washington Avenue)	\$39,000	1,743	2026
Hays Avenue Chip Seal (North of Kansas Street, South of Deeded Lane)	\$22,000	933	2026
Varner Avenue Chip Seal (East of Hardefeldt Street, West of Olive Street)	\$23,000	985	2026
Corrin Avenue Chip Seal (West of Leber Street, East of Calistoga Street)	\$48,000	2,273	2026
Washington Avenue Chip Seal (East of Brown Street, West of Brown Way)	\$57,000	2,537	2028
Mill Avenue Chip Seal (North of Christian Lane, South of Train Street)	\$46,000	2,118	2027
Callistoga Court Chip Seal (Cul-de-sac)	\$20,000	827	2027
Rainier Lane Chip Seal (East of Whitesell Street, West of Leber Street)	\$16,000	621	2029



4.2.6 Annual Budget

The annual budget varies depending on several assumptions, including the overall extent of preservation treatments needed (defined by total construction costs), the aggressiveness of making preservation treatments (generally controlled by total years of preservation program/cycle), and availability of funding. The total project costs are approximately constant for a given year. The total years of the preservation cycle is based on the TIB cycle while balancing the number of roads in need of maintenance with a reasonable annual budget. The availability of funding changes based on government programs and the City’s budget. The predicted annual budget is shown in Table 6.

Table 6. Annual Budget

Year #	Year	Cost
1	2024	\$173,000
2	2025	\$196,000
3	2026	\$207,000
4	2027	\$205,000
5	2028	\$212,000
6	2029	\$221,000

4.2.7 6-Year Workplan

This workplan needs to account for the roadway projects currently planned. These are the Kansas Street Reconstruction and the Whitehawk Boulevard Road Extension. The Kansas Street Reconstruction is a major reconstruction project that is currently in design while the Whitehawk Boulevard Road Extension is currently in the planning stages. For the purposes of this program, it will be assumed that these two projects will reconstruct all of Kansas Street and remedy any pavement needs in Whitehawk Boulevard and they were not factored into the pavement preservation budget. See Table 7 for a list of all the projects covered in the 6-year Workplan.

Table 7. 6-Year Workplan

Location and Treatment	Year of Construction
2024	
Grinnell Avenue Chip Seal (South of Kansas Street, North of Balmer Street)	2024
Skinner Way Chip Seal (East of Belfair Avenue, West of Grinnell Avenue)	2024
2025	
Varner Ave Chip Seal (East of Train Street, West of River Avenue)	2025
Christian Lane Chip Seal (East of Mill Avenue, West of Christian Court)	2025
Skinner Way/Belfair Avenue Chip Seal (East of Calistoga Street, West of Grinnell Avenue)	2025
2026	
Van Scoyoc Avenue Chip Seal (East of Corrin Avenue, West of River Avenue)	2026
Rocky Road Chip Seal (North of Washington Avenue)	2026
Hays Avenue Chip Seal (North of Kansas Street, South of Deeded Lane)	2026
Varner Avenue Chip Seal (East of Hardefeldt Street, West of Olive Street)	2026
Corrin Avenue Chip Seal (West of Leber Street, East of Calistoga Street)	2026



Location and Treatment	Year of Construction
2027	
Mill Avenue Chip Seal (North of Christian Lane, South of Train Street)	2027
Callistoga Court Chip Seal (Cul-de-sac)	2027
Bridge Street Overlay (North of Eldredge Avenue, South of Corrin Avenue)	2027
2028	
Washington Avenue Chip Seal (East of Brown Street, West of Brown Way)	2028
River Avenue Overlay (South of Factory Street, North of Ammons Lane)	2028
Calistoga Street Overlay (East of Calistoga Lane, West of River Avenue)	2028
2029	
Rainier Lane Chip Seal (East of Whitesell Street, West of Leber Street)	2029
Cardinal Lane/Ammons Lane/Whitesell Street Overlay (South of Bowlin Avenue, North of Varner Avenue)	2029

4.3 NON-CONSTRUCTION ACTIVITIES

4.3.1 Inspection

This PMS is reliant on knowing the distresses present on streets, which is used to determine their overall quality. This knowledge will come from inspecting the pavement on a 6-year basis. All arterial and collector streets should be evaluated once every 2 years, while the local access streets should be split into a 6-year cycle with 1 section being looked at every 2 years. Table 8 shows the recommended split for the local access roads on a 3-section cycle, while Figure 2 shows the groups on a map. These updates should follow the prioritization process included in this report.

Table 8. Annual Roadway Inspection Schedule

Inspection Group	Year of Roadway Inspection							
	2022 (Baseline)	2024	2026	2028	2030	2032	2034	2036
Group 1 (northern neighborhoods)	●	●			●			●
Group 2 (north of Eldredge)	●		●			●		
Group 3 (south of Eldredge)	●			●			●	
Group 4 (non-local access)	●	●	●	●	●	●	●	●

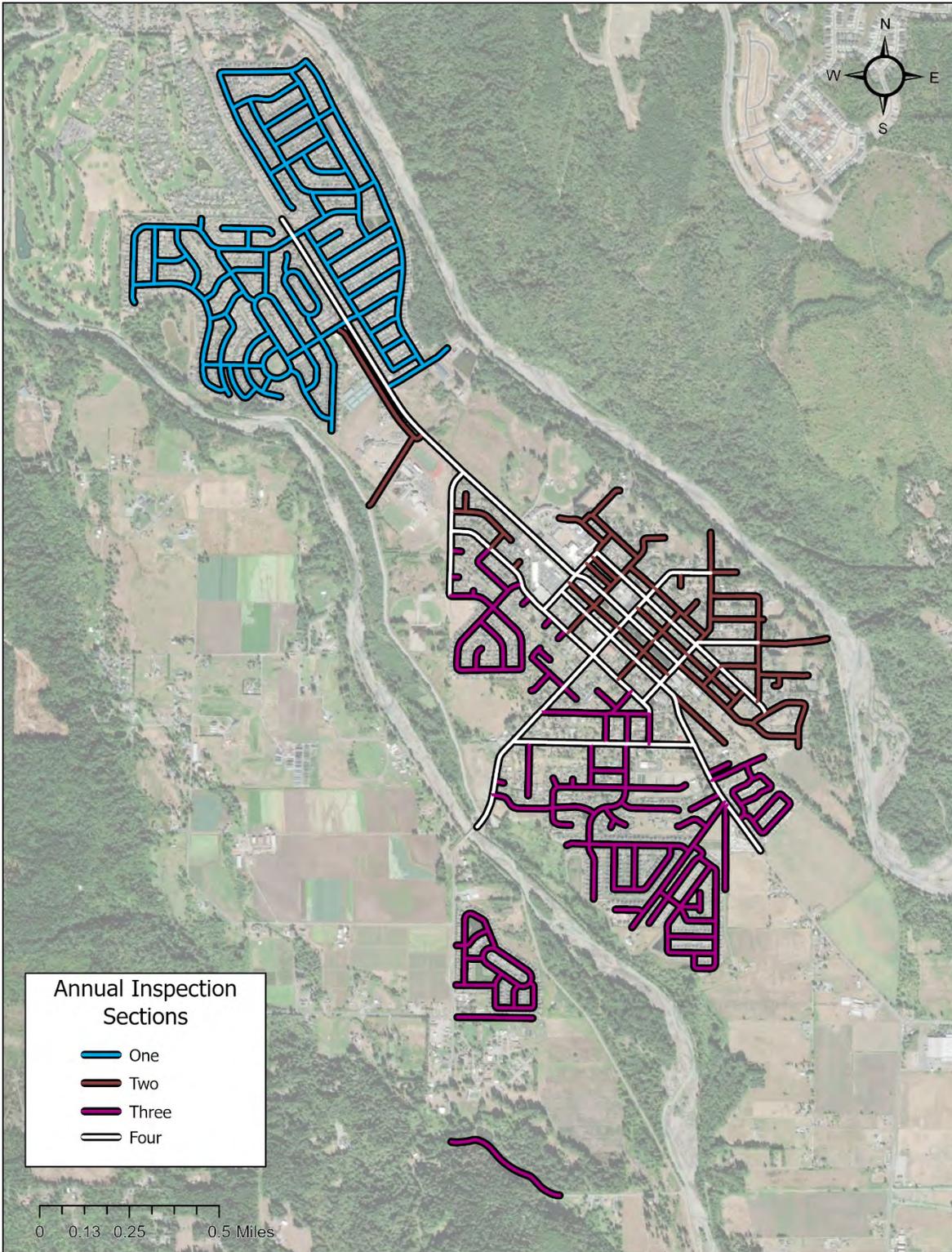


Figure 2. Annual Roadway Inspection Sections



4.3.2 Overall Rating by Section

For all newly reviewed segments, compare the ratings given during the recent inspection cycle to the previous inspection cycle. This report serves as the implementation point. The map of current distressed pavements will help in re-prioritization of segments not previously considered as high traffic or in high rate of distress.

4.3.3 Prioritization

Segments found to be in major distress or potentially hazardous that require emergency repair efforts will be communicated to the city engineer directly. Segments that have a poor rating and are in requirement of full reconstruction are prioritized for outside funding, while segments that need rehabilitative maintenance are also outside funding candidates. Segments in low need of repair have the benefit of low-cost maintenance options and should be addressed earlier rather than later. These are a target for funds and maintenance activity as these road segments are still within service life and this life can be extended cheaply.

4.3.4 Updating Treatments if Necessary

This section will be updated ongoing to incorporate new policy making activity relevant to the pavement treatment activities to be implemented with local guidance from FHWA or WSDOT. This section includes treatment types that may have not been previously implemented by the city or are new maintenance technologies that, with local guidance, are being implemented.

4.3.5 Updating Program Costs

Costs in the baseline 6-year Workplan are based on 2024 construction costs escalated to the year of construction. Costs will need to be updated to reflect inflation, or else the cost estimates shown in this report will quickly become dated. A standard 3% inflation factor may be used for future cost estimating, although the National Highway Construction Cost Index (NHCCI) provides a more roadway specific inflation factor that could be interpolated to find a more accurate factor (Federal Highway Administration).

4.3.6 Revising TIP as Needed

The City's transportation improvement plan, or TIP, will need to be updated using this program as a resource. These updates should take place after the roadway assessments have taken place and the roadways that could use funding the most efficiently have been identified.

4.4 SUMMARY

The PMS begins with inspections of the roads. A Workplan was then assembled or revised (in future) by including new inspection data and re-prioritizing the roads that can be most cost-effectively addressed per the new inspection, which leads to an expected project list. This project list allows funding to be chased and projects to be addressed. Finally, the PMS must be updated with new costs, treatments, and inspections as necessary.



5. ANNUAL WORKPLAN IMPLEMENTATION

5.1 INTRODUCTION

From the data collected, activities to implement the maintenance strategies can then be conducted. First is the project list, or annual pavement preservation workplan, which lays out a list of projects for the city to consider over the next six years. The project list will be evaluated at the start of every other year, and this engineering analysis will lead to an annual project list with bid documents attached. These projects will go to bidding, be awarded, and then after construction the project will be inspected and tested. Finally, a post-construction report will be written about each maintenance project.

5.2 CONSTRUCTION

A project list covering the next six years has been established. The original version covers 2024-2029, and it will be updated after the roadways are reinspected. This list will prioritize projects based on the elements listed out in this program, while also considering the annual budget. Construction season is generally from April through September or mid-October, and these projects may need to plan around this timeline.

5.2.1 Plan Sets and Engineering

Plans, specifications, and estimate (PS&E) need to be prepared annually for the program of projects and should be finalized as early in the year as possible, but no later than the end of March to allow the projects to be advertised for construction in the same calendar year.

5.2.2 Bidding

Projects with a schedule of less than 3 months will typically be advertised for bid by the end of March, and the bid should be finalized by the end of April. Projects scheduled for more than 3 months may need to begin during the next construction season or may take more than one construction season (esp. reconstruction projects).

5.2.3 Coordination with Other Agencies

Some projects in this program, especially those abutting State Route 162, may require coordination with WSDOT. Orting is in the WSDOT Olympic Region and could also contact the WSDOT Local Programs Headquarters for help with coordination.

Coordination with other agencies, especially Pierce County Roads, may be beneficial. This coordination could allow the price of projects to decrease through increasing the size of a project and the economy of scale.

5.2.4 Construction Management

All of the work scheduled for one year can typically be completed under one PS&E and one construction management contract that can be included with the design of the project or contracted separately.



5.3 NON-CONSTRUCTION

5.3.1 Pavement Condition Assessment Updates

As an ongoing part of the pavement condition assessment program, this section is to include updates to policy and procedures around the Pavement Condition assessment. This should also include any additions and updates to the pavement network and updates on previous construction activities completed or referenced in the previous inspection cycle.

This section should include updates and revisions to the data collection process and app or assessment methodology. The first of these is that roads should be rated following the WSDOT Streetwise guide, rather than the methodology in Appendix A.

5.3.2 TIP Updates

This section should include any anticipated or upcoming and planned construction projects that address nearby pavement deficiencies. By taking inventory of upcoming projects, the city can dedicate resources to projects not incorporated as part of larger capital improvement or frontage development project.

5.3.3 PMS Updates

This section will incorporate future and ongoing updates and revisions to the pavement management system.

5.3.4 Administrative Updates

Section to be updated as annual reporting strategy is implemented. This includes personnel and policy updates related to the Pavement Maintenance program and assessment.

5.3.5 Funding Activities

As this program is implemented, this section will include funding that has been obtained or is being sought at the time of assessment for current and future projects. A major source of this funding is expected to be the Washington State Transportation Improvement Board, TIB, which distributes maintenance grants throughout the state. Another potential source of funding is the Safe Routes to School Program through WSDOT.

5.3.6 GIS Updates

Segments produced from the pavement management program inception are updated with new segment photos at time of inspection. These segments are also intended to be updated post construction or maintenance activity along a given segment, the compliance of this is up to the maintenance program administrator.



5.4 SUMMARY

This report is intended to serve as a starting point and as guidance for ongoing and future pavement maintenance activities and procedures. As the city grows and the needs change, the City and program administrator will need to make ongoing updates to this report to reflect the present and ongoing needs of the pavement system.

6. CONCLUSION

The pavement maintenance recommended and included in this report are intended to be used as a planning tool. Further engineering judgment and field verification is necessary before preparing final maintenance plans for each year.



APPENDIX A

2022 PAVEMENT CONDITION ASSESSMENT REPORT (ATTACHED WITHOUT APPENDICES)

2022 Pavement Condition Assessment



ORTING
Washington

February 2023



SCJ ALLIANCE
CONSULTING SERVICES

2022 Pavement Condition Assessment

Project Information

Project: 2022 Pavement Condition Assessment

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Project Reference SCJ #21-000838, Phase 05, Task 01

Path: <N:\Projects\4270 City of Orting\21-000838 Orting 2021-24 On-Call PE Services\Phase 05 - Pavement Management\05.01 2022 Street Condition Assessment\Reports\Assessment Final Draft>

PROJECT ENGINEER'S CERTIFICATION

I hereby certify that this Pavement Condition Assessment for the City of Orting has been prepared by me or under my supervision and meets the minimum standards of the City of Orting and normal standards of engineering practice.



2-12-23

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Appendix B: SCJ Pavement Condition Evaluation App

Appendix C: Table of Assessment by Roadway Segments

Appendix D: Pavement Surface Condition Field Rating Manual for Asphalt Pavements



1. EXECUTIVE SUMMARY

SCJ Alliance performed this pavement condition assessment from September to October, 2022, to assess the City of Orting’s roadway network according to WSDOT’s recommended methods per the Northwest Pavement Management Association’s (NWPMA) Pavement Surface Condition Field Rating Manual for Asphalt Pavements (PSCFRM). This manual is included in Appendix D. The assessments were made by a two-person team to visually qualify and physically quantify various pavement distresses that are discussed further in Chapter 4.3 and include:

- 1. Rutting
- 2. Alligator Cracking
- 3. Longitudinal Wheel Path Cracking
- 4. Longitudinal Non-wheel Path Cracking
- 5. Transverse Cracking
- 6. Raveling and Aging
- 7. Flushing and Bleeding
- 8. Patching
- 9. Corrugation and Waves (not observed)
- 10. Sags and Humps
- 11. Block Cracking (not observed)
- 12. Pavement Edge Condition
- 13. Crack Seal Condition

Based on the cumulative presence or lack of these distresses, each roadway segment was given an overall rating of poor, average, good, or new. A summary of the overall quality of the City of Orting’s roadway network is shown in Figure 1 below. Roadway segments were primarily in good or like new quality, as seen in Figure 2 on page 8. Kansas Street and Old Pioneer Way were found to have multiple, consecutive, notably low-quality segments along their limits.

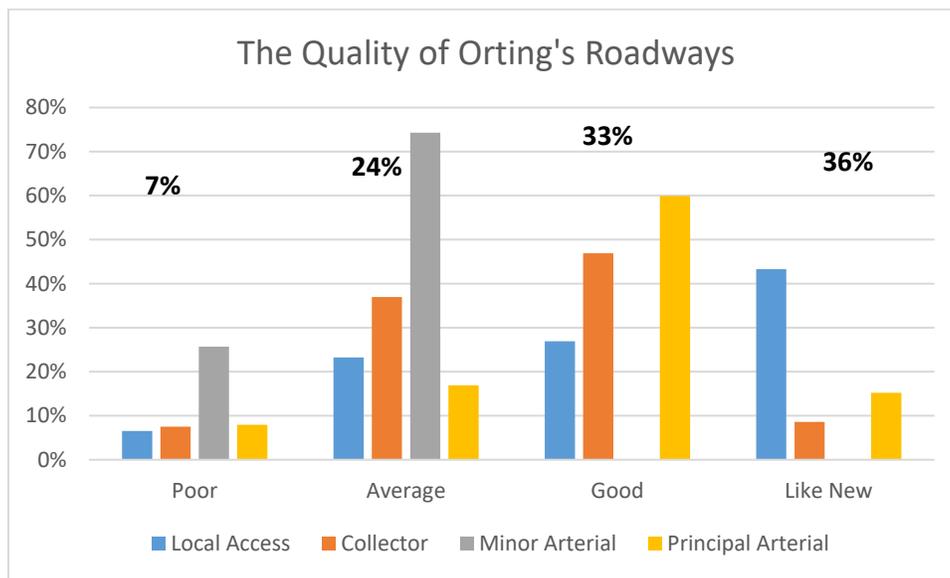


Figure 1. Overall Pavement Condition Ratings Summarized by Functional Class

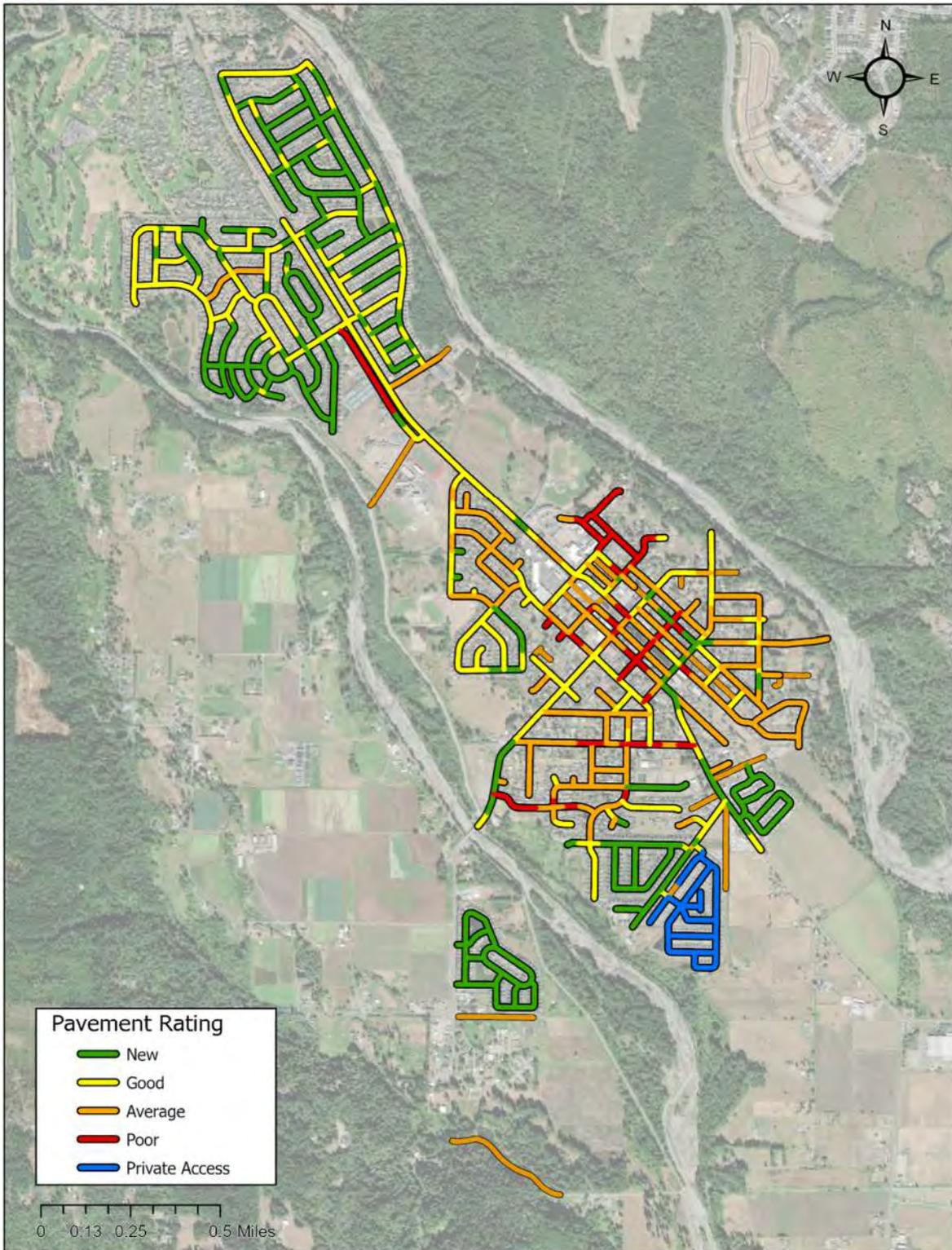


Figure 2. Roadways by Overall Rating



The most significant of the poor segments were along Kansas Street, which is a principal arterial south of downtown. This roadway was observed being used by commercial trucks to bypass downtown and the frequent high loads have deteriorated the pavement to a poor condition. At the time of assessment, a planned reconstruction of Kansas Street is scheduled to begin in 2024.

The other, notably poor roadway is Old Pioneer Way, which is a local access road that starts at State Route 162 (SR 162) and runs parallel for several blocks and dead-ends before reaching Lane Blvd. NW. There were both commercial and residential developments along this roadway and it is a much lower traffic roadway than Kansas Street. These two roads, combined with a few other sporadic segments, make up the roughly 7% of roads in Orting with a poor condition.

In addition, approximately 24% of the roadways were rated average and would also benefit from a variety of pavement and maintenance activities.

2. INTRODUCTION

This report summarizes the methods and results of the pavement condition assessment that were conducted within the City of Orting limits. The report should be used to understand the condition evaluation process for future pavement condition assessments, to understand the current pavement condition ratings, and to understand the data contained in the city's GIS database. This pavement condition assessment was necessary to establish a baseline of the existing condition of the roads within the city. This report will serve as a basis for future projects and on-going pavement maintenance and preservation planning and programming.

This report contains a description of the roads in Orting and a description of the distresses assigned to roads. The roads of Orting are broken down by pavement type and functional classification. The distresses are broken down individually with photographs from the field and maps showing where these distresses were observed. For each segment, the cumulative frequency and severity of distresses were considered and an overall rating was assigned to provide a qualitative and comparative ranking as seen on Figure 1, page 7, and Figure 2, page 8.

3. CITY OF ORTING ROADWAY SYSTEM

3.1 CITY OF ORTING ROADWAY SYSTEM

The City of Orting roadway network includes 62.7 lane-miles of asphalt concrete pavement (ACP), 2.5 lane-miles of gravel, and 0.1 lane-miles of Portland concrete pavement (PCC). This corresponds to the network being 96% ACP, 3.9% gravel, and 0.1% PCC. PCC is found primarily on older, local access roads in the downtown core. Gravel roads were recorded on alleys through downtown as well as some side streets, especially those near the edge of town. The pavement material of each roadway segment is shown in Figure 3 on page 10.

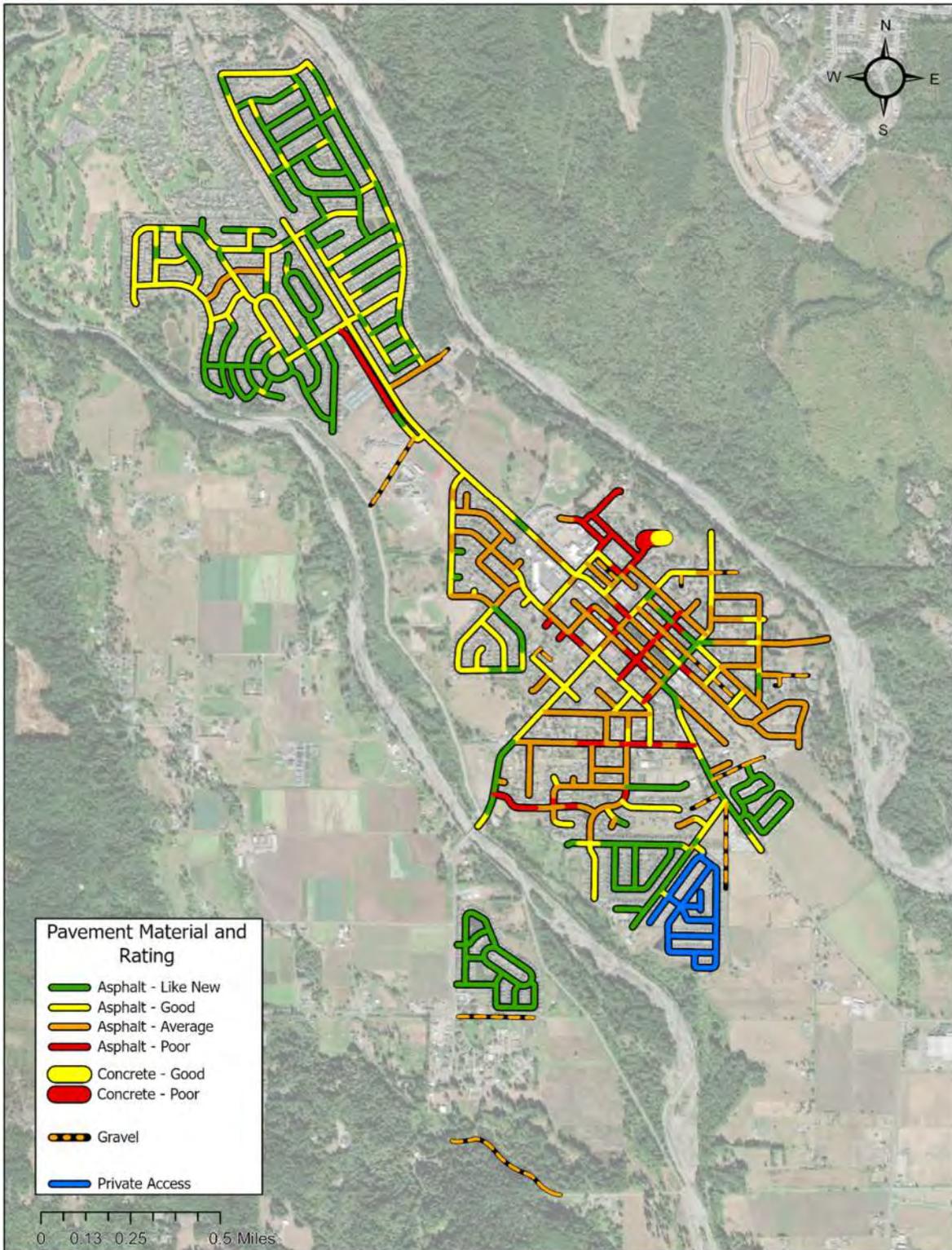


Figure 3. Roadways by Material and Overall Rating



Orting's roads are assigned a functional classification based on the volume of traffic using each roadway and the purpose of the roadway. Orting has 49.7 lane-miles of local access roads (76%), 5.2 lane-miles of collector roads (8%), 0.8 lane-miles of minor arterial roads (1%), and 9.7 lane miles of principal arterial roads (15%). Functional classifications are shown in Figure 4 on page 12.

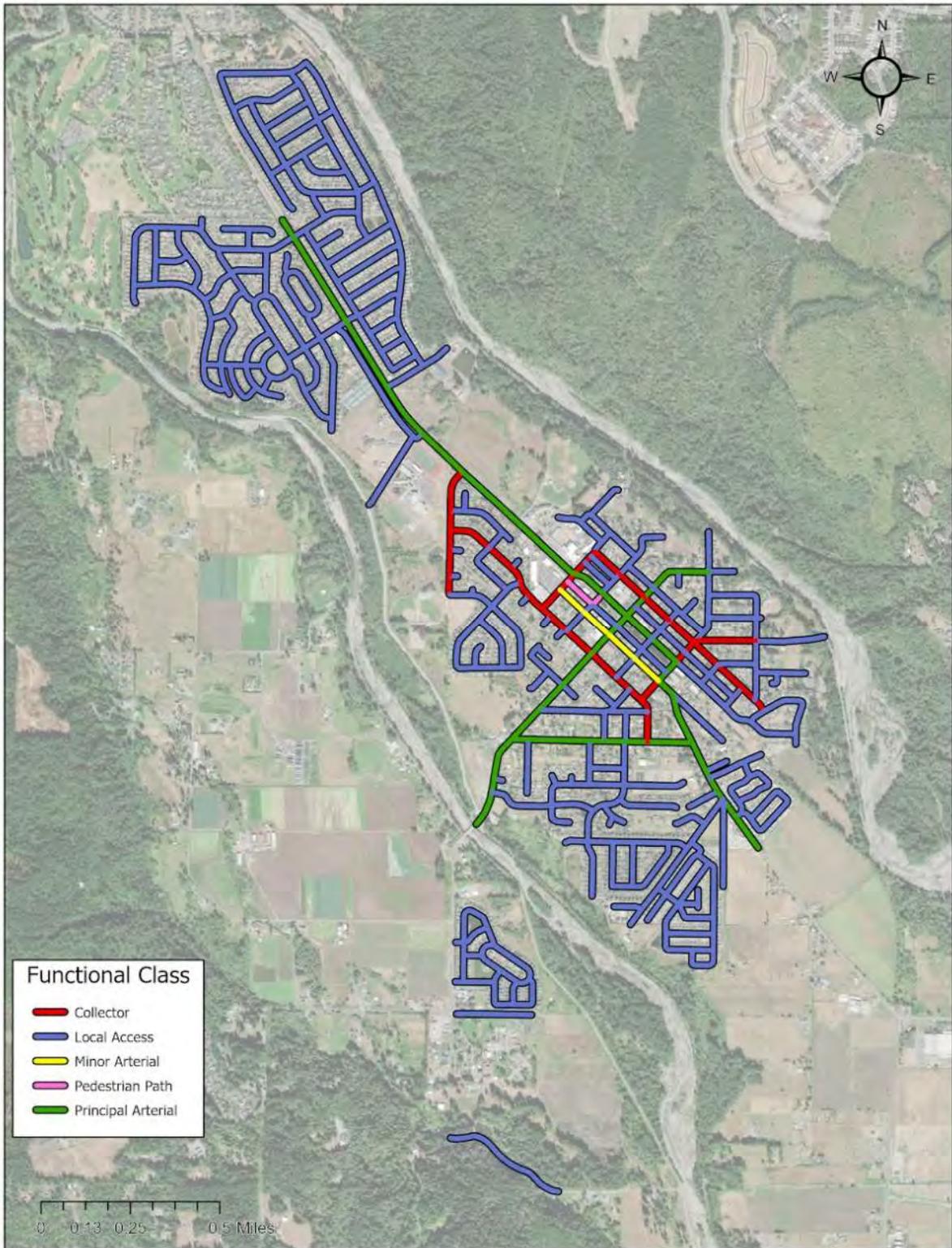


Figure 4. Roadways by Functional Classifications



3.2 GIS DATABASE

One of the priorities of the pavement evaluation was to establish a GIS database for the City of Orting so that a variety of infrastructure data could be better managed within GIS. To begin this effort, available data was pulled from Pierce County's GIS database and trimmed to Orting's city limits. This data was based on GIS nodes at intersections with links (roadways) connecting the appropriate nodes. For the purposes of the pavement condition assessment, these roadway links were further divided into segments that were approximately 250 feet in length to define manageable segments of roadway for the observation of the pavement condition. In general, these segments were recombined to be consistent with the GIS segments pulled from the Pierce County database. Exceptions were made based on significant differences in distresses present.

4. PAVEMENT CONDITION FIELD ASSESSMENT

4.1 INTRODUCTION

The first step in the development of a pavement management system is to inventory the existing roadway system to establish a baseline of the condition in time. From this assessment, a PMS can be developed based on field-collected data. It also sets a precedent by which the PMS can be updated and expanded as future pavement condition assessments are conducted.

This section covers the methods, distresses, segment evaluation, and overall rating process used in the pavement condition assessment. This section of the report includes excerpts from the PSCFRM that were expanded to describe each observable distress, along with photographs from the field and maps of where each of the distresses were present in Orting. This is intended to facilitate an understanding of the pavement condition assessment and provide consistent review data for future pavement condition assessments.

4.2 PAVEMENT CONDITION ASSESSMENT METHODOLOGY

4.2.1 Asphalt Concrete Paved Roadways

This pavement condition assessment followed NWPMA's PSCFRM (Manual) methodology as recommended by WSDOT. The Manual describes potential asphalt concrete pavement distresses, listed in Chapter 4.3, and recommends methods of qualitative and quantitative assessment based on both severity and extent. The PSCFRM lays out two options to qualify these severities and extents. Option A used the worst assigned severity and the total extent of the distress while Option B assigned the extent of each severity individually. For the purposes of this assessment, Option A was always used.

The Manual also discusses best practices for evaluating the roadways. These evaluations were done on foot, or in Phase 2, confirmed while on foot, and they were conducted by a 2-person team over a 2-month period. The observation team recorded the pavement condition for each segment defined in the GIS. Pavement condition overall ratings covered the whole traveled surface of the roadway, not an individual lane or direction of travel. Observed distresses and data that captured the severity and frequency of each distress were entered electronically in a proprietary SCJ software that was developed based on this manual and the use of GIS (see Appendix B).



Due to variability in site conditions or assessors, it is critical to have continuity between both the time of the assessment and assessors, and to collect the data within the same range of time and using the same methodology. The Orting Pavement Condition Assessment covered roadways within Orting’s city limits and took place in September and October 2022, in three independent phases conducted by the same 2-person team of engineers. Summer weather conditions were observed in all field visits.

The first phase of three covered principal arterials, minor arterials, and collector streets, as well as some central local access roads with the exception of SR 162, which is maintained by the WSDOT. The second phase covered the remaining local access roads and the third phase covered SR 162 through city limits. The segments observed in each phase are shown in Figure 5 on page 15.

Data collection varied from phase to phase as it was recognized that fewer pictures could cover the entire segment because the pavement condition of segments was nearly always consistent. Therefore, pictures were taken at 125’ intervals in Phase 1, but then at 250’ intervals in Phase 2. In Phase 3, a video was also taken to assist in the pavement condition observation because the roadway is under significant amounts of vehicular traffic.

4.2.2 Portland Cement Concrete Paved Roadways

WSDOT doesn’t make a recommendation for how to assess the condition of PCC roadways, and no equivalent manual exists. Therefore, PCC roadways were evaluated using the PSCFRM distresses and the same methodology because rigid pavement surfaces such as PCC will exhibit similar failure characteristics as flexible, ACP.

4.2.3 Gravel Roadways

Gravel roadways were qualitatively field rated without PSCFRM distress observations or evaluation. Access, maintenance, and service all factor into roadway surface construction materials, gravel while not excluded from the report, is not included in the PSCFRM.

4.2.4 Private Access Roadways

Private access roadways were encountered in gated communities where vehicular access is restricted to property owners only. Each segment of private access roadway was evaluated where possible without disturbing private occupants and photographs only taken on the public portion of these segments.

Majestic View Estates is a private access, gated community located on the southern part of town. With the restricted access, no field assessment was made, and no GIS data collected. If these roadways are maintained by the City, future pavement condition assessments should be performed with coordinated access to these communities.

4.2.5 Pedestrian Paths

Three segments consisting solely of pedestrian path were included as part of the assessment and given qualitative ratings using PSCFRM as a basis of assessment.

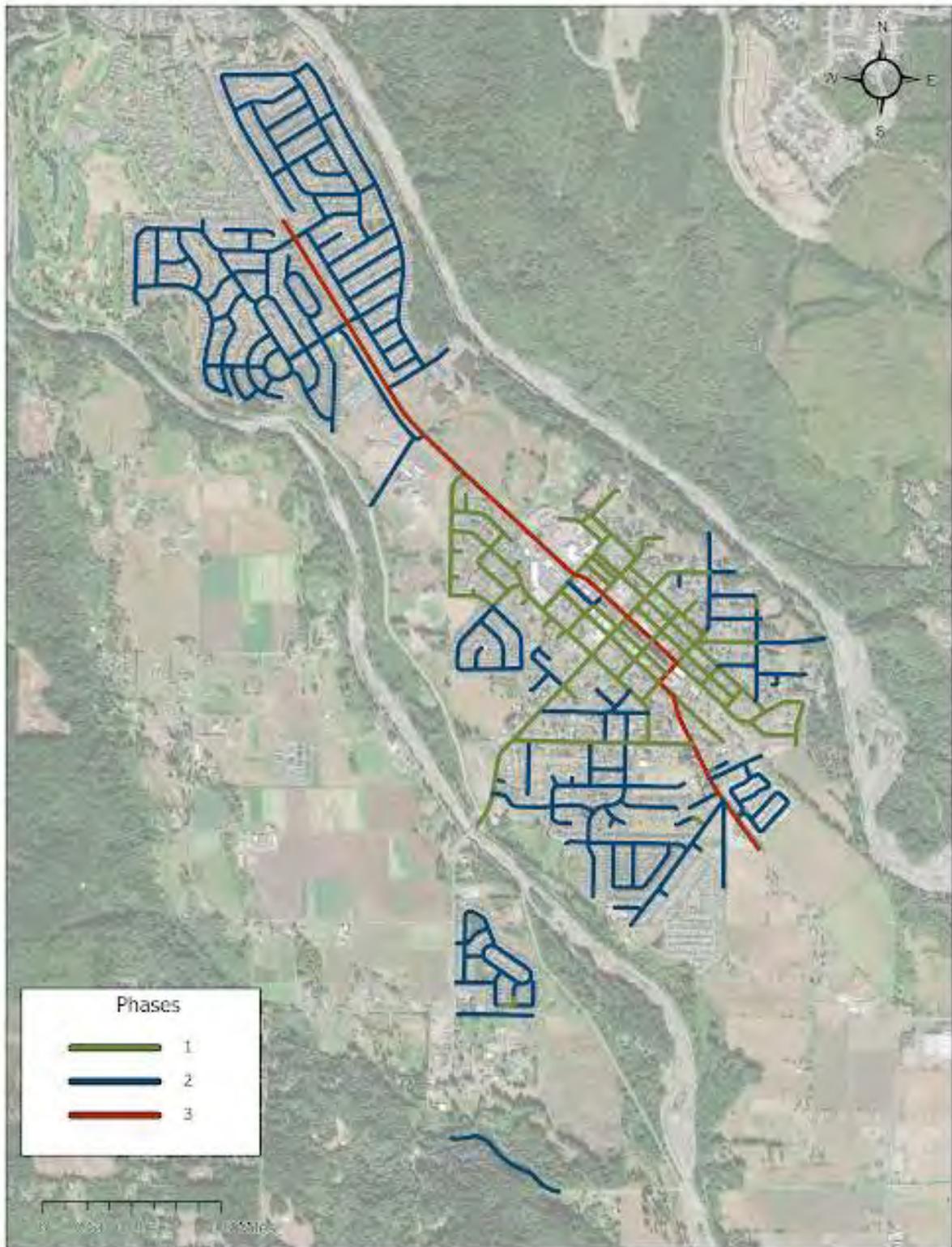


Figure 5. Roadways Assessed in Each Phase of Evaluation



4.3 PAVEMENT CONDITION ASSESSMENT

The distresses that were evaluated in this pavement condition assessment come direction from the PSCFRM. Two distress types were included in the assessment but were not observed as noted below.

1. Rutting
2. Alligator Cracking
3. Longitudinal Wheel Path Cracking
4. Longitudinal Non-wheel Path Cracking
5. Transverse Cracking
6. Raveling and Aging
7. Flushing and Bleeding
8. Patching
9. Corrugation and Waves (not observed)
10. Sags and Humps
11. Block Cracking (not observed)
12. Pavement Edge Condition
13. Crack Seal Condition



Each subsection below describes the distresses evaluated in this pavement condition assessment, information on how the severity and frequency was evaluated for each distress, potential causes for this type of failure, and in some cases, specific methods typically used to address these failures. Much of this information is borrow directly from the NWPMA's PSCFRM and is included here to support the baseline pavement condition assessment and subsequent pavement management planning and programming efforts. An example photo specific to the City of Orting and from this baseline pavement condition assessment has been included to indicate the potential worst case of each distress type assessed.

4.3.1 Rutting

Rutting occurs when vehicle's wheels have forced the wheel path lower than the rest of the road (seen on Kansas Street, Figure 6 on page 2). Although, it can be due to the pavement being worn off, it is generally attributed to base material being displaced. Pavement being worn off can be fixed with a repave, but if the root cause was the base material, a full reconstruction is likely needed. Figure 7 on page 3 shows the locations where rutting was observed during this pavement condition assessment.

Severity

- Low – ¼ inch to ½ inch
- Medium – ½ inch to ¾ inch
- High – over ¾ inch

Frequency

- Not measured for rutting, applied to entire segment, or defined in a comment.



Figure 6. Rutting on Kansas Street

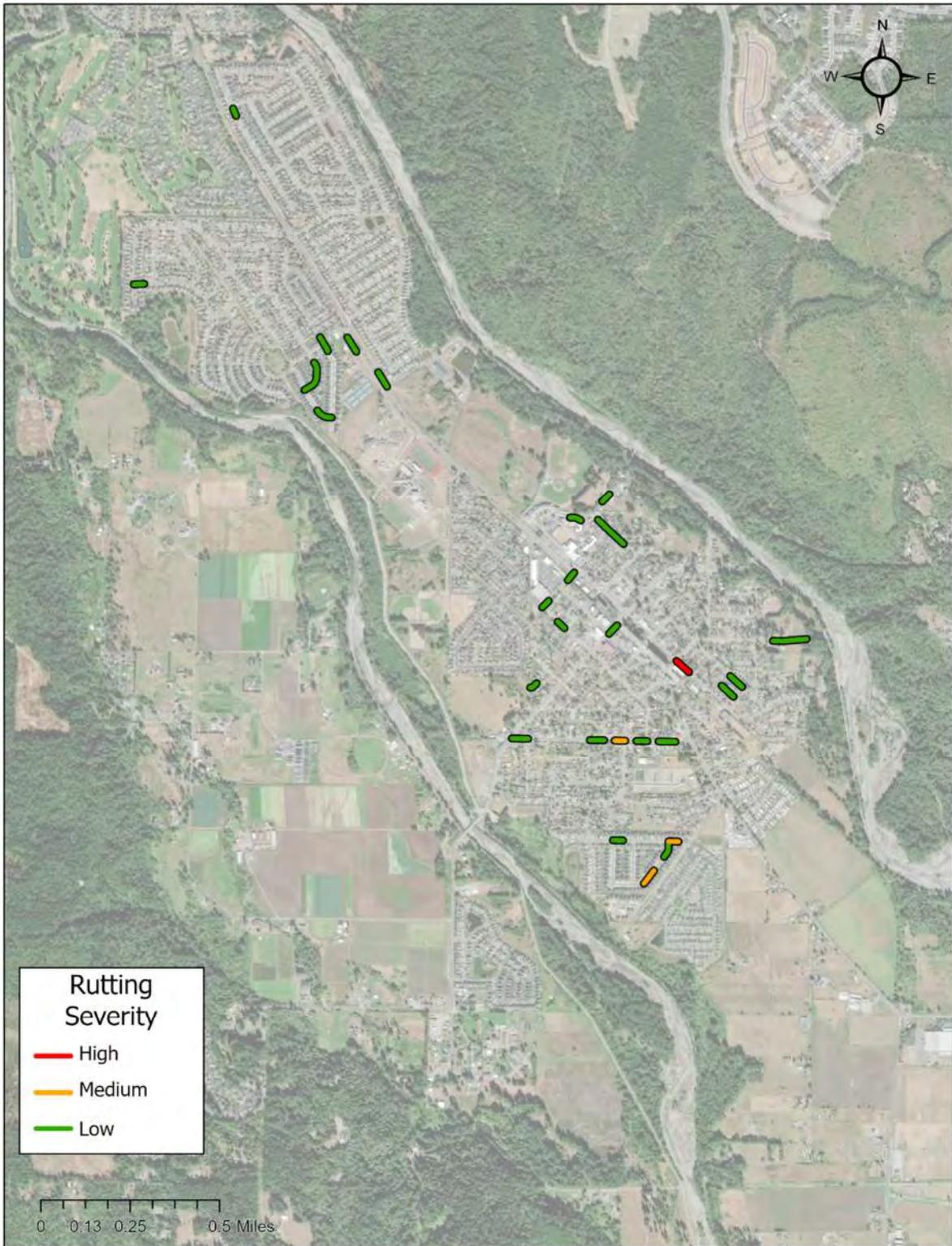


Figure 7. Rutting in Orting



4.3.2 Alligator Cracking

Alligator cracking is a distress due to wear where cracks connect extensively (see Figure 9 below). These interconnected cracks point to material beneath the pavement having settled and show the pavement is not receiving adequate support. This distress requires fixing the base materials as well as the pavement itself. Alligator cracking was mainly observed in the southern section of Orting, as seen in Figure 10 on page 6.

Severity

- Low – Branched, longitudinal, discontinuous thin cracks beginning to interconnect.
- Medium – Cracking is completely interconnected, and some spalling may appear at edge of cracks. Pavement pieces are still in place.
- High – Well developed pattern of cracking, spalling is very apparent, and pieces may be missing.



Figure 8. Alligator Cracking Severities

Frequency

- Percentage of each wheelpath affected per segment evaluated.



Figure 9. Alligator Cracking on Varner Avenue

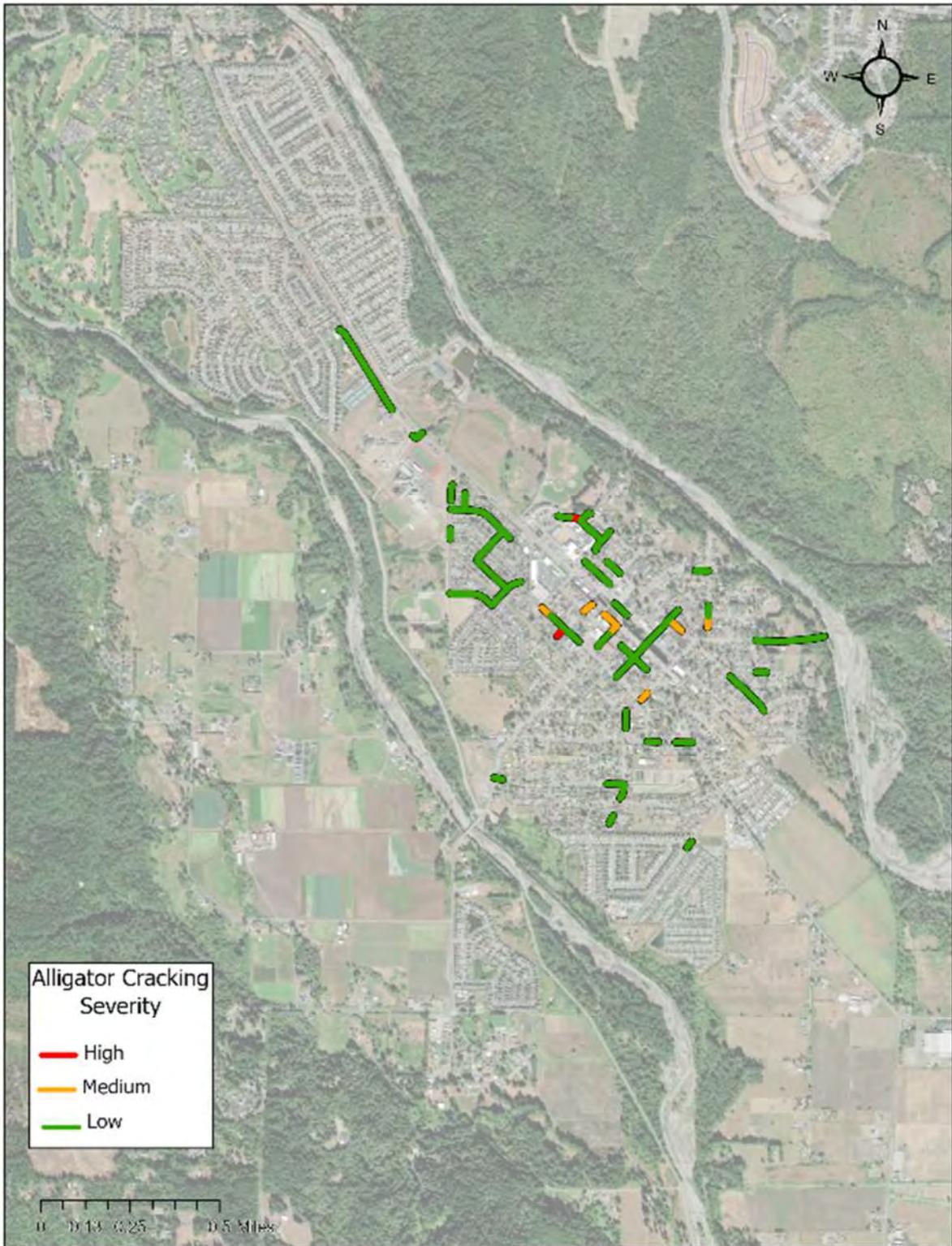


Figure 10. Alligator Cracking in Orting



4.3.3 Longitudinal Wheelpath Cracking

Longitudinal wheelpath cracks run parallel to the roadway centerline and are in the wheel path of traffic (Figure 12 below). Although it is possible that these cracks are from poor joint construction, they may also be the beginning of alligator cracks forming. Depending on the cause, the repair methods vary from crack sealing to repaving. Longitudinal wheel path cracking was only observed in Orting at low severity, as seen in Figure 13 on 9.

Severity

- Low – Cracks have very little or no spalling and are less than ¼" in width
- Medium – Cracks have little or no spalling but are greater than ¼" in width
- High – Cracks are spalled, and pieces are visibly missing



Figure 11. Longitudinal Wheelpath Cracking Severities

Frequency

- Percentage of the length of each segment evaluated.



Figure 12. Longitudinal Wheelpath Crack along Calistoga Street

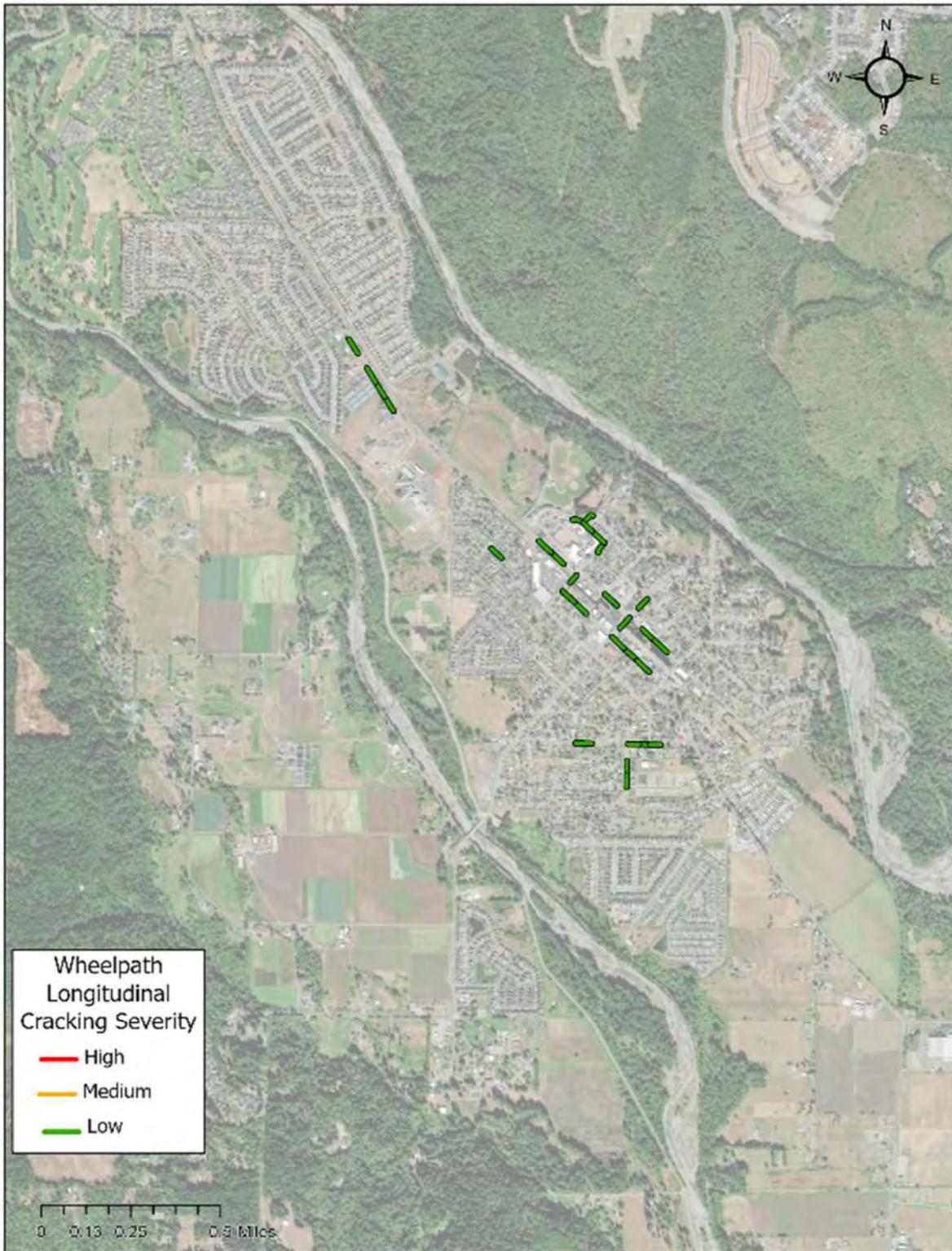


Figure 13. Longitudinal Wheelpath Cracking in Orting



4.3.4 Longitudinal Non-Wheelpath Cracking

Longitudinal non-wheelpath cracks were seen on the centerline of many of Orting's roadways (Figure 15 below). These longitudinal cracks run parallel to the roadway centerline and are not in the wheel path of traffic. They are generally caused by poor joint construction. Crack sealing may be all the maintenance required, however, a repave is needed to truly fix the crack. Figure 16 on page 12 shows this distress was often seen on long stretches of the same road, indicating it was likely due to paving methods.

Severity

- Low – Cracks have very little or no spalling and are less than ¼" in width
- Medium – Cracks have little or no spalling but are greater than ¼" in width
- High – Cracks are spalled and pieces are visibly missing



Figure 14. Longitudinal Non-Wheelpath Cracking Severities

Frequency

- Percentage of the length of each segment evaluated.



Figure 15. Longitudinal Non-Wheelpath Cracking along Bridge Street

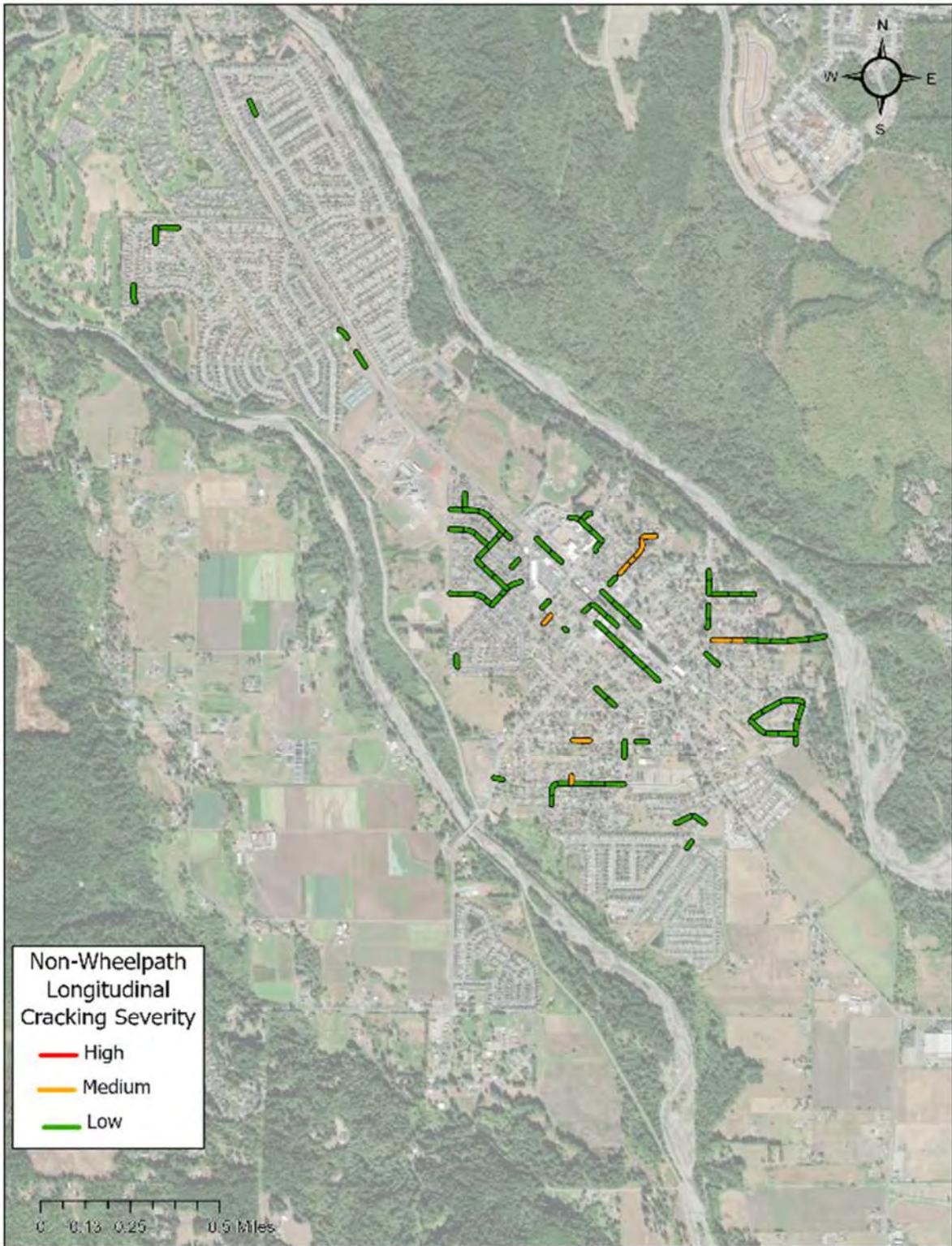


Figure 16. Longitudinal Non-Wheelpath Cracking in Orting



4.3.5 Transverse Cracking

Transverse cracks run perpendicular to the roadway centerline (Figure 18 below). These can be caused by pavement shrinkage at low temperatures, by binder hardening, or by the joints between concrete slabs when pavement is placed on top of concrete. Crack sealing will prevent water infiltration, but to fix the cracks, a repave may be required. Figure 19 on page 15 shows prominent transverse cracking along Washington Ave.

Severity

- Low – Cracks have very little or no spalling and are less than ¼" in width
- Medium – Cracks have little or no spalling but are greater than ¼" in width
- High – Cracks are spalled and pieces are visibly missing



Figure 17. Transverse Cracking Severities

Frequency

- Count of cracks observed per 100-foot section.



Figure 18. Transverse Cracks on Belfair Avenue

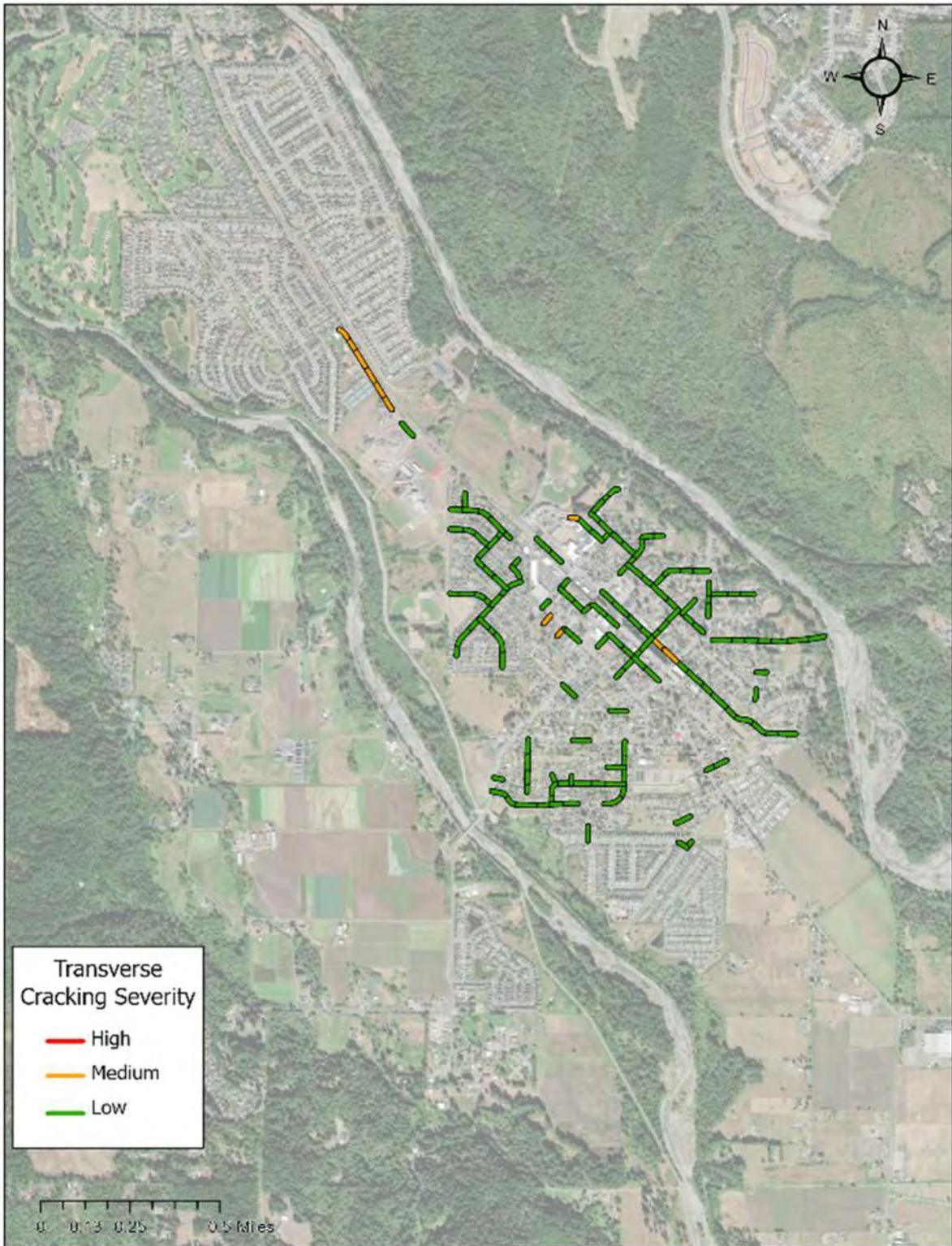


Figure 19. Transverse Cracking in Orting



4.3.6 Raveling and Aging

Raveling and aging can be seen when the roadway looks rough and worn (Figure 21 below). Aging specifically presents itself in the discoloration of a pavement surface and can be present without raveling. Aging is the indication of the beginnings of roadway failure. Raveling happens as aging pavement begins to see the aggregate separating, or the aggregate is no longer present in the pavement. Aging and Raveling are not indicative of any subbase failure. Pavement life can be extended by chipseal or other maintenance activities prior to failure. Raveling and aging is the most common distress found during the assessment, as shown in Figure 22 on page 18.

Severity

- Low – Aggregate and/or binder has started to wear away.
- Medium – Aggregate and/or binder has worn away and the surface texture is rough and pitted.
- High – Aggregate and/or binder has worn away significantly and the surface texture is deeply pitted and very rough.



Figure 20. Raveling and Aging Severities

Frequency

- Extent of raveling observed is either localized, confined to the wheelpath, or across the entire lane.



Figure 21. Raveling and Aging along Corrin Avenue

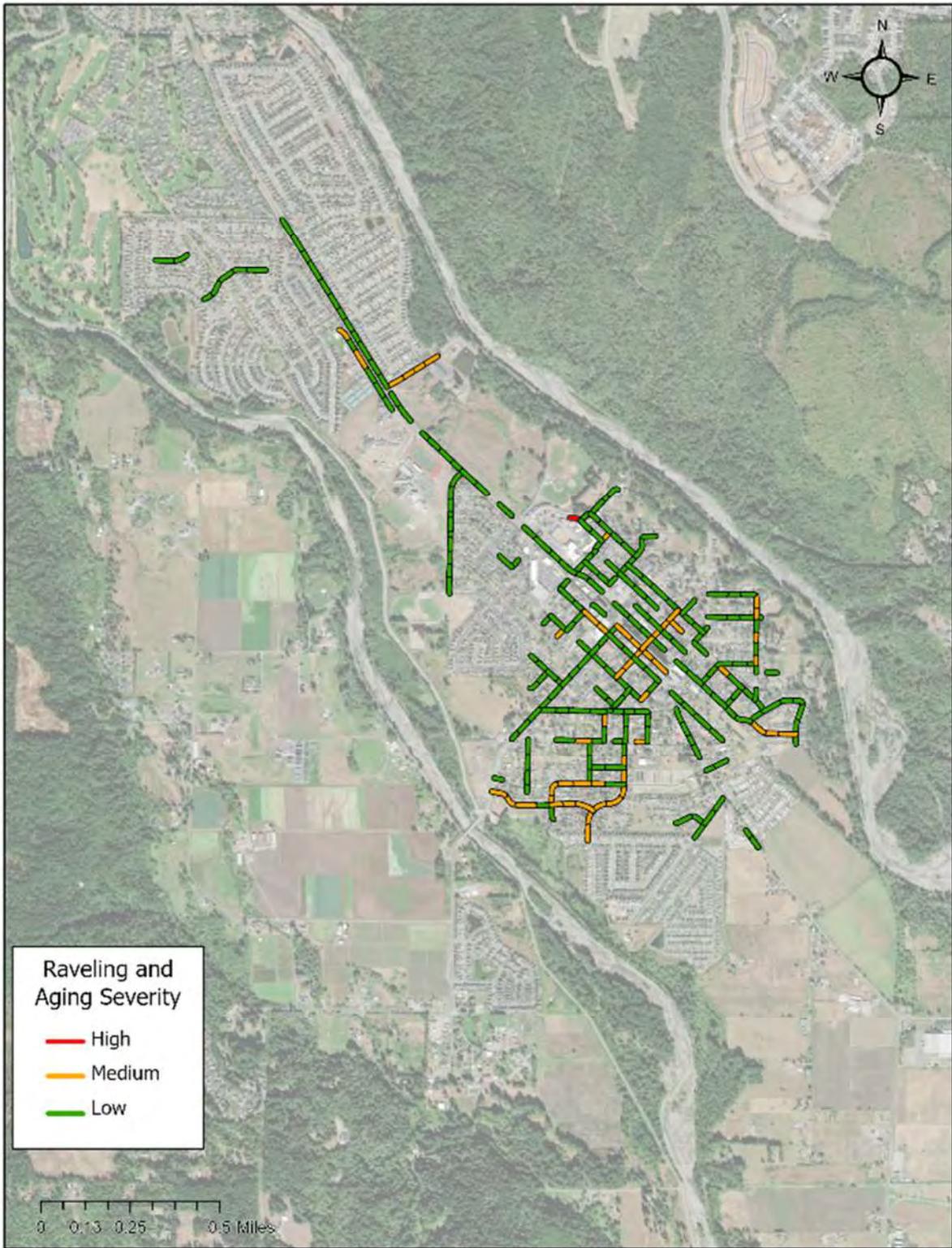


Figure 22. Raveling and Aging in Orting



4.3.7 Flushing and Bleeding

Flushing and bleeding look shiny on colder days and can approach a goeey look on hot days (cold day, ~60 degrees, shown in Figure 24 below). It occurs when there is excess binder in the pavement, causing it to bleed to the surface. Chip seals often lead to this condition as they get older. This distress can be halted by applying sand to soak up excess binder, but it likely needs a repave or slurry seal to permanently fix. Flushing and bleeding in Orting were assessed on limited segments of long of roads and are particularly indicative of a poor binder mix during asphalt roadway construction or asphalt roadway construction during weather elements that negatively impact curing of these binders. (Figure 25 on page 21).

Severity

- Low – Minor amounts of aggregate covered by excess asphalt
- Medium – Significant amount of the aggregate covered by excessive asphalt
- High – Most of the aggregate is covered by excessive asphalt

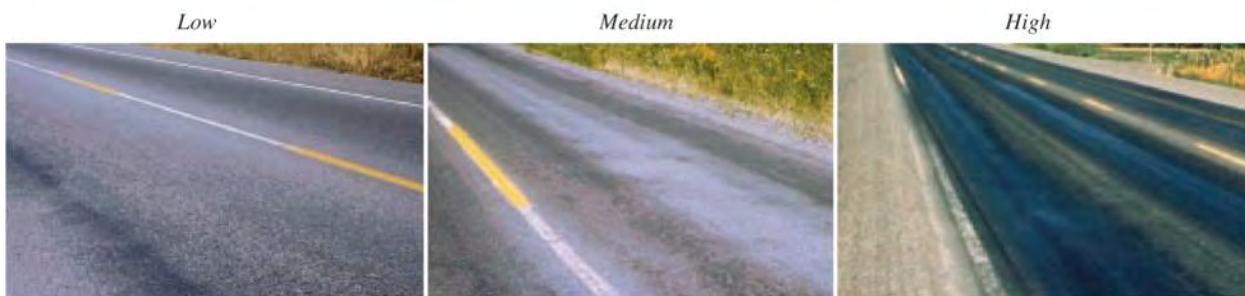


Figure 23. Flushing and Bleeding Severities

Frequency

- Extent of flushing observed is either localized, confined to the wheelpath, or across the entire lane.



Figure 24. Flushing and Bleeding on Park Place

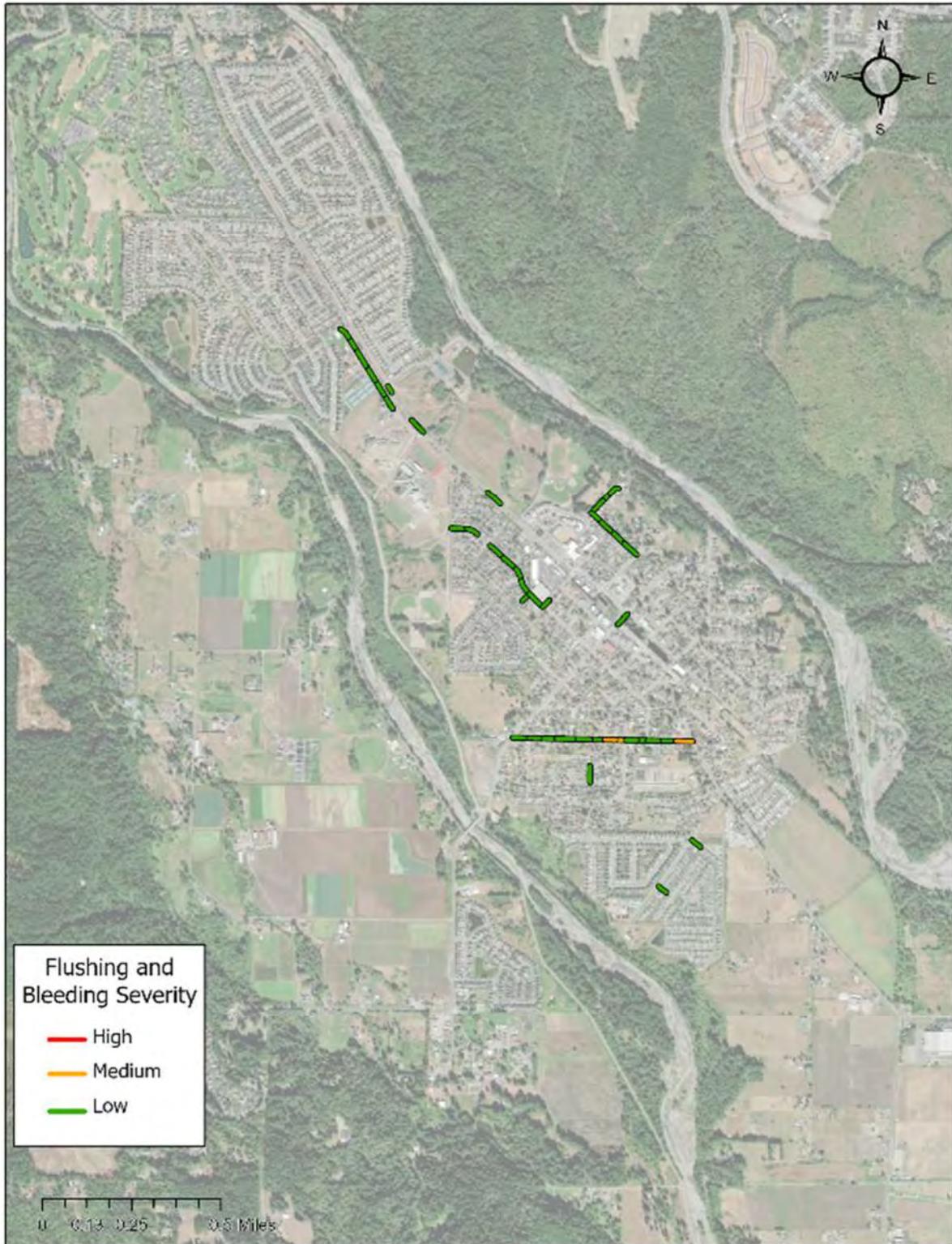


Figure 25. Flushing and Bleeding in Orting



4.3.8 Patching

Roadway patches occur anywhere the original construction of pavement has been cut into (Figure 27 below). Patching is a result of various activities. Patching can be the result of a utility repair below the roadway surface. Patching can occur to repair a failed portion of the roadway either a pothole or excessive cracking that affects a limited section of an otherwise good roadway. Patching can occur to address subgrade failures on the edges of pavement where the roadway width has been compromised. The assessment found a low frequency of patching and a high rate of patching success where patches are present. Patches failed are assessed by the type of failure present within the roadway segment and considered high severity if the patch has otherwise failed. No conditions of severe patching were assessed in the city of Orting. (Figure 28 on page 24).

Severity

- Low – Patch has at most low severity distress of any type.
- Medium – Patch has at most medium severity distress of any type.
- High – Patch has at most high severity distress of any type.



Figure 26. Patching Severities

Frequency

- Percentage of each wheelpath affected.



Figure 27. Patching on Bridge Street

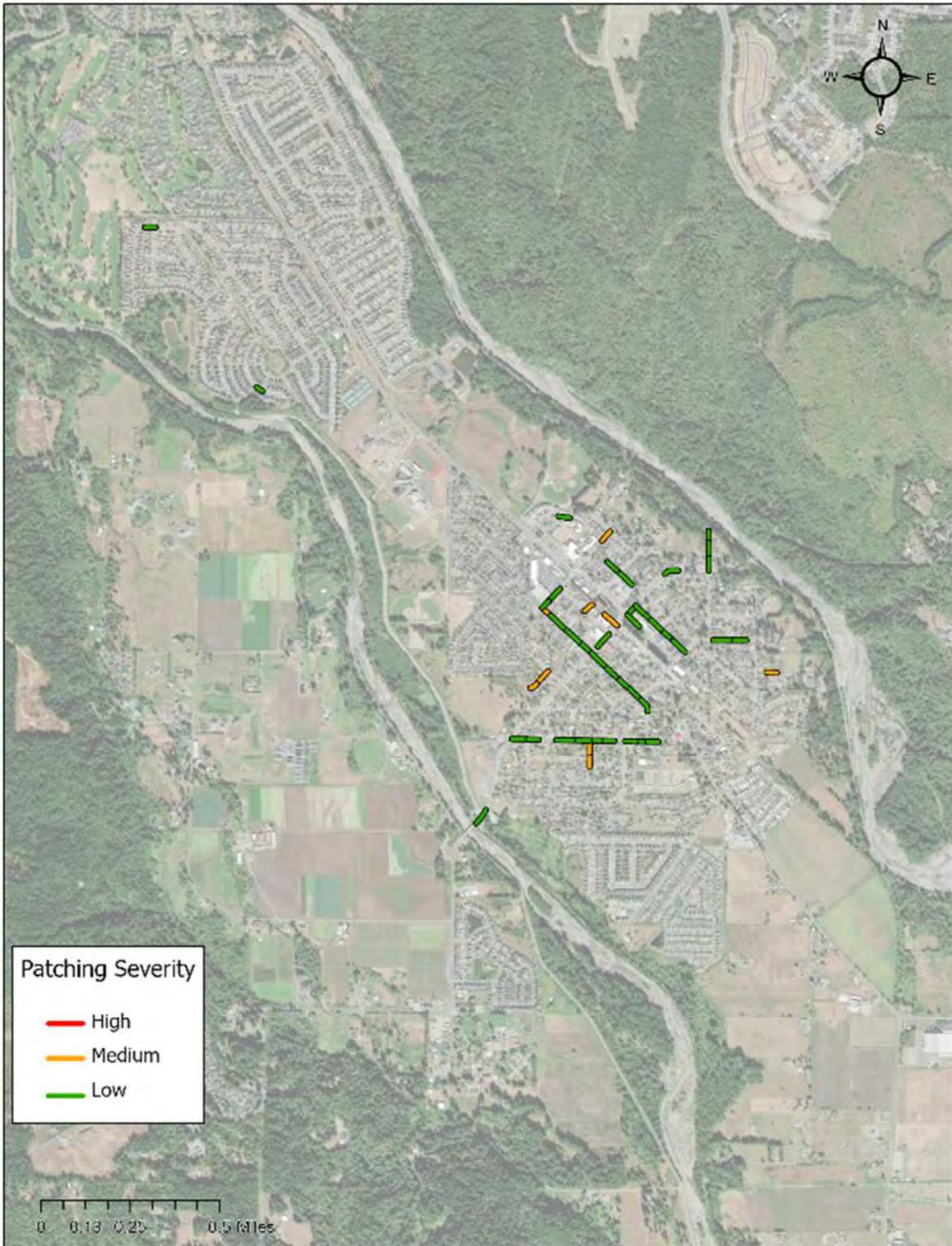


Figure 28. Patching in Orting



4.3.9 Corrugation and Waves

This distress was not significant, although a few cases were noted, in the baseline pavement condition assessment performed for Orting.

Severity

- Low – ½ inch to 2 inches per 10 feet.
- Medium – 2 inches to 4 inches per 10 feet.
- High – Over 4 inches per 10 feet.

Frequency

- Extent of corrugations measured in square feet.

4.3.10 Sags and Humps

Sags and humps are localized low or high points in a roadway respectively (see sags in Figure 29 below). These may result from settlement, tree roots, pavement shoving, or subgrade swelling. Patching should fix this condition if it is localized while a repave may be more appropriate if an entire roadway sags and humps. Sags and humps of medium and high severity were present on the lowest rated roads in this assessment, Old Pioneer Way, and Kansas Street (Figure 30 on page 27).

Severity

- Low – ½ inch to 2 inches per 10 feet.
- Medium – 2 inches to 4 inches per 10 feet.
- High – Over 4 inches per 10 feet.

Frequency

- Percentage of the lane-area affected.



Figure 29. Sags along Hays Avenue

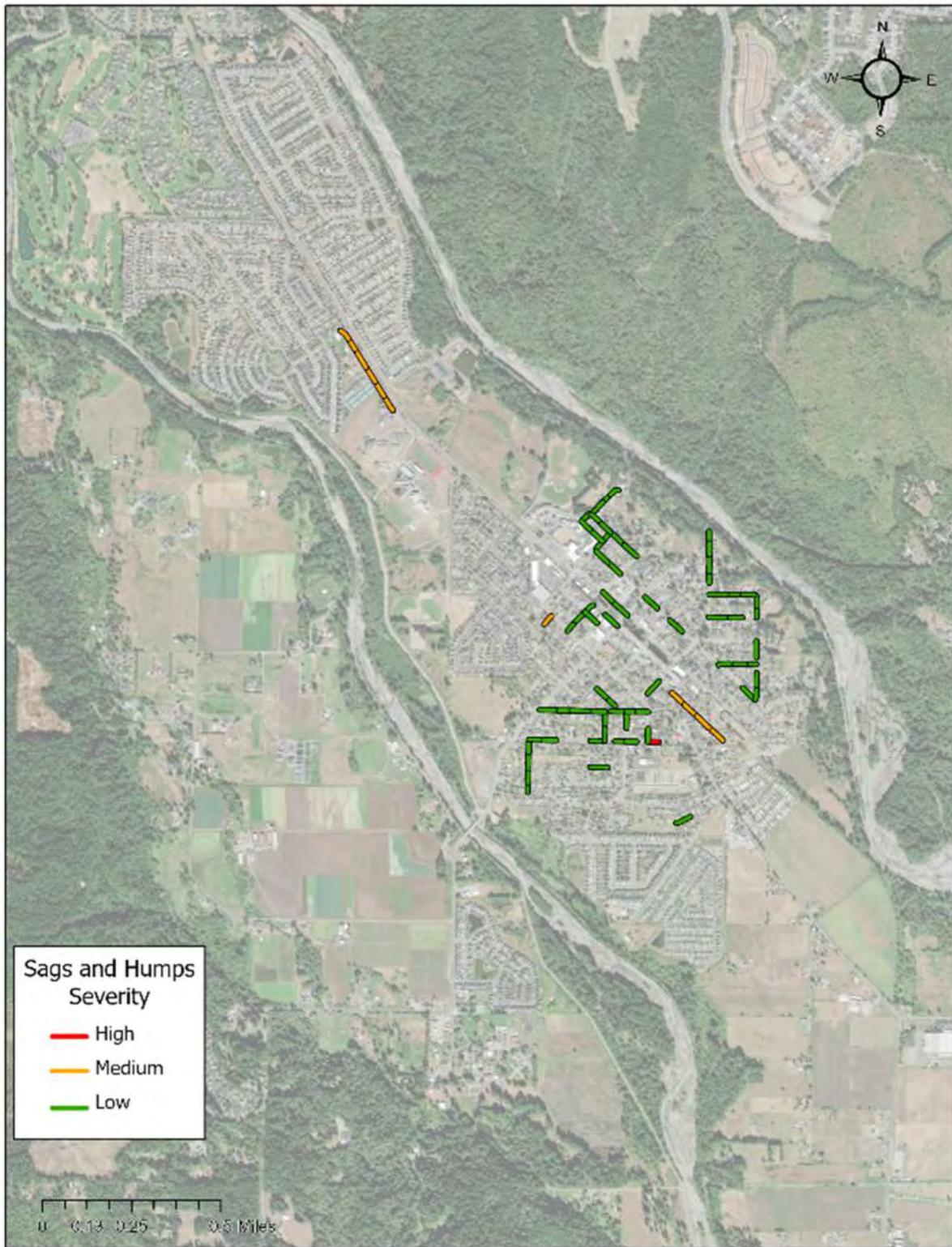


Figure 30. Sags and Humps in Orting



4.3.11 Block Cracking

This distress was not significant, although a few cases were noted, in the baseline pavement condition assessment performed for Orting.

Severity – Block Size

- Low – 9 x 9 feet or greater.
- Medium – 5 x 5 feet to 8 x 8 feet blocks.
- High – 4 x 4 feet blocks or less.

Severity – Crack Size

- Low – Less than ¼ inch.
- Medium – Over ¼ inch.
- High – Spalled.

Frequency

- Not measured for rutting, applied to entire segment.

4.3.12 Pavement Edge Condition

Low severity edge condition, or edge raveling, is common and often occurs near gravel driveways as seen in Figure 31 below. It can lead to more severe edge conditions, such as potholes, or very severe conditions where the travel lane is effectively less than 10 feet wide. Treatment for edge raveling and potholing includes patching or half road patching depending on the severity of the patch. Edge conditions were mainly present in a low severity case, but also has some medium severity segments and one high severity segment, as seen in Figure 32 on page 30.

Severity – Crack Size

- Low – Edge Raveling.
- Medium – Edge Patching.
- High – Edge lane less than 10 feet.

Frequency

- Percentage of the length of each segment evaluated.



Figure 31. Edge Raveling on Olive Street

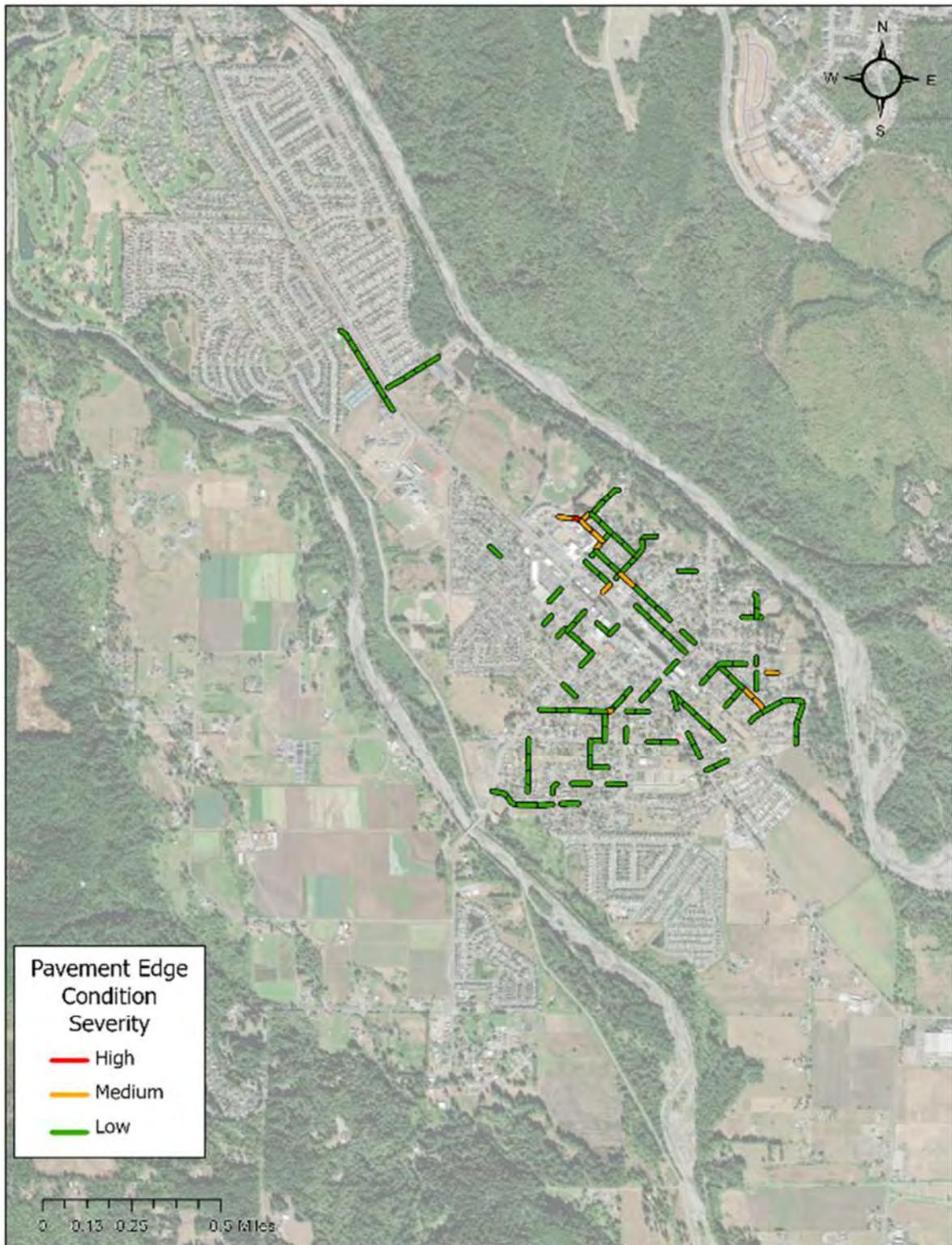


Figure 32. Edge Conditions in Orting



4.3.13 Crack Seal Condition

Crack sealing is a valuable maintenance method for cracks as it limits water infiltrating the base material (see Figure 33 below). This, in turn, delays or prohibits the expensive maintenance methods aimed at fixing the base levels. It is important to know where cracks are present that have not been sealed, so the final condition rated the extent of crack sealing and if there were any new cracks forming through the seal. Figure 34 on page 32 shows all the locations crack sealing was observed in Orting.



Figure 33. Crack Seal down Silvernail Street

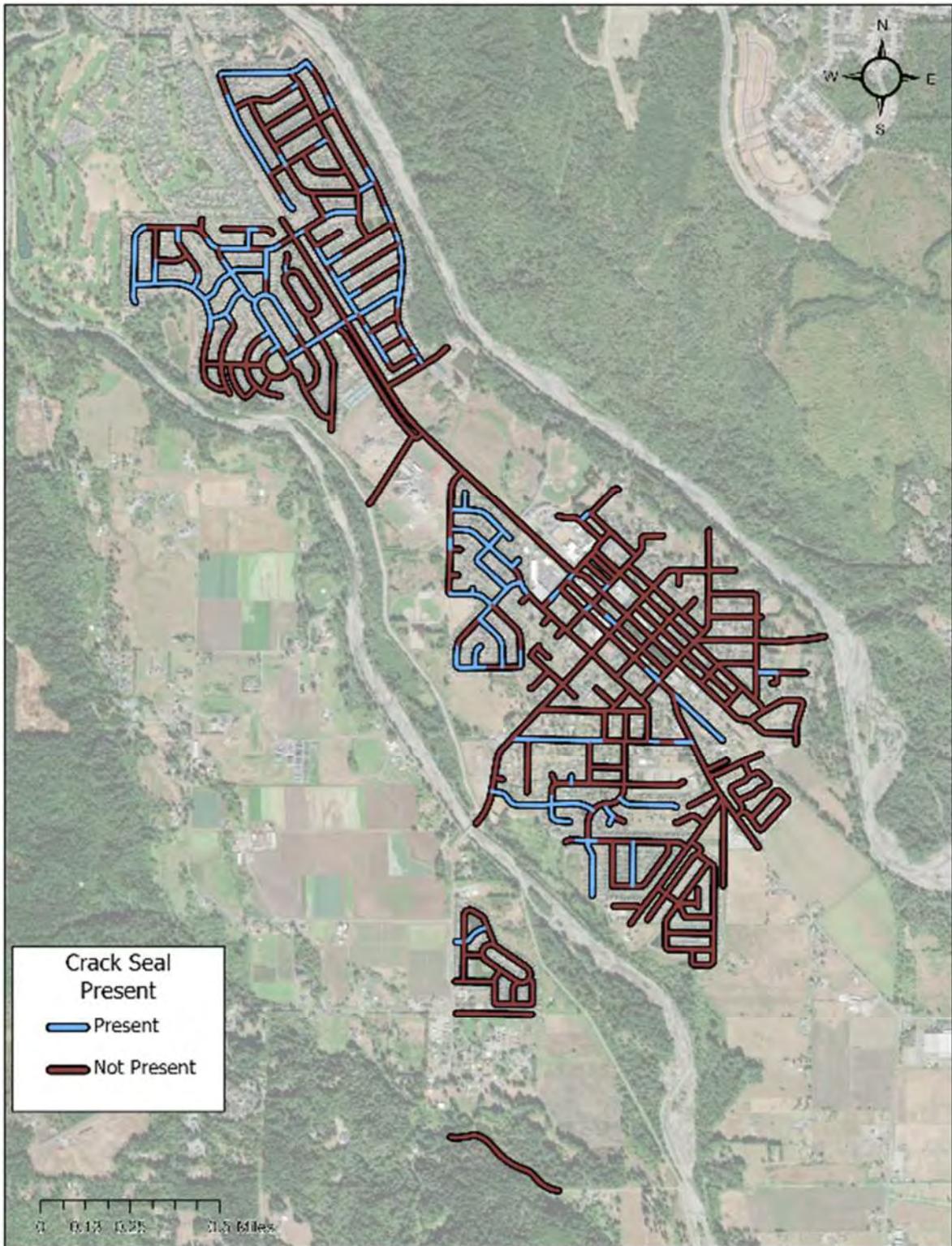


Figure 34. Crack Sealing in Orting



5. OVERALL PAVEMENT CONDITION RATINGS

5.1 INTRODUCTION

In order to compare and prioritize segments for inclusion in the City's pavement management system, it is helpful to have an overall rating of the pavement condition for each segment. With this data, segments can be prioritized for both maintenance and preservation actions and a plan to address them can be developed considering all segments, even though they experience different issues that, at times, have different solutions. This section describes how the overall rating was assigned for each segment and summarizes the condition of the city's roadway network.

5.2 OVERALL PAVEMENT CONDITION RATINGS METHODOLOGY

Based on the cumulative presence or lack-of, the distresses discussed in Section 4 and the severity and frequency of these distresses, we developed a weighted grading of pavement condition. This section describes how the overall rating was determined.

We collected field data for each segment and applied a rating scale based on the distresses found:

Not present (0); Low (1); Medium (2); High (3)

These severities are based on conditions specific to the distress type present, e.g., alligator cracking is rated based on the width of cracks and severity of roadway spalling, 0 being no alligator cracking and 3 being roadway spalling or large intrusive cracking. See individual distress sections for these rating metrics.

We then included a weighting factor on the significance of the distress type:

Alligator Cracking, Rutting (5)

Raveling and Aging, Corrugation and Waves (4)

Block Cracking, Longitudinal Wheel Path Cracking, Transverse Cracking, Crack Seal Condition, Flushing and Bleeding (3)

Patching, Sags and Humps (2)

Pavement Edge Condition, Longitudinal Non-wheel Path Cracking (1)

We included another factor based on the volume of the distress type included:

0 – 10%, 1-4, etc. (1)

11-25%, 4-9, etc. (1.2)

25%+, 10+, etc. (1.5)



The purpose of these modification factors is to quantify the distresses in each segment in a way that allows them to be compared to like segments and compare typical distresses found. From these quantitative ratings, a qualitative rating of Like New, Good, Average, or Poor was determined. This overall rating will help us compare the segments to each other if different types of distresses are present so that we can prioritize maintenance and preservation activities to include in the multi-year pavement management program. A full list of roadway segments, along with their field pavement condition ratings, has been included in Appendix C and is also shown in Figure 2 on page 8.

5.3 SUMMARY OF OVERALL PAVEMENT CONDITION RATINGS

Figure 1 on page 7 shows the overall pavement condition ratings summarized by each roadway’s functional classification. This summary shows that 7% of the lane-miles are rated poor, 24% are rated average, 33% are rated good and the last 36% are rated like new (consolidated in Figure 35 below). As these figures demonstrate, the majority of the city’s roadway network is in good or new condition and likely does not need any pavement preservation and/or maintenance work at this time.

Approximately 24% of the remaining 31% roadway segments are rated in average condition and would likely benefit from pavement preservation and/or maintenance work to their usable life. Only 7% of the city’s network is rated in poor condition which would require more extensive reconstruction or replacement work. The most significant of the poor segments were along Kansas Street, which is a principal arterial south of downtown. This roadway was observed being used by commercial trucks to bypass downtown and the frequent high loads have deteriorated the pavement to a poor condition. At the time of assessment, a planned reconstruction of Kansas Street is scheduled for 2024.

The other, notably poor roadway is Old Pioneer Way, which is a local access road that starts at State Route 162 (SR 162) and runs parallel for several blocks and dead-ends before reaching Lane Blvd. NW. There were both commercial and residential developments along this roadway and it is a much lower traffic roadway than Kansas Street. These two roads, combined with a few other sporadic segments, make up the roughly 7% of roads in Orting with a poor condition.

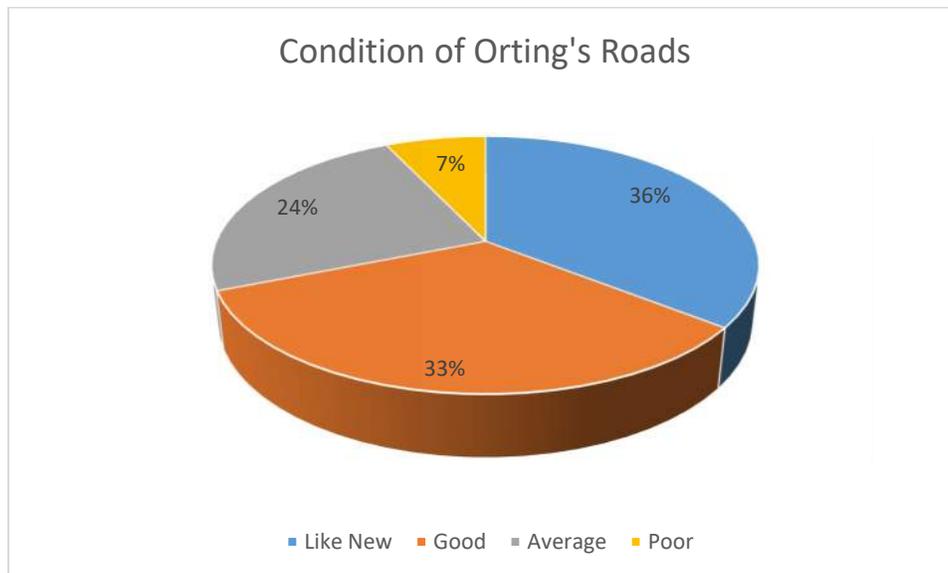


Figure 35. The Majority of Orting's Roadways are in a Good or Like New Condition



6. NEXT STEPS

The next step in the development of the city's Pavement Management System is to prioritize the poor and average sections and identify a list of projects to be programmed annually so that the City can pursue funding for this work. This will be done by considering the overall pavement condition ratings and functional classifications along with other considerations to prioritize each segment and then packaging like work into phases of pavement preservation and maintenance activities. A separate PMS report will include this work.



APPENDIX B

REFERENCES

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APPENDIX C

PRESERVATION TREATMENT UNIT COSTS

FINAL UNIT CONSTRUCTION COSTS

Chip Seal	\$12.20 per lf of lane	\$64,416 cost per lane mile
Mill and Fill	\$44.80 per lf of lane	\$236,544 cost per lane mile
Reconstruction	\$142.10 per lf of lane	\$750,288 cost per lane mile

LEGEND

	from uba
	calculation
	user input

Chip Seal		Mill and Fill (grind and overlay)		Reconstruction	
\$10.00	per sy	\$36.65	per sy	\$116.25	per sy
	All inclusive cost per prior research and WSDOT Chip Seal reference	10%	mobilization	10%	mobilization
		\$3.33	per sy, mobilization	\$10.57	per sy, mobilization
		\$11.50	per sy, planing bituminous pavement	\$45.20	per cy, roadway excavation incl. haul
		\$175.00	per ton, HMA CL. 1/2 IN. PG 58H-22	15	depth (in)
		\$358.75	per cy, HMA CL. 1/2 IN. PG 58H-22	\$18.83	per sy, roadway excavation incl. haul
		2	depth (in)	\$41.58	per ton, csbc
		\$19.93	per sy, HMA CL. 1/2 IN. PG 58H-22	\$76.92	per cy, csbc
		6%	% of construction cost for traffic control	9	depth (in)
		\$1.89	per sy, traffic control	\$19.23	per sy, csbc
				\$175	per ton, HMA CL. 1/2 IN. PG 58H-22
				\$358.75	per cy, HMA CL. 1/2 IN. PG 58H-22
				6	depth (in)
				\$59.79	per sy, HMA CL. 1/2 IN. PG 58H-22
				8%	% of construction cost for traffic control
				\$7.83	per sy, traffic control

Adjusting costs to lane width per LF					
11 lf wide lane (average)				assumes 6" HMA on 9" CSTC	
1 lf of lane length	9.0 sy/sf	9.0 sy/sf	9.0 sy/sf		
	\$12.20 per lf of lane	\$44.80 per lf of lane	\$142.10 per lf of lane		



APPENDIX D

RECOMMENDED MAINTENANCE PROJECT TECHNICAL MEMO



Technical Memo

To: City of Orting
From: Andrew Armstrong
Date: May 21, 2024
Project: City of Orting Pavement Management System
Subject: Recommended Maintenance Projects

Introduction:

This memo covers the projects recommended for reconstruction and overlays following the initial pavement assessment. Reconstruction projects are shown in Table 1 and overlay projects are shown in Table 2. Project costs assume pavement work for the full width of the roadway (travel lanes and shoulders/parking lanes). Project costs also include curb ramp repairs for existing ramps out of compliance with ADA.

Table 1 – Recommended Reconstruction Projects

Project	Project Cost (in 2024 dollars)	Linear Feet of Lanes	Curb Ramps Needing Repair	Median PCR of Roadway Segments
Ammons Lane Reconstruction (West of Cardinal, East of parking lot)	\$256,000	1,118	0	12
Whitesell Street Reconstruction (North of Ammons Lane, South of Bowlin Avenue)	\$79,000	272	2	36
Eldredge Avenue Reconstruction (East of Whitesell Street, West of Calistoga Street)*	\$696,000	2,618	12	50
Leber Street/Van Scoyoc Avenue Reconstruction (North of Corrin Avenue, West of Calistoga Street)	\$723,000	3,056	3	35
Leber Court Reconstruction (South of Eldredge Avenue, cul-de-sac)**	\$209,000	769	4	20

*Sections of Eldredge need reconstruction, while some are in better shape. Recommend holding off on reconstruction for entire segment for a couple years to address other projects.

**Recommend lining Leber Court up with the Eldredge reconstruction to minimize mobilization costs.

Table 2 – Recommended Overlay Projects

Project	Project Cost (in 2024 dollars)	Linear Feet of Lanes	Curb Ramps Needing Repair	Median PCR of Roadway Segments
Old Pioneer Way Overlay (West of School Driveway, East of turn around)	\$222,000	2,842	2	50
Calistoga Street Overlay (South of Van Scoyoc Avenue, North of Eldredge Avenue)	\$317,000	2,942	13	61
River Avenue Overlay (South of Factory Street, North of Ammons Lane)	\$39,000	516	0	48
Bridge Street Overlay (North of Eldredge Avenue, South of Corrin Avenue)	\$127,000	1,300	4	43
Train Street Overlay (South of Ammons Lane to Washington Avenue, South of Van Scoyoc Avenue to Eldredge Avenue)	\$600,000	4,636	33	52
Calistoga Street Overlay (East of Calistoga Lane, West of River Avenue)	\$98,000	1,138	2	62
Cardinal Lane/Ammons Lane/Whitesell Street (South of Bowlin Avenue, North of Varner Avenue)	\$176,000	2,306	1	55
Corrin Avenue Overlay (East of Train Street, West of Bridge Street)	\$243,000	2,473	8	55

Table 3 shows cost estimating assumptions (cost factors) and Table 4 shows unit prices used to develop the project costs shown in Table 1 and Table 2.

Table 3 – Project Cost Factors

Design Contingency	10% of itemized construction costs	Estimates the construction costs of minor design elements that have not yet been identified (e.g., pavement markings, minor ADA improvements)
Inflation/Year	3% of itemized construction costs	Escalates the construction costs from 2024 to the year of construction.
Permitting	3% of total construction cost	Estimates permit costs for the City. Does not include environmental documentation.
Design	15% of total construction cost	Estimates costs to prepare PS&E and environmental documentation.
City PM/Administration	3% of total construction cost	Estimates City costs for administration and oversight of the project.
Construction Management	15% of total construction cost	Estimates construction inspection and management for the project.
Management Reserve	10% of total construction cost	Overall contingency for the project – reduces as the project definition progresses.



Table 4 – Unit Price Calculations

FINAL UNIT CONSTRUCTION COSTS				LEGEND				
Chip Seal	\$12.20	per lf of lane	\$64,416	cost per lane mile			from uba	
Mill and Fill	\$44.80	per lf of lane	\$236,544	cost per lane mile			calculation	
Reconstruction	\$142.10	per lf of lane	\$750,288	cost per lane mile			user input	
Chip Seal				Mill and Fill (grind and overlay)				Reconstruction
	\$10.00	per sy		\$36.65	per sy		\$116.25	per sy
				10%	mobilization		10%	mobilization
		All inclusive cost per prior research and WSDOT Chip Seal reference		\$3.33	per sy, mobilization		\$10.57	per sy, mobilization
				\$11.50	per sy, planing bituminous pavement		\$45.20	per cy, roadway excavation incl. haul
				\$175.00	per ton, HMA CL. 1/2 IN. PG 58H-22		15	depth (in)
				\$358.75	per cy, HMA CL. 1/2 IN. PG 58H-22		\$18.83	per sy, roadway excavation incl. haul
				2	depth (in)		\$41.58	per ton, csbc
				\$19.93	per sy, HMA CL. 1/2 IN. PG 58H-22		\$76.92	per cy, csbc
				6%	% of construction cost for traffic control		9	depth (in)
				\$1.89	per sy, traffic control		\$19.23	per sy, csbc
							\$175	per ton, HMA CL. 1/2 IN. PG 58H-22
							\$358.75	per cy, HMA CL. 1/2 IN. PG 58H-22
							6	depth (in)
							\$59.79	per sy, HMA CL. 1/2 IN. PG 58H-22
							8%	% of construction cost for traffic control
							\$7.83	per sy, traffic control
Adjusting costs to lane width per LF				assumes 6" HMA on 9" CSTC				
	11 lf wide lane (average)			9.0 sy/sf			9.0 sy/sf	
	1 lf of lane length			\$12.20	per lf of lane		\$44.80	per lf of lane
							\$142.10	per lf of lane

Self-Evaluation and ADA Transition Plan

City of Orting

Prepared For:

City of Orting

Prepared By:

SCJ Alliance

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September 2024



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CONSULTING SERVICES

Self-Evaluation and ADA Transition Plan

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Signature

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.



Approved by Patrick Holm, PE

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1 Introduction

The City of Orting (City) is committed to providing equal access to its programs, services, and activities to all its residents. This Self-Evaluation and ADA Transition Plan (Plan) is a living document which will help guide planning and implementation for removing accessibility barriers within the City's jurisdiction. Public comments are always welcome and the City will update the Plan periodically.

2 Legal Requirements

The American with Disabilities Act (ADA) and the Rehabilitation Act of 1973, Section 504, requires cities with fewer than fifty employees, that is a recipient, or subrecipient, of federal financial assistance, to prepare a Self-Evaluation and ADA Program Access Plan. This document is a Self-Evaluation and ADA Transition Plan, which applies if the City employs more than fifty employees as well. The ADA also dictates that public entities must reasonably modify its policies, practices, and procedures to avoid discrimination against people with disabilities. WSDOT discusses these requirements in its Local Agency Guidelines (LAG) Manual (Wonch, 2022).

2.1 Legal Mandate

The ADA is a civil rights law for persons with disabilities that's purpose is to provide a "clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities." This law, passed in 1990, followed the Rehabilitation Act of 1973, and both combine to describe the City's responsibilities for ADA accessibility. This ADA Transition Plan is a requirement of the Rehabilitation Act, specifically Section 504, shown below.

No otherwise qualified individual with a disability in the United States shall, solely by reason of his or her disability, be excluded from the participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. This part applies to each recipient of Federal financial assistance from the Department of Transportation and to each program or activity that receives such assistance (Office of the Assistant Secretary for Administration & Management, n.d.).

2.1.1 Title I of the ADA

Title I of the ADA addresses employment practices and prohibits discriminating against qualified individuals with disabilities. This discrimination is prohibited in a number of areas, including but not limited to application processes, hiring, employment termination, promotion, compensation, and training. The City is an equal employment opportunity employer and complies with Title I (ADA, n.d.).

2.1.2 Title II of the ADA

Title II of the ADA, which adopts much of Section 504 of the Rehabilitation Act of 1973, is addressed in this Plan. It prohibits the City from denying equal opportunity to services, programs, and activities to persons with disabilities. This prohibition applies whether the denial is direct or indirect (ADA, n.d.).

2.2 ADA Self-Evaluation and Transition Plan Requirements

This Plan is intended to provide a framework for the continuous improvement of City programs and facilities for people with disabilities. This Plan addresses facilities within the public right-of-way, especially curb ramps, and is intended to be updated as barriers are removed, programs change, and/or

new facilities come under control of the City. Programs offered by the City must be accessible to all people. The administrative requirements of this plan include:

- Designation of an ADA Coordinator responsible for overseeing Title II compliance,
- Development of an ADA grievance/complaint procedure,
- Completion of a self-evaluation of facilities, programs, and services,
- Development of a transition plan where the self-evaluation identifies any accessibility deficiencies.

This Plan identifies and makes recommendations to correct practices that result in limitations on access. As part of the self-evaluation, the City:

- Identifies the city's programs, activities, and services
- Reviews the policies, practices, and procedures that govern the administration of the City's programs, activities, and services
- Provides opportunity for public comment
- Makes the report available to the public
- Corrects any programs, activities, and services that are not consistent with the requirements

This Plan identifies barriers for people with disabilities and a schedule to remove these barriers over time and includes:

- A list of the physical barriers in the City's facilities that limit the accessibility of its programs, activities, or services to individuals with disabilities
- A detailed outline of the methods to be used to remove these barriers and make the facilities accessible
- A schedule for taking the steps necessary to achieve compliance with ADA Title II
- An opportunity for the public to provide comment on the transition plan
- The name of the individual responsible for the plan's implementation

This Plan is an assessment of the City's right-of-way facilities to find barriers to City programs for people with disabilities. The facilities with barriers have been identified and summarized in Chapter 3.

2.3 Public Involvement

The ADA requires the involvement of people with disabilities in the development and review of the ADA Self-Evaluation and Transition Plan. The city's public grievance policy is shown in Appendix D.

2.4 ADA Coordinator

The City Clerk was designated as the ADA Coordinator. This position is responsible for ensuring the accessibility of all programs, services, and activities of the City. The City's ADA Coordinator is:

City Clerk
104 Bridge Street South
Orting, WA 98360
clerk@cityoforting.org
(360) 893-9008

2.5 Requesting Accommodation

Requests may first be directed to the individual responsible for the program, activity, or service to which access is requested. If access is not accommodated, a formal complaint in writing should be made to the ADA Coordinator within 30 working days of the complainant becoming aware of the alleged violation. Reasonable accommodation to assist in completing this is available upon request. These requests should be made according to the City of Orting Resolution No. 2015-15, passed on November 25, 2015, and shown in Appendix D. Attaching a photo to the request, if available, would be very helpful for the City.

Requests for accommodation should include:

- The requestor's contact information (name, address, and telephone number)
- A brief description of the alleged violation
- A proposed accommodation or resolution

There is a City of Orting Public Access Request for Accommodation Form available, but it is not necessary.

2.6 Filing a Grievance

The City has a formal grievance procedure in place that was instituted in City of Orting Resolution No. 2015-15, passed on November 25, 2015. It is important to note that this grievance procedure does not preclude filing a complaint of discrimination with any appropriate state or federal agency, and that use of this grievance procedure is not a prerequisite in the pursuit of other remedies.

Step 1: Request accommodation from the individual responsible for the program, activity, or service to which access is requested.

Step 2: To file a grievance, make a formal complaint in writing to the ADA Coordinator within 30 working days of the complainant becoming aware of the alleged violation. This complaint should include the following information, and reasonable accommodation to assist in this is available upon request:

- Contact information for the person filing the grievance (full name, address, and phone number)
- The issue at hand, along with any other information that may support the grievance
- A proposed accommodation/resolution

There is a City of Orting Public ADA Complaint Form available for this purpose, but it is not necessary.

Step 2: The ADA Coordinator will conduct an informal, but thorough, review affording the complainant and the affected department(s) an opportunity to submit information relevant to the complaint and potential accommodation/resolution.

Step 3: A written response and description of the accommodations/resolutions, if any, will be issued by the ADA Coordinator and sent to the complainant within 30 calendar days after the complaint is received. If the complexities of the complaint require additional time, the complainant will be notified. The accommodation or resolution may not be the same as requested.

Step 4: The complainant may request a reconsideration of the case determination by submitting a request for reconsideration within ten (10) working days following the date the complainant receives the City's response.

Step 5. The Mayor or his or her designee will conduct his/her review of the complaint and issue his/her decision to the complainant within twenty (20) working days of receiving the request for reconsideration, unless the complexities of the complaint require additional time. The Mayor and/or his or her designee's decision is final.

Step 6. The City Clerk will maintain the files and records of the City of Orting related to ADA complaints filed and keep a log of complaints. The log shall include:

- a. The name and address of the person filing the complaint;
- b. The date of the complaint;
- c. The basis of the complaint;
- d. The disposition of the complaint.

2.7 Undue Burden

If the City can demonstrate that an action would result in a fundamental alteration in the nature of its program or activity, would create a direct threat to the participant or others, or would represent an undue financial and administrative burden, it is not required to take it. This determination must be based on an evaluation of all resources available for use in the city and alternative solutions must be examined.

2.8 Public Outreach

Information on this Plan was presented at the August 9, 2024 Public Works Department sponsored Touch-A-Truck event held at the Orting Main City Park. This public event was advertised on the City's Facebook page and a poster used is shown in Appendix G. However, no comments were received in-person or through the linked survey.

To allow for further public comment, this plan has also been posted on the City's website at <https://www.cityoforting.org/government/ada-plan>. These comments should be directed to the ADA Coordinator. This plan will be updated once per year to show completed projects as well as comments or changes suggested by the public as appropriate.

2.9 State and Local Requirements

Facilities in the public right of way must be compliant with the 2011 Public Right-of-Way Accessibility Guidelines (PROWAG) to the maximum extent feasible (U.S. Access Board, 2013).

2.10 Public Notice Requirements

The City's ADA provisions and grievance/complaint procedures are required to be posted both internally and externally. Posting on the City's website counts as external posting. The ADA provisions shall contain a brief description of how ADA accessibility is addressed in its employment, communications, policies, and resolution of complaints. Both ADA provisions and grievance/complaint procedures must be made available in alternative formats that address the needs of persons with disabilities.

3 Self-Evaluation of Policies, Procedures, and Programs

3.1 Introduction

Programs, services, and activities offered by the City must be accessible for all people to the maximum extent feasible. This section details the review of current Public Works policies and programs. The findings and recommendations contained in this section will serve as a basis for the implementation of specific improvements for providing access to City programs as required by the ADA.

3.2 Programmatic Modification

The ADA Coordinator, or designee, will follow-up with department staff to review the recommendations in this section. The ADA Coordinator, or designee, will coordinate with needed parties on the removal of barriers to accessibility when they are found.

3.3 Self-Evaluation Findings

3.3.1 Public Right of Way

3.3.1.1 City Facilities, Streets, and Parks

Publicly accessible facilities were evaluated for this plan and the results are shown in Appendix E. A summary of these findings follows:

The buildings evaluated were found to be sufficiently accessible. The parks evaluated needed a few updates to be accessible, generally maintenance on paths, playground surfacing, and accessible routes to sporting facilities and playgrounds. Several parks need updates for ADA accessible toilet rooms and ADA parking spots.

3.3.1.2 Public Streets and Curb Ramps

Facilities evaluated for this Plan include curb ramps, pedestrian activated signals, and sidewalks. The facilities were evaluated over a month-long period in early 2023 (March to April) with several follow up surveys using criteria from the PROWAG. These facilities were evaluated both in the field and using Google Street View, and the results are compiled in a GIS database. Of the City's approximately 605 existing curb ramps, 104 were found to be compliant with the PROWAG as shown in Figure 1. Of the 501 non-compliant curb ramps, 28 are missing the detectable warning strip (DWS), and the remainder, 473, need to be completely replaced because elements of the curb ramp do not meet width or grade standards.

Sidewalks were evaluated around parks and facilities, and three were found to be inaccessible as shown in Figure 1, Figure 2, and Appendix C. Sidewalks should continue to be evaluated with future roadway projects and based on the complaint form then prioritized following section 4.2.

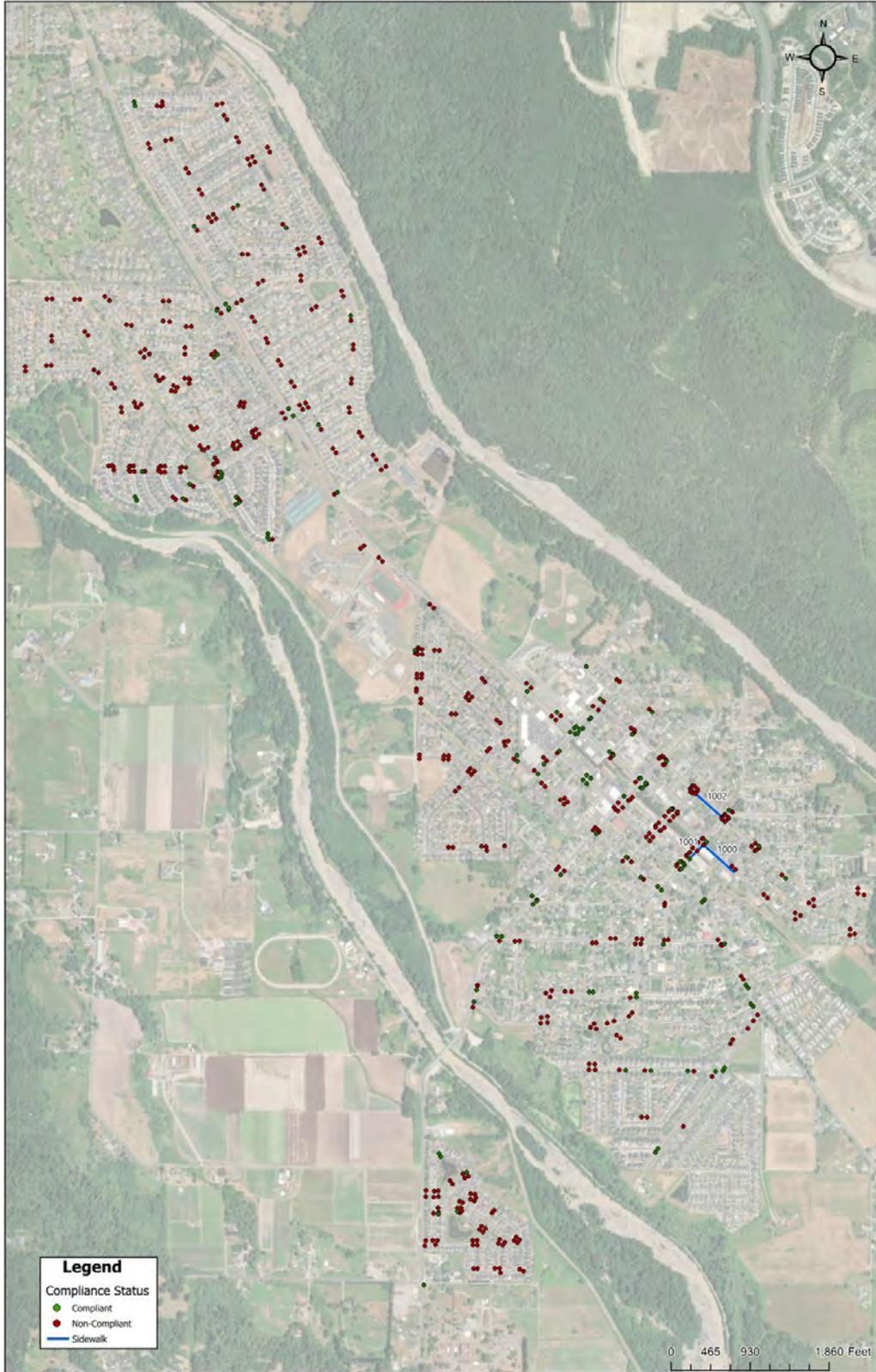


Figure 1. Curb Ramps Labeled by ADA Compliance

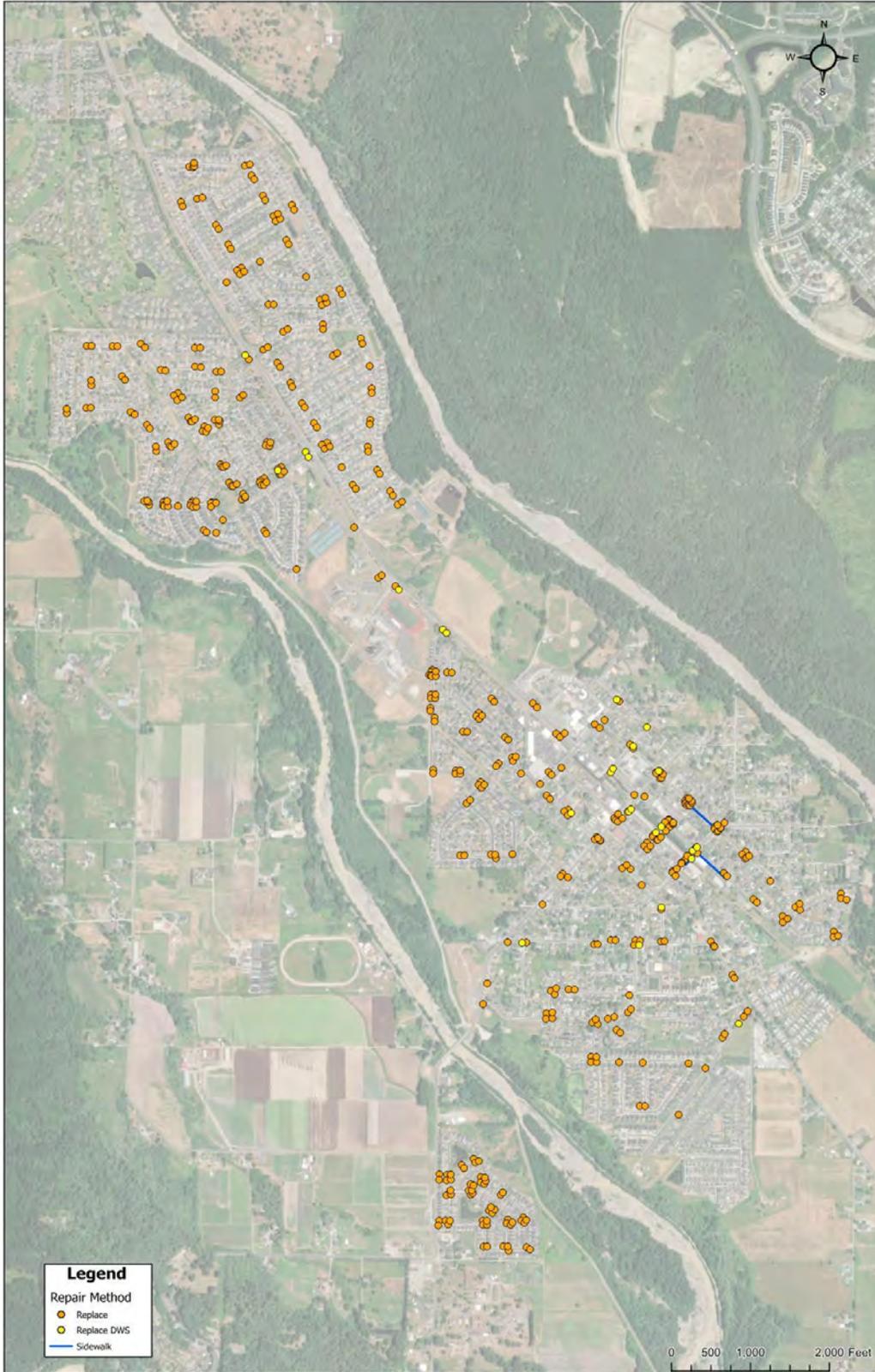


Figure 2. Noncompliant Curb Ramps labeled by Repair Method Needed

3.3.2 Programs, Services, and Activities

3.3.2.1 Public Meetings, Hearings, and Events

The city works hard to ensure its public meetings, hearings, and events are open and accessible to all citizens, regardless of disability.

- The first city council meeting of each month is taped and replayed on PCTV (Comcast channel 22) and Comcast On-Demand.
- All regular council and council committee meetings are open to the public.
- Accessibility complaints for these meetings can be voiced through the city ADA grievance policy in City of Orting Resolution No. 2015-15, passed on November 25, 2015.
- Requests for accessibility should be made as soon with the person or department that scheduled the event as possible and no later than 72 hours before the scheduled event. If it is not known who to contact, the ADA coordinator may be contacted (City of Orting, n.d.).

3.3.2.2 Printed Materials

The City will, upon request, attempt to provide appropriate aids and services leading to effective communication for qualified persons with disabilities so they can participate equally in the City's programs, services and activities.

- These requests should go through the person responsible for the program, service, or activity before following the ADA accommodation request procedure.

3.3.2.3 Website

The City's website includes accessibility features such as the ability to adjust font size, links to free viewers for attached documents, and the ability to print or provide feedback on specific pages. The website displays the ADA Plan as well as ADA Request forms under an ADA Plan section, linked here: <https://www.cityoforting.org/government/ada-plan>.

However, there are several website elements that should be updated for the web content accessibility guidelines (WCAG). These include updating text contrast several places and making links clearer and more differentiable. See Appendix F for a more thorough explanation.

3.3.2.4 Contracting/Purchasing

The City generally awards contracts based upon the lowest responsive and responsible bid per RCW 39.04.350, which qualifies as criteria that does not discriminate based on disability.

The City should include language in all of its bid solicitation documents explaining that the contractor must comply with Equal Employment Opportunity regulations.

3.3.2.5 Emergency Management Programs

The City has a number of emergency management programs, some in conjunction with Pierce County. Although they are governed by the same ADA Title II Complaint form and Grievance process as the rest of the City's programs, more information should be posted to the website about how they apply to all citizens regardless of disability.

3.3.2.6 Staff Training and Employment

The City's Personnel Policies & Procedures Manual contains information about the ADA as it relates to employees (City of Orting, n.d.). Included in this manual is information about requesting reasonable accommodations and the City's commitment to providing them.

4 ADA Transition Plan

4.1 Introduction

According to the ADA, localities that receive financial aid from the federal government and have less than fifty employees are required to create a Self-Evaluation and ADA Program Access Plan, although this document is a Self-Evaluation and ADA Transition Plan and also applies if the city employs more than 50 employees. Public institutions are required by the ADA to make reasonable modifications to their policies, practices, and procedures in order to prevent discrimination against individuals with disabilities. This Plan is a dynamic document that outlines the programmatic steps the City will take to remove all barriers to accessibility under its purview. This plan complies with Section 504 of the Rehabilitation Act's standards as well as the ADA's requirements for accessibility to public programs, services, and activities.

4.2 Prioritization of Barrier Removal

Removal of barrier prioritization will follow the methods laid out by WSDOT (Watkinson, 2018). They are:

Highest Priority

- Priority identified through public input or complaints received, and
- Areas with high concentrations of populations with disabilities (based on Census data),
- Intersections and roadway segments serving facilities including:
 - Government offices
 - Public schools
 - Hospitals, health clinics and health centers
 - Transit facilities (includes bus stops)

Second Highest Priority

- Areas with medium/mid-range concentrations of populations with disabilities (based on Census data)
- Intersections and roadway segments serving facilities including:
 - Public housing
 - Sports arenas
 - Licensing offices
 - Libraries
 - Shopping malls
 - Supermarkets
 - Strip retail centers
 - Other major employment sites

Third Highest Priority

- Areas with lower/low-range concentrations of populations with disabilities (based on Census data),
- Intersections and roadway segments serving facilities including:
 - Industrial areas
- Other areas not classified as high or medium priority

4.3 Barrier Removal Schedule

The barrier removal schedule includes all noncompliant ramps and is organized by the priority of each curb ramp. Curb ramp reference numbers, locations, repair method(s), and cost estimates are included for each project area, generally an intersection. This schedule should be used as a planning tool and further inspection may be required to determine if a full curb ramp replacement will be necessary based on future degradation. The estimates below include both DWS and curb ramp replacement.

Table 1. Highest Priority Curb Ramps

ID No.	Location (Highest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
165-166	Lane Blvd & Washington Ave	2 DWS replacements	\$2,400
214-215	Washington Ave N & Rocky Rd NE	2 full replacements	\$0*
225-226	Ptarmigan Ridge Elementary	2 DWS replacements	\$2,400
227-228	Old Pioneer Way & Washington Ave	2 DWS replacements	\$2,400
229-230	Washington Ave & Whitehawk Blvd	2 DWS replacements	\$2,400
231-238	Whitehawk Blvd & Corrin Ave	8 full replacements	\$88,000
239-242	Whitehawk Blvd & Eldridge Ave	4 full replacements	\$44,000
292-293 & 297	Washington Ave & Whitesell St	3 full replacements	\$33,000
299	Whitesell St. & Rainer Ln	1 full replacement	\$11,000
300-301	Whitesell St. & Varner Ave	2 full replacements	\$22,000
588-591	Washington Ave and High School	4 full replacements	\$44,000
592 & 594	Washington Ave and High School	2 full replacements	\$22,000
598 & 599	Orting City Hall	2 DWS replacements	\$2,400
600 & 601	Washington Ave and High School	2 full replacements	\$22,000

*the curb ramps at this location will be superseded (replaced) by the pedestrian bridge project on Washington Ave.

Table 2. Second Highest Priority Curb Ramps

ID No.	Location (2 nd Highest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
285	Whitesell St & Eldredge Ave	1 full replacement	\$11,000
287-289	Whitesell St & Corrin Ave	3 full replacements	\$33,000
290-291	Whitesell St & Scoyoc Ave	2 full replacements	\$22,000
305 – 306	Leber St & Varner Ave	2 full replacements	\$22,000
307 – 308	Leber St & Varner Ave	2 DWS replacements	\$2,400
316 & 318	Leber St & Washington Ave	2 DWS replacements	\$2,400
321 – 324	Corrin Ave & Leber St	4 full replacements	\$44,000
331 – 335	Corrin Ave & Calistoga St	5 full replacements	\$55,000
336 – 337	Van Scoyoc Ave & Calistoga St	2 full replacements	\$22,000
338-339	Van Scoyoc Ave & Calistoga St	2 DWS replacements	\$2,400
341	Washington Ave & Calistoga St	1 full replacement	\$11,000
369-370 & 372-376	Washington Ave & Calistoga St	7 full replacements	\$77,000
377-386	Varner Ave & Calistoga St	10 full replacements	\$110,000
436-441	Washington Ave & River Ave	6 full replacements	\$66,000
595	Rainer Lane & Calistoga St	1 full replacement	\$11,000

Table 3. Lowest Priority Curb Ramps

ID No.	Location (Lowest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
3-8	Ames St NE Midblock	6 full replacements	\$66,000
9-10	Burr St & Riddell Ave	2 full replacements	\$22,000
11-12	Burr St & Hardtke Ave	2 full replacements	\$22,000
13-14	Burr St & Hansberry Ave	2 full replacements	\$22,000
15-16	Fielding St & Hardtke Ave	2 full replacements	\$22,000
17-18	Fielding St & Hansberry Ave	2 full replacements	\$22,000
19-20	Gipple St & Hardtke Ave	2 full replacements	\$22,000
21-24	Gipple St & Hansberry Ave	4 full replacements	\$44,000
25-26	Gipple St & Daffodil Ave	2 full replacements	\$22,000
28	Johns St & Riddell Ave	1 full replacement	\$11,000
29-32	Johns St & Kendall St	4 full replacements	\$44,000
33	Johns St & Michell Lane	1 full replacement	\$11,000
35-36	Johns St & Hansberry Ave	2 full replacements	\$22,000
37	Michell Lane & Hansberry Ave	1 full replacement	\$11,000
39-40	Kendall St & Hardtke Ave NE	2 full replacements	\$22,000

ID No.	Location (Lowest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
41-44	Kendall St & Hansberry Ave	4 full replacements	\$44,000
45-46	Kendall St & Daffodil Ave	2 full replacements	\$22,000
47-48	Williams Blvd & Hardtke Ave NE	2 full replacements	\$22,000
49-50	Williams Blvd & Hansberry Ave	2 full replacements	\$22,000
51-52	Williams Blvd & Washington Ave	2 full replacements	\$22,000
56- 57	Williams Blvd & Riddell Ave	2 full replacements	\$22,000
58-59	Lawson Ct & Riddell Ave	2 full replacements	\$22,000
60-61	Mazza St & Hansberry Ave	2 full replacements	\$22,000
62-63	Mazza St & Riddell Ave	2 full replacements	\$22,000
64-65	Mazza Sr & Daffodil Ave	2 full replacements	\$22,000
66-67	Nelsen St & Riddell Ave	2 full replacements	\$22,000
69	Nelsen St & Daffodil Ave	1 full replacement	\$11,000
70-71	Roberts St & Riddell Ave	2 full replacements	\$22,000
72-73	Roberts St & Daffodil Ave	2 full replacements	\$22,000
74-75	Lane Blvd & Daffodil Ave	2 full replacements	\$22,000
76-79	Lane Blvd & Riddell Ave	4 full replacements	\$44,000
81	Silvernail St & Riddell Ave	1 full replacement	\$11,000
82-83	Silvernail St & Daffodil Ave	2 full replacements	\$22,000
84-85	Voss St & Riddell Ave	2 full replacements	\$22,000
86-87	Voss St & Daffodil Ave	2 full replacements	\$22,000
88-89	Weaver St & Daffodil Ave	2 full replacements	\$22,000
90-91	Rocky Rd & Daffodil Ave	2 full replacements	\$22,000
92-93	Williams Ct & Williams St	2 full replacements	\$22,000
94-95	Mellinger Ave & Williams St	2 full replacements	\$22,000
96-97	Mellinger Ave & Stone St	2 full replacements	\$22,000
98-99	Mellinger Ave & Williams Blvd NW	2 full replacements	\$22,000
100-101	Headley Ave & Williams Blvd NW	2 full replacements	\$22,000
102-103	Headley Ave & Stone St	2 full replacements	\$22,000
104-105	Noble Ave NW & Williams Blvd NW	2 full replacements	\$22,000
106-107	Headley Ave & Williams St	2 full replacements	\$22,000
108- 109	Nunnally Ave & Williams Blvd NW	2 full replacements	\$22,000
110-111	Jurin Ave & Whitley St	2 full replacements	\$22,000
112-113	Jurin Ave & Williams Blvd NW	2 full replacements	\$22,000
114-117	Anderson St & Nunnally Ave	4 full replacements	\$44,000
118-119	Anderson St & Williams St	2 full replacements	\$22,000
120-121	Anderson St & Boatman Ave	2 full replacements	\$22,000
122-123	Ozzie St & Williams St	2 full replacements	\$22,000
124-127	Ozzie St & Van Ogle Lane	4 full replacements	\$44,000
128-131	Ozzie St & Nunnally Ave	4 full replacements	\$44,000

ID No.	Location (Lowest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
132-135	Cloud St & Nunnally Ave	4 full replacements	\$44,000
136-139	Cloud St & Nunnally Ave	4 full replacements	\$44,000
140 & 143	Sigafoos Ave NW & Ross Ave NW	2 full replacements	\$22,000
144-146	Spangler St & Williams St	3 full replacements	\$33,000
147	Spangler St & Williams St	1 DWS replacement	\$1,200
148-153	Spangler St & Van Ogle Lane	6 full replacements	\$66,000
154-157	Sigafoos Ave & Ross Ave	4 full replacements	\$44,000
158-163	Spangler St & O Farrell Lane	5 full replacements	\$55,000
168-173	Lane Blvd & Sigafoos Ave	5 full replacements	\$55,000
174-179	Lane Blvd & Boatman Ave	6 full replacements	\$66,000
180-183	Lane Blvd & Nunnally Ave	4 full replacements	\$44,000
184-187	Nunnally Ave & O Farrell Lane	4 full replacements	\$44,000
188-191	Nunnally Ave & Colorossi Cir	4 full replacements	\$44,000
193	Spangler St & Antonie Lane	1 full replacement	\$11,000
194-197	Spangler St & Colorossi Cir	4 full replacements	\$44,000
199	Geels Way & Colorossi Cir	1 full replacement	\$11,000
206-207	Boatman Ave & Williams Blvd NW	2 full replacements	\$22,000
210-211	Antonie Ln & O Farrell Lane	2 full replacements	\$22,000
213	Geels Way & O Farrell Lane	1 full replacement	\$11,000
216 & 220	Boatman Ave & Louise Wise Ave	2 full replacements	\$22,000
224	Sigafoos Ave & Louise Wise Ave	1 full replacement	\$11,000
243-244	Whitehawk Blvd & Service Rd	2 full replacements	\$22,000
245-246	Corrin Ave & Corrin Ct	2 full replacements	\$22,000
247-248	Whitehawk Blvd & Whitehawk Ct	2 full replacements	\$22,000
249-250	Whitehawk Blvd & Orting Ave	2 full replacements	\$22,000
251-252	Corrin Ave & Rowe St	2 full replacements	\$22,000
253-256	Eldredge Ave & Rowe St	4 full replacements	\$44,000
257-258	Kensington Ave & Rowe St	2 full replacements	\$22,000
259-262	Orting Ave & Orting Ct	4 full replacements	\$44,000
263-264	Eldredge Ave & Callendar Ct	2 full replacements	\$22,000
265-267	Eldredge Ave & Callendar St	3 full replacements	\$33,000
268-269	Kensington Ave & Callendar St	2 full replacements	\$22,000
270-273	Orting Ave & Callendar St	4 full replacements	\$44,000
274-275	Thompson Ave & Callendar St	2 full replacements	\$22,000
276-277	Groff Ave & Burnett Ct	2 full replacements	\$22,000
278-280	Groff Ave & Thompson Ave	3 full replacements	\$33,000
281	Groff Ave & Orting Ave	1 full replacement	\$11,000
282-284	Eldredge Ave & Eldredge Ct	3 full replacements	\$33,000
302	Bowlin Ave & Parker Lane	1 full replacement	\$11,000

ID No.	Location (Lowest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
303-304	Bowlin Ave & Whitesell St	2 full replacements	\$22,000
309	Eldredge Ave & Whitesell Ct	1 DWS replacement	\$1,200
310	Eldredge Ave & Whitesell Ct	1 full replacement	\$11,000
311 & 313	Eldredge Ave & Leber Ct	2 full replacements	\$22,000
312 & 314	Eldredge Ave & Leber Ct	2 DWS replacements	\$2,400
319	Bowlin Ave & Leber St	1 DWS replacement	\$1,200
320	Bowlin Ave & Leber St	1 full replacement	\$11,000
325-326, 328-330	Eldredge Ave & Calistoga St	5 full replacements	\$55,000
347	Varner Ave & Calistoga St	1 DWS replacement	\$1,200
348-351	Varner Ave & Calistoga St	4 full replacements	\$44,000
353-354	Varner Ave & Calistoga St	2 full replacements	\$22,000
356-357	Eldredge Ave & Train St	2 DWS replacements	\$2,400
358	Eldredge Ave & Train St	1 full replacement	\$11,000
359-362	Corrin Ave & Train St	4 full replacements	\$44,000
363-367	Van Scoyoc Ave & Train St	5 full replacements	\$55,000
368	Van Scoyoc Ave & Train St	1 DWS replacement	\$1,200
388	Eldredge Ave & Taylor St	1 full replacement	\$11,000
389	Eldredge Ave & Taylor St	1 DWS replacement	\$1,200
390-391 & 393	Tacoma Ave & Calistoga St	3 full replacements	\$33,000
397	Deeded Lane & Calistoga St	1 full replacement	\$11,000
398-399	Kansas St & Calistoga St	2 full replacements	\$22,000
401-402	Kansas St & Coe Lane	2 full replacements	\$22,000
403-404	Kansas St & Ford Lane	2 full replacements	\$22,000
405-406	Kansas St & Hays Ave	2 full replacements	\$22,000
407-410	Kansas St & Grinnell Ave	4 full replacements	\$44,000
411-413	Kansas St & Eldredge Ave	3 full replacements	\$33,000
415	Eldredge Ave & River Ave	1 full replacement	\$11,000
416	Deeded Lane & Eldredge Ave	1 DWS replacement	\$1,200
417	Deeded Lane & Eldredge Ave	1 full replacement	\$11,000
419	Corrin Ave & Harman Way	1 full replacement	\$11,000
420-422	Kansas St & Harman Way	3 full replacements	\$33,000
425-427 & 431	Corrin Ave & River Ave	4 full replacements	\$44,000
432-435	Van Scoyoc Ave & River Ave	4 full replacements	\$44,000
442 & 444	Varner Ave & River Ave	2 full replacements	\$22,000
443 & 445	Varner Ave & River Ave	2 DWS replacements	\$2,400

ID No.	Location (Lowest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
446-449	Varner Ave & River Ave	4 full replacements	\$44,000
450-451	Bridge St & River Ave	2 full replacements	\$22,000
452-453	Washington Ave & Hardefeldt St	2 full replacements	\$22,000
454-458	Varner Ave & Hardefeldt St	5 full replacements	\$55,000
460-461	Washington Ave & Olive St	2 full replacements	\$22,000
462	Varner Ave & Olive St	1 full replacement	\$11,000
464-466	Washington Ave & Brown St	3 full replacements	\$33,000
467-469	Varner Ave & Brown St	3 full replacements	\$33,000
470-472	Washington Ave & Brown Way	3 full replacements	\$33,000
473-475	Brown St & Brown Way	3 full replacements	\$33,000
476	Skinner Way & Calistoga St	1 full replacement	\$11,000
478-481	Skinner Way & Belfair Ave	4 full replacements	\$44,000
482-484	Belfair Ave & Johnson Ct	3 full replacements	\$33,000
485-486	Belfair St & Cammarano Ct	2 full replacements	\$22,000
487-488	Belfair St & Ford Lane	2 full replacements	\$22,000
489	Belfair St & Grinnell Ave	1 full replacement	\$11,000
492-494	Skinner Way & Grinnell Ave	3 full replacements	\$33,000
495-496	Coplan St & Grinnell Ave	2 full replacements	\$22,000
497-498	Coplan St & Coplan Ct	2 full replacements	\$22,000
499-500	Icey St & Grinnell Ave	2 full replacements	\$22,000
501-504	Balmer St & Grinnell Ave	4 full replacements	\$44,000
505	Balmer St & Koehler Ave	1 full replacement	\$11,000
507	Balmer St & Carrier Ave	1 full replacement	\$11,000
509-510	Buell St & Carrier Ave	2 full replacements	\$22,000
515	Park Pl & Beckett Lane	1 DWS replacement	\$1,200
516	Balmer St & Beckett Lane	1 full replacement	\$11,000
519	Maple Lane & Beckett Lane	1 full replacement	\$11,000
520-521	McMahon Lane & Beckett Lane	2 full replacements	\$22,000
522-523	BTWN McMahon Lane & Harman Way	2 full replacements	\$22,000
525-527	Harrison Lane & Harman Way	3 full replacements	\$33,000
528-529	Erickson Lane & Harman Way	2 full replacements	\$22,000
530	Harman Way & Beckett Lane	1 full replacement	\$11,000
531-532	Robin St & Calistoga Ave	2 full replacements	\$22,000
534-536	Robin St & Eagle Ave	3 full replacements	\$33,000
537-540	Robin St & Blue Jay Ave	4 full replacements	\$44,000
541-544	Hawk Ave & Blue Jay Ave	4 full replacements	\$44,000
545-547 & 602	Mockingbird St & Eagle Ave	4 full replacements	\$44,000
548-549	Cardinal St & Calistoga Ave	2 full replacements	\$22,000

ID No.	Location (Lowest Priority)	Repair Method	Estimated Cost (in 2024 dollars)
550-553	Cardinal St & Eagle Ave	4 full replacements	\$44,000
556-558	Cardinal St & Phoenix Ave	3 full replacements	\$33,000
560-563	Hawk Ave & Goldfinch Ave	4 full replacements	\$44,000
564-565	Starling St & Blue Jay Ave	2 full replacements	\$22,000
566-568	Starling St & Quail Ave	3 full replacements	\$33,000
569-570	Starling St & Goldfinch Ave	2 full replacements	\$22,000
571 & 573-575	Hawk Ave & Mockingbird St	4 full replacements	\$44,000
576-577	Hawk Ave BTW Phoenix Ave & Mockingbird St	2 full replacements	\$22,000
578-581 & 605	Hawk Ave & Phoenix Ave	5 full replacements	\$55,000
582-583	Hawk Ave BTW Phoenix Ave & Goldfinch Ave	2 full replacements	\$22,000
584	Williams Blvd & Washington Ave	1 full replacement	\$11,000
603-604	Cardinal St & Eagle Ave	2 full replacements	\$22,000
606-609	Hawk Ave & Quail Ave	4 full replacements	\$44,000

4.4 Curb Ramp Barrier Removal Triggers

Curb ramps are sorted first into two categories, compliant and noncompliant. Compliant ramps will remain, while noncompliant ramps are sorted into two further categories, replace or replace detectable warning strip (DWS). This is based on if the barrier is due to the characteristics of the ramp or the DWS.

Ramps found to be non-compliant may have elements that are compliant and can be preserved in order to reduce cost. However, the cost to benefit analysis of what elements are to remain should be conducted prior to bidding any ramp reconstruction work, to verify compliance when constructed.

4.5 Barrier Removal Budget

The city’s budget of \$65,000 per year for the ADA Compliance Annual Program allows for 5 curb ramps to be replaced each year (see Appendix B for a detailed breakdown). Grant opportunities, such as Safe Routes to School, as well as including curb ramp replacements with roadway projects will allow for more curb ramps to be replaced each year without increasing the city’s budget. Roadway maintenance projects, in particular reconstructions and overlays, should be planned with ADA repairs in mind as they may necessitate reconstruction of ADA facilities.

Appendix A

References

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Appendix B

Estimate

Project Development Level	Design			Design	City PM/Admin	Construction Management	Management Reserve
	Contingency	Inflation/yr	Permitting				
Planning (<\$250k)	50%	3%	5%	25%	5%	25%	10%
Planning (\$250k-\$1M)	30%	3%	5%	15%	3%	15%	10%
Planning (>\$1M)	30%	3%	5%	12%	3%	15%	10%
30% Design (<\$250k)	30%	3%	5%	25%	5%	25%	10%
30% Design (\$250k-\$1M)	20%	3%	5%	15%	3%	15%	10%
30% Design (>\$1M)	20%	3%	5%	12%	3%	15%	10%
60% Design (<\$250k)	20%	3%	N/A	N/A	5%	25%	10%
60% Design (\$250k-\$1M)	10%	3%	N/A	N/A	3%	15%	10%
60% Design (>\$1M)	10%	3%	N/A	N/A	3%	15%	10%
90% Design (<\$250k)	N/A	3%	N/A	N/A	5%	25%	10%
90% Design (\$250k-\$1M)	N/A	3%	N/A	N/A	3%	15%	10%
90% Design (>\$1M)	N/A	3%	N/A	N/A	3%	15%	10%
Final Design (<\$250k)	N/A	3%	N/A	N/A	5%	25%	10%
Final Design (\$250k-\$1M)	N/A	3%	N/A	N/A	3%	15%	10%
Final Design (>\$1M)	N/A	3%	N/A	N/A	3%	15%	10%

City of Orting - 2024 ADA Replacement Estimate
Costs per Year

Year #	Year	Cost
1	2024	\$55,000
2	2025	\$57,000
3	2026	\$59,000
4	2027	\$62,000
5	2028	\$64,000
6	2029	\$66,000

Year #	1
Year	2024
Years of Escalation	0
CONSTRUCTION SUBTOTAL (2024)	\$25,000
DESIGN CONTINGENCY (30%)	<u>\$7,500</u>
SUBTOTAL	<u>\$32,500</u>
INFLATION/YR (3%)	\$32,500
TOTAL CONSTRUCTION + ROW (INFLATED)	\$32,500
PERMITTING (5%)	\$1,625
DESIGN (25%)	\$8,125
CITY PM/ADMINISTRATION (5%)	\$1,625
CONSTRUCTION MANAGEMENT (25%)	\$8,125
MANAGEMENT RESERVE (10%)	\$3,250

TOTAL COST	\$363,000
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CONSTRUCTION GRAND TOTAL	\$55,000
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City of Orting - 2024 ADA Replacement Estimate
Costs per Year

Year #	2	Year #	3
Year	2025	Year	2026
Years of Escalation	1	Years of Escalation	2
CONSTRUCTION SUBTOTAL (2024)	\$25,000	CONSTRUCTION SUBTOTAL (2024)	\$25,000
DESIGN CONTINGENCY (30%)	<u>\$7,500</u>	DESIGN CONTINGENCY (30%)	<u>\$7,500</u>
SUBTOTAL	<u>\$32,500</u>	SUBTOTAL	<u>\$32,500</u>
INFLATION/YR (3%)	\$33,475	INFLATION/YR (3%)	\$34,479
TOTAL CONSTRUCTION + ROW (INFLATED)	\$33,475	TOTAL CONSTRUCTION + ROW (INFLATED)	\$34,479
PERMITTING (5%)	\$1,674	PERMITTING (5%)	\$1,724
DESIGN (25%)	\$8,369	DESIGN (25%)	\$8,620
CITY PM/ADMINISTRATION (5%)	\$1,674	CITY PM/ADMINISTRATION (5%)	\$1,724
CONSTRUCTION MANAGEMENT (25%)	\$8,369	CONSTRUCTION MANAGEMENT (25%)	\$8,620
MANAGEMENT RESERVE (10%)	\$3,348	MANAGEMENT RESERVE (10%)	\$3,448
CONSTRUCTION GRAND TOTAL	\$57,000	CONSTRUCTION GRAND TOTAL	\$59,000

City of Orting - 2024 ADA Replacement Estimate
Costs per Year

Year #	4	Year #	5
Year	2027	Year	2028
Years of Escalation	3	Years of Escalation	4
CONSTRUCTION SUBTOTAL (2024)	\$25,000	CONSTRUCTION SUBTOTAL (2024)	\$25,000
DESIGN CONTINGENCY (30%)	<u>\$7,500</u>	DESIGN CONTINGENCY (30%)	<u>\$7,500</u>
SUBTOTAL	<u>\$32,500</u>	SUBTOTAL	<u>\$32,500</u>
INFLATION/YR (3%)	\$36,579	INFLATION/YR (3%)	\$37,676
TOTAL CONSTRUCTION + ROW (INFLATED)	\$36,579	TOTAL CONSTRUCTION + ROW (INFLATED)	\$37,676
PERMITTING (5%)	\$1,829	PERMITTING (5%)	\$1,884
DESIGN (25%)	\$9,145	DESIGN (25%)	\$9,419
CITY PM/ADMINISTRATION (5%)	\$1,829	CITY PM/ADMINISTRATION (5%)	\$1,884
CONSTRUCTION MANAGEMENT (25%)	\$9,145	CONSTRUCTION MANAGEMENT (25%)	\$9,419
MANAGEMENT RESERVE (10%)	\$3,658	MANAGEMENT RESERVE (10%)	\$3,768
CONSTRUCTION GRAND TOTAL	\$62,000	CONSTRUCTION GRAND TOTAL	\$64,000

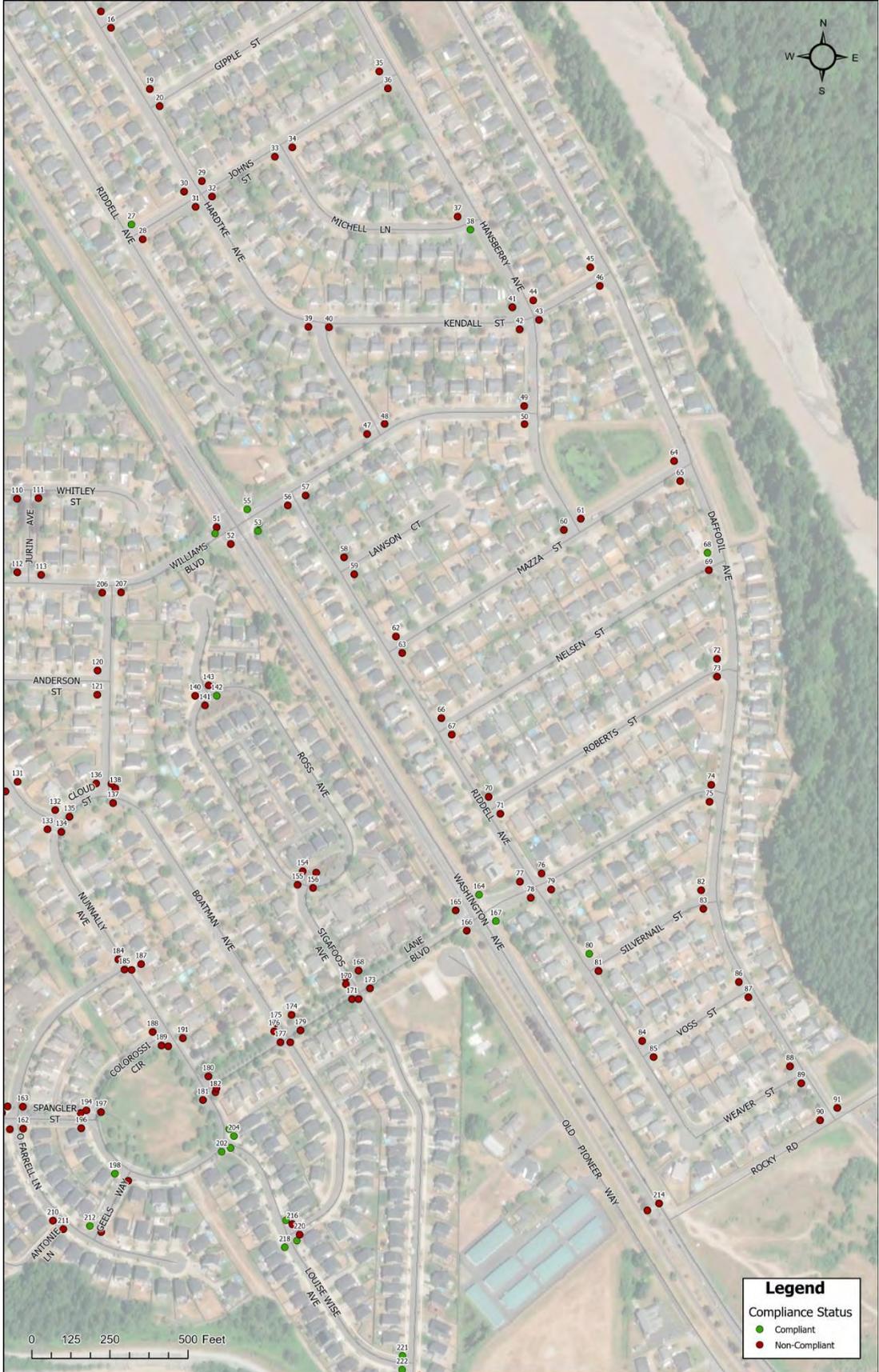
City of Orting - 2024 ADA Replacement Estimate
Costs per Year

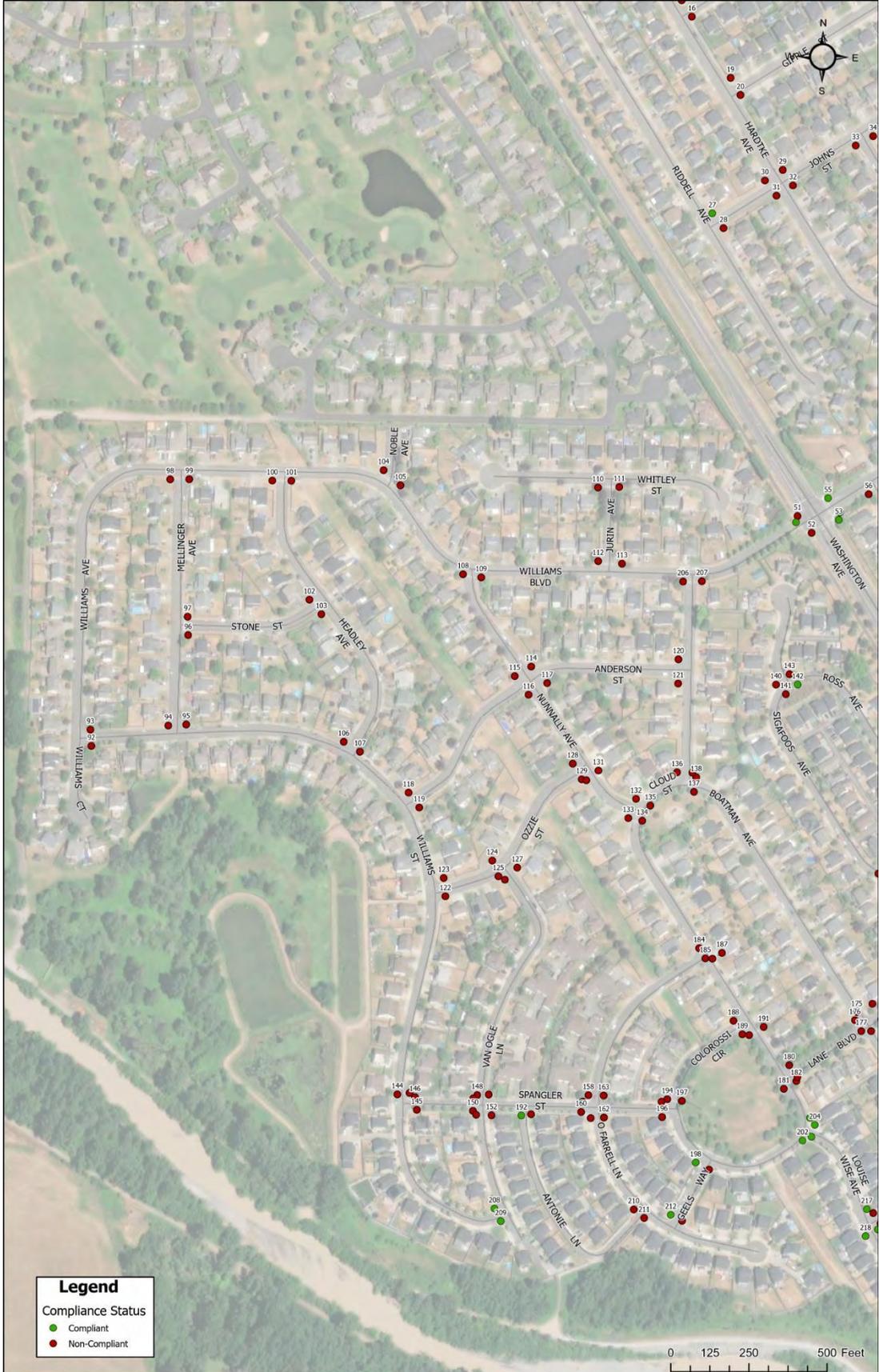
Year #	6
Year	2029
Years of Escalation	5
CONSTRUCTION SUBTOTAL (2024)	\$25,000
DESIGN CONTINGENCY (30%)	<u>\$7,500</u>
SUBTOTAL	<u>\$32,500</u>
INFLATION/YR (3%)	\$38,807
TOTAL CONSTRUCTION + ROW (INFLATED)	\$38,807
PERMITTING (5%)	\$1,940
DESIGN (25%)	\$9,702
CITY PM/ADMINISTRATION (5%)	\$1,940
CONSTRUCTION MANAGEMENT (25%)	\$9,702
MANAGEMENT RESERVE (10%)	\$3,881
CONSTRUCTION GRAND TOTAL	\$66,000

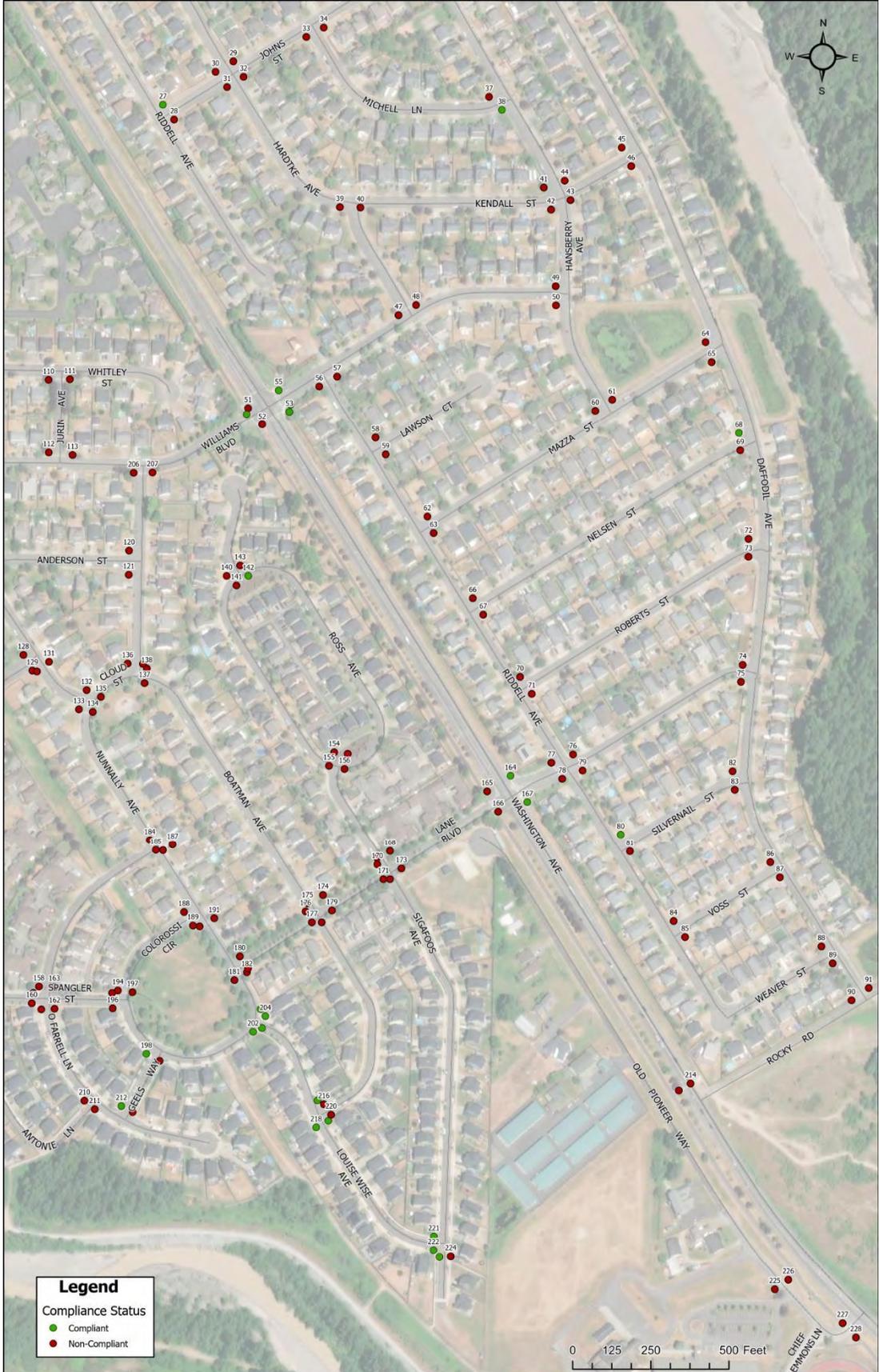
Appendix C

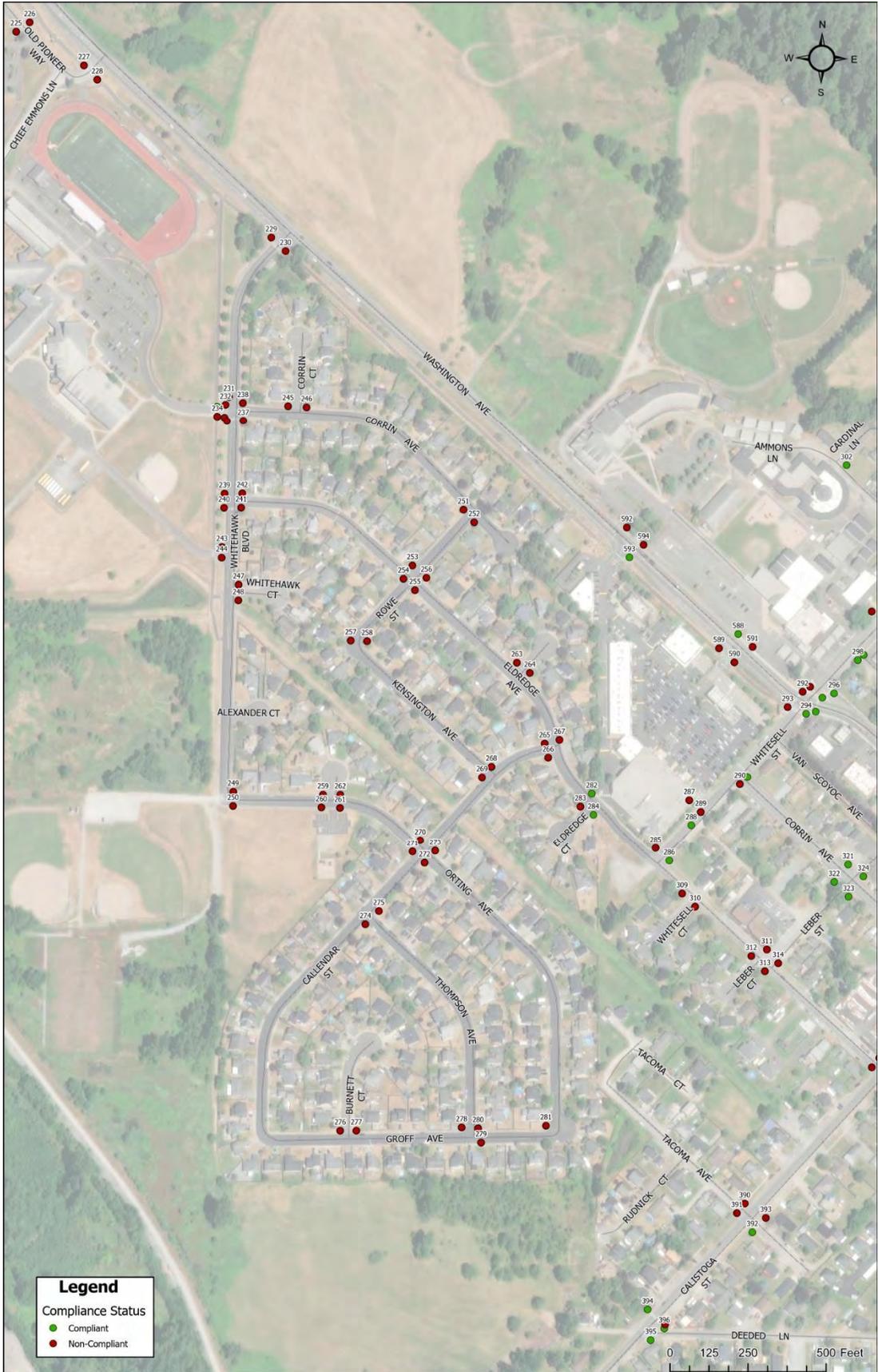
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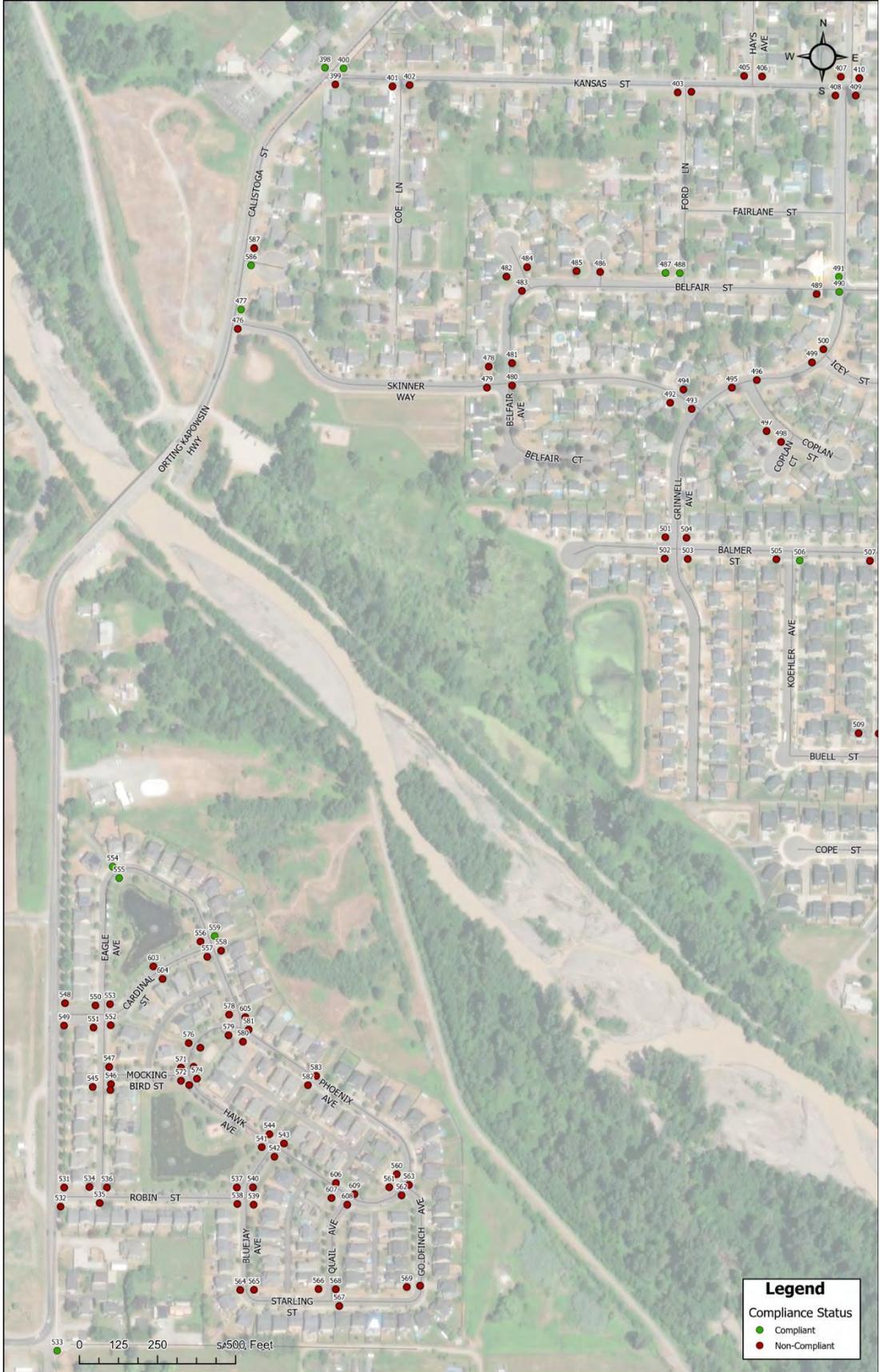






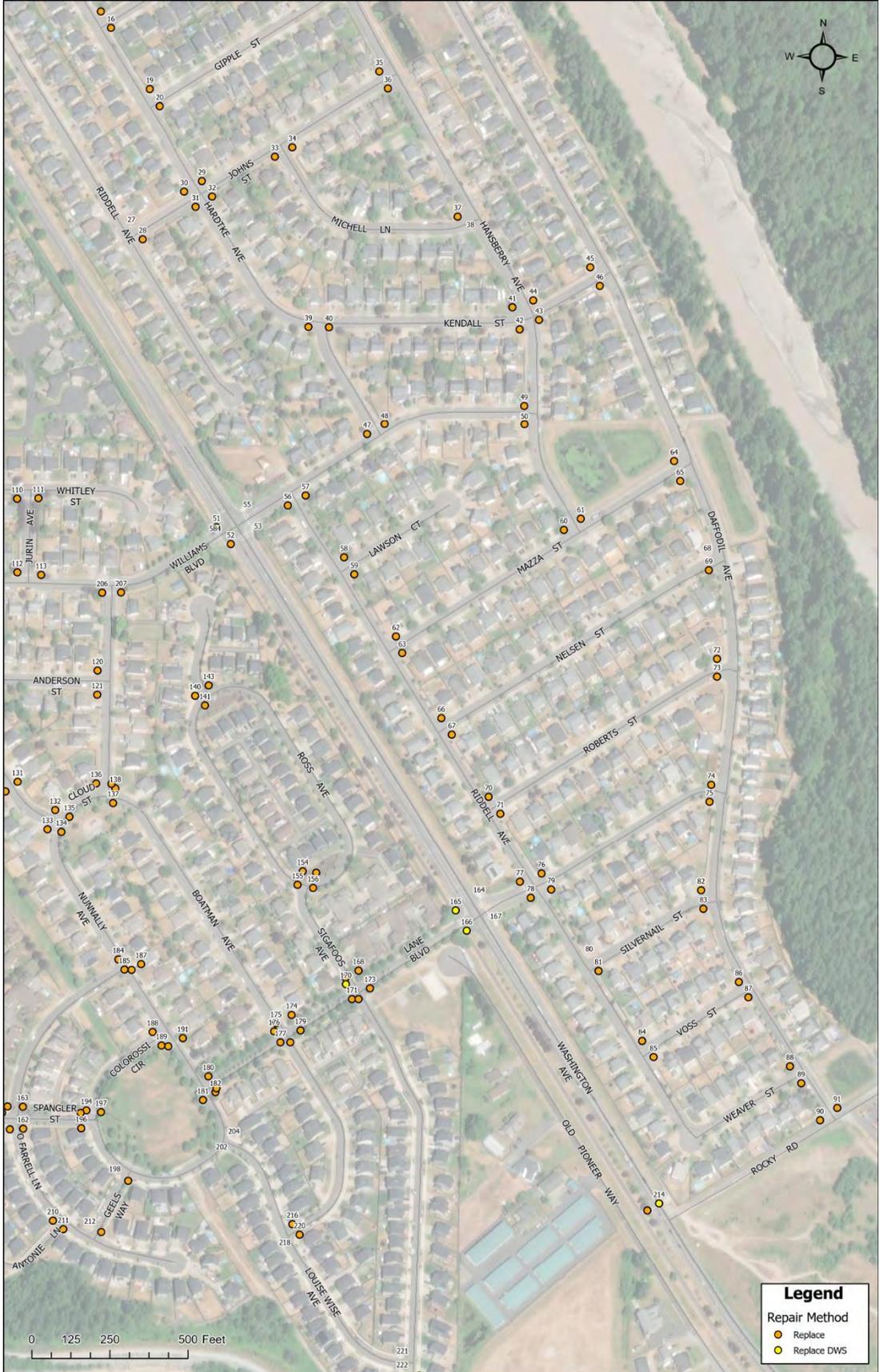












Legend

Repair Method

- Replace
- Replace DWS

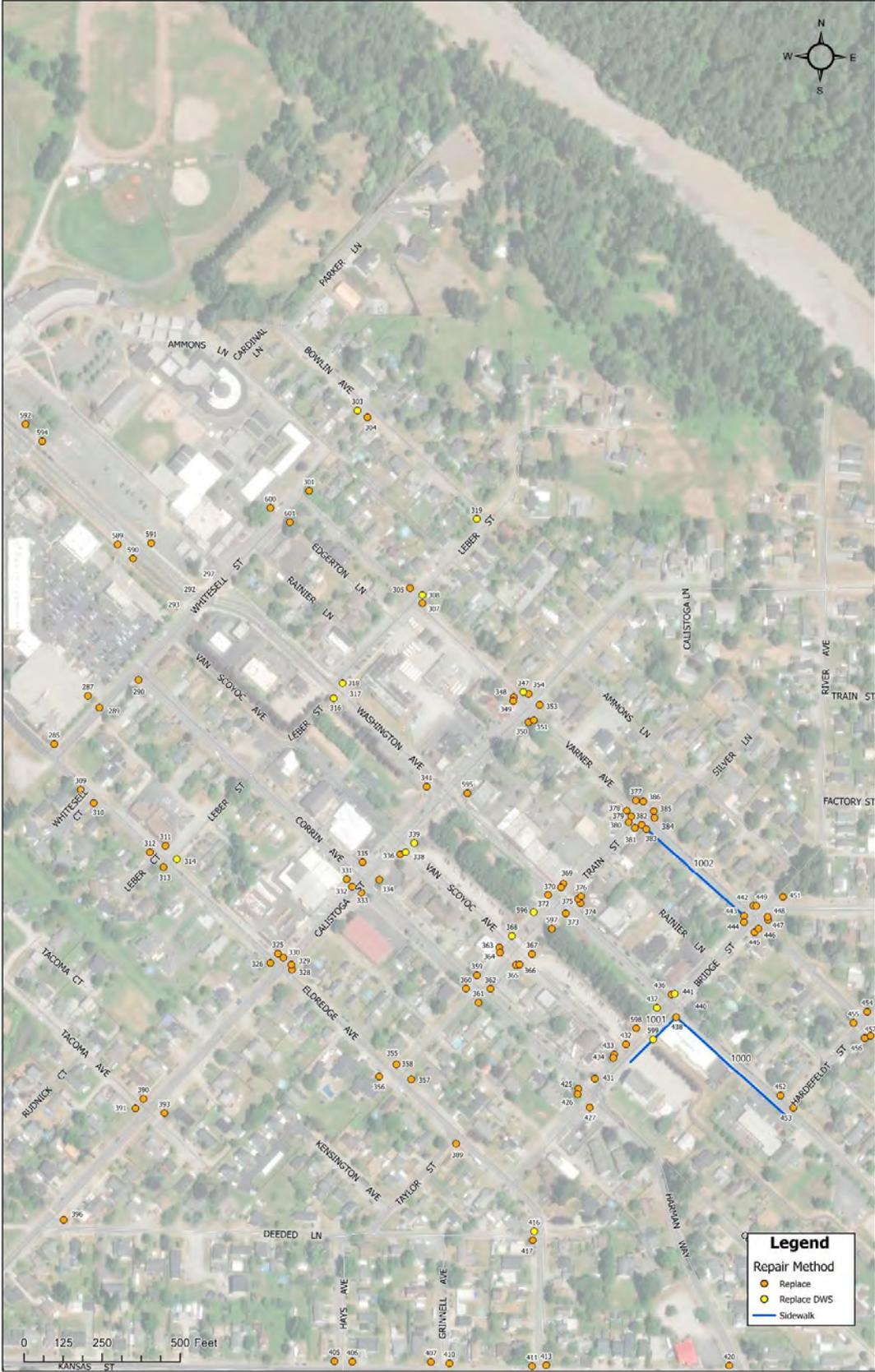
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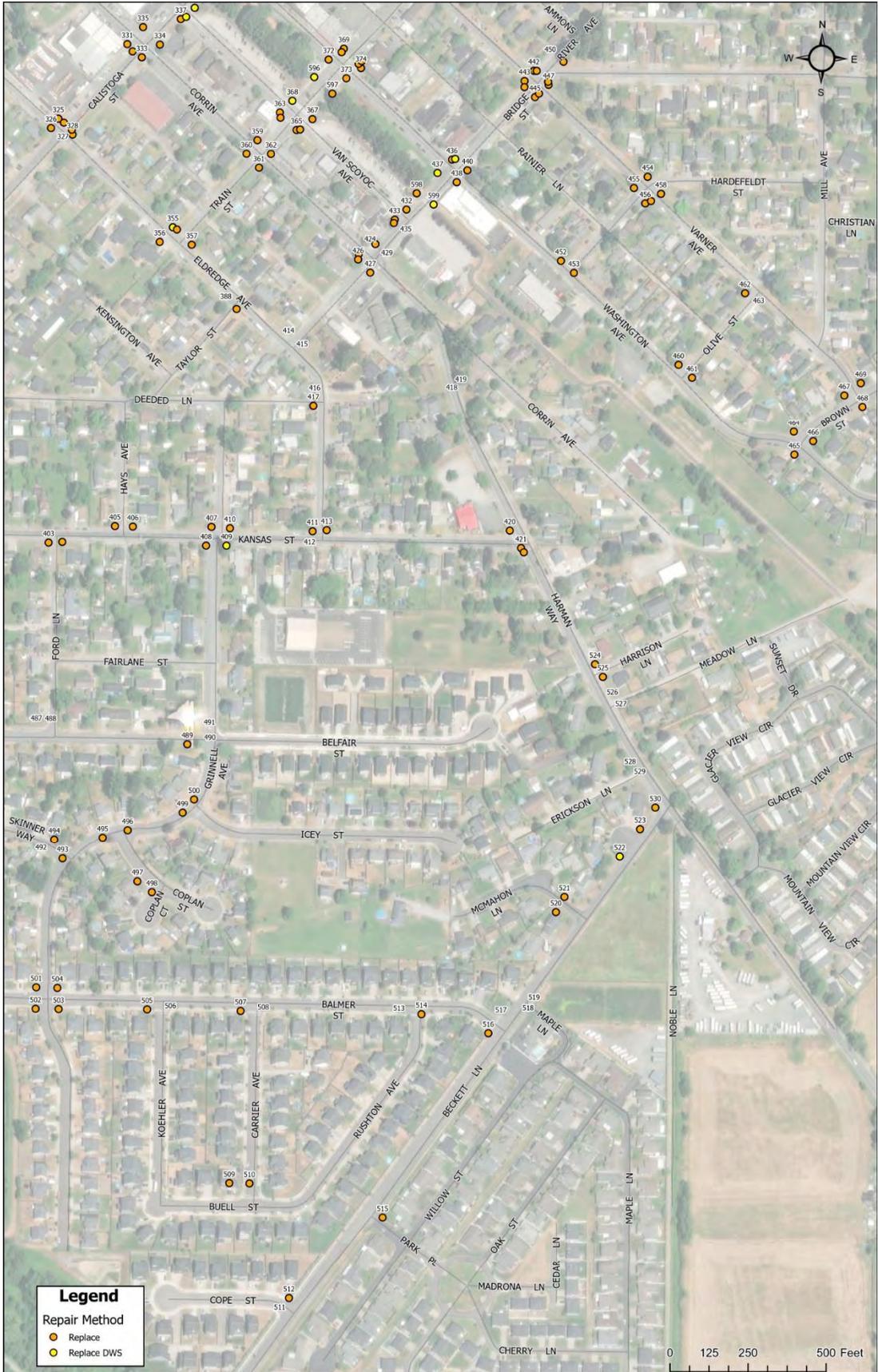














Appendix D

City of Orting Resolution No. 2015-15

CITY OF ORTING
WASHINGTON
RESOLUTION NO. 2015-15

**A RESOLUTION OF THE CITY OF ORTING,
WASHINGTON, ADOPTING A POLICY AND NOTICE
REGARDING THE AMERICANS WITH DISABILITIES
ACT**

WHEREAS, the Congress of the United States adopted the Americans with Disabilities Act of 1990 (ADA) to prohibit discrimination against individuals with disabilities; and

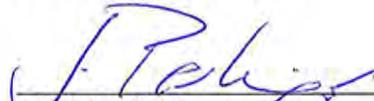
WHEREAS, the City Orting is required to comply with the ADA;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORTING,
WASHINGTON, DOES RESOLVE AS FOLLOWS:**

Section 1. The policy and procedures and notice are hereby adopted as an official policy of the City, in the form attached hereto as Exhibit A.

**PASSED BY THE CITY COUNCIL OF THE CITY OF ORTING, WASHINGTON,
AT AN OPEN PUBLIC MEETING THEREOF HELD THIS 25TH DAY OF NOVEMBER,
2015.**

CITY OF ORTING



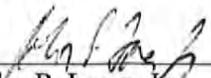
Joachim Pestinger, Mayor

ATTEST/AUTHENTICATED:



Rachel Pitzel, City Clerk

Approved as to form:



John P. Long, Jr.
Kenyon Disend, PLLC
City Attorney

Exhibit "A"

PURPOSE:

To establish a policy for ensuring reasonable access to services, programs and activities of the City of Orting and a procedure with which a person with disabilities can identify and request resolution of accommodation within a service, program or activity of local government.

ORGANIZATIONS AFFECTED:

Applies to all departments and divisions.

POLICY:

The City of Orting does not discriminate on the basis of disability. It is the policy of the City to assure disabled persons the opportunity to participate in, or benefit from employment, services, activities and facilities, where possible. The City, upon request, will provide reasonable accommodation in compliance with the Americans with Disabilities Act and the Washington Law against Discrimination.

DEFINITIONS:

Disabled Individual – an individual (1) with a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (2) with a record of such impairment; or (3) who is regarded as having such an impairment.

Reasonable Accommodation – are modifications or adjustments that enable an individual with a disability to enjoy equal benefits and privileges as are enjoyed by other individuals without disabilities, without placing an undue hardship on the operation of the City.

REFERENCES:

1. The Americans with Disabilities Act of 1990, Title II.
2. Washington State Law against Discrimination, RCW Chapter 49.60.

NOTICE:

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990, the City of Orting does not discriminate against qualified individuals with disabilities on the basis of disability in the City's services, programs or activities.

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990, the City of Orting does not discriminate on the basis of disability in its hiring or

employment practices and complies with all regulations promulgated by the Equal Employment Opportunity Commission under Title I of the ADA.

Effective Communication: The City of Orting, will, upon request, attempt to provide appropriate aids and services leading to effective communication for qualified persons with disabilities so they can participate equally in the City's programs, services and activities. We strive to make information and communication accessible to people who have speech, hearing or vision impairments.

Modifications to Policies and Procedures: The City of Orting will make reasonable modifications to policies and programs to ensure that people with disabilities have equal opportunity to enjoy all City programs, services and activities. For example, individuals with service animals are welcomed in city offices and parks, where animals are generally prohibited.

Anyone who requires an auxiliary aid or service for effective communication or modification of policies or procedures to participate in a City program, service or activity, should contact the person or department who scheduled the event as soon as possible but no later than 72 hours before the scheduled event. If you are not sure who you should contact, you may contact the ADA Coordinator identified in this notice.

The ADA does not require the City to take any action that would fundamentally alter the nature of its programs or services, or impose an undue financial or administrative burden.

The City will not place a surcharge on a particular individual with a disability or group of individuals with disabilities to cover the cost of providing auxiliary aids/services or reasonable modifications of policy.

ADA Questions and Complaints: The City of Orting has an ADA Coordinator and a grievance procedure. Those are intended to ensure that complaints are handled promptly. Equitable resolution is strived for through the review process. Please contact the ADA Coordinator with questions or complaints about the ADA compliance efforts.

ADA Coordinator:

Rachel Pitzel
110 Train Street SE
Orting, WA 99360
Phone: (360) 893-2219
E-mail: rpitzel@cityoforting.org

PROCEDURE:

1. The City Clerk of the City of Orting shall be the City's ADA Coordinator.
2. Requests for accommodation may first be directed to the individual responsible for the program, activity or service to which access is requested.
3. If access is not accommodated, a formal complaint must be submitted in writing to the ADA Coordinator within 30 working days after the complainant becomes aware of the alleged violation. Reasonable accommodation to assist in completing the form is available upon request.
4. The complaint must contain the name, address, and telephone number of the individual filing the complaint; briefly describe the alleged violation and the requested accommodation resolution. A form is available, but is not necessary.
5. The ADA Coordinator will conduct an informal, but thorough, review affording the complainant and the affected department(s) an opportunity to submit information relevant to the complaint and potential accommodation/resolution.
6. A written response and description of the accommodations/resolutions, if any, will be issued by the ADA Coordinator and sent to the complainant within 30 calendar days after the complaint is received, unless the complexities of the complaint require additional time, in which case the complainant will be notified. The accommodation or resolution may not be the same as requested.
7. The complainant may request a reconsideration of the case determination by submitting a request for reconsideration within ten (10) working days following the date the complainant receives the City's response.
8. The Mayor or his or her designee will conduct his/her review of the complaint and issue his/her decision to the complainant within twenty (20) working days of receiving the request for reconsideration, unless the complexities of the complaint require additional time. The Mayor and/or his or her designee's decision is final.
9. The City Clerk will maintain the files and records of the City of Orting related to ADA complaints filed and keep a log of complaints. The log shall include:
 - a. The name and address of the person filing the complaint;
 - b. The date of the complaint;
 - c. The basis of the complaint; and
 - d. The disposition of the complaint.

10. The individual's right to a prompt and equitable solution of the complaint will not be impaired by his/her pursuit of other remedies such as filing a grievance of an ADA complaint with the responsible federal department or agency. Use of this grievance procedure is not a prerequisite to the pursuit of other remedies.

**CITY OF ORTING
PUBLIC ACCESS REQUEST FOR
ACCOMMODATION FORM**

NAME OF ENTITY: CITY OF ORTING

RETURN TO: CITY CLERK

Name of Individual Requesting Accommodation	Address	Phone

Explain what functional disability you have that limits your ability to participate in a (Name of Entity) program or service: (e.g. "I am confined to a wheelchair.")

Describe the program, service or activity you cannot access due to your disability, and what you believe are the barriers to access or participation.

Proposed Accommodation/Resolution:

RESERVED FOR ENTITY USE

DATE RECEIVED: _____ BY: _____

DATE SENT TO ADA COORDINATOR: _____

DATE CITY RESPONSE SENT: _____

Appendix E

City of Orting Facilities Memo



Technical Memo

To: John Bielka, City of Orting
From: Andrew Armstrong, SCJ Alliance
Date: February 23, 2024
Project: City of Orting ADA Transition Plan
Subject: ADA Accessibility of the City of Orting Facilities

Introduction:

The City of Orting maintains a number of facilities for the public, including buildings and parks. Facilities must meet the ADA Accessibility Guidelines (US Access Board, n.d.). These guidelines apply to parks and buildings constructed, altered, or added onto post-2010. This means that although the City of Orting's facilities are not all up to current standards, they are not necessarily out of compliance. Existing barriers to access are required to be removed when they are readily achievable (ADA, 2012). This memo describes the compliant features as well as the noncompliant features and the actions that should be taken to bring them into compliance with the current standards. These features were assessed by visual inspection over multiple site visits.

1 Publicly Accessible Buildings

Buildings were evaluated for ADA Parking Stalls and ADA compliant walkways to ADA compliant restrooms. The buildings evaluated were:

- ◆ Library
- ◆ City Hall
- ◆ Old City Hall
- ◆ Public Works Building

1.1. Parking:

- ◆ Library: 1 ADA Parking Stall, 8 Total Stalls
- ◆ City Hall: 2 ADA Parking Stalls, 13 Total Stalls
- ◆ Old City Hall: 1 ADA Parking Stall, 8 Total Stalls
- ◆ Public Works Building: 1 ADA Parking Stall, 15 Total Stalls
- ◆ These buildings all have a compliant number of ADA Parking Stalls (Figure 1)

Minimum Number of Accessible Parking Spaces

[§208.2](#)

Minimum Number of Accessible Parking Spaces Table
 * at least 1 of every 6 accessible spaces or fraction of 6
 ** 501 to 1000: 2% of total
 *** 1001 and over: 20 + 1 for each 100 or fraction thereof over 1000

Parking Facility Total	Minimum Number of Accessible Spaces		
	Standard	Van*	Total (Standard + Van)
1 to 25	0	1	1
26 to 50	1	1	2
51 to 75	2	1	3
76 to 100	3	1	4
101 to 150	4	1	5

Figure 1. ADA Accessible Parking Spaces Requirement (U.S. Access Board, n.d., Chapter 5: Parking Spaces)

1.2. Walkways:

- ◆ All buildings have ADA compliant walkways to access ADA compliant restrooms.
- ◆ Old City Hall has one doorway with only 32" of clear width, but this is compliant since it does not last for 24" (Figure 2).

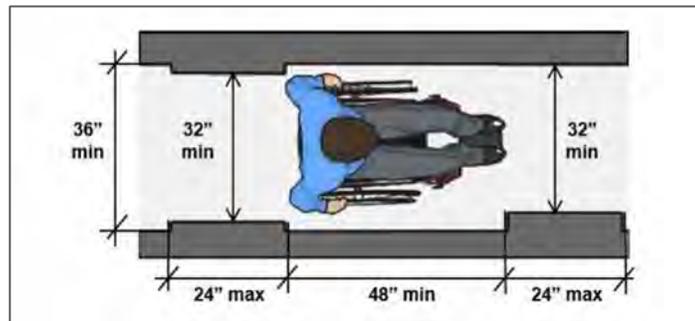


Figure 2. Minimum Clearance Requirements (U.S. Access Board, n.d., Chapter 4: Accessible Routes)

2 Parks

The City's parks were evaluated for ADA compliant walkways, restrooms, parking spots, and playgrounds. The parks evaluated were:

- ◆ Callistoga Park
- ◆ Cemetery
- ◆ Charter Park
- ◆ Gratzer Sports Park
- ◆ Main City Park
- ◆ Rainier Meadows Park
- ◆ Whitehawk Park
- ◆ Williams Park
- ◆ 3 Corners Park
- ◆ Memorial Park
- ◆ North Park
- ◆ Triangle Park
- ◆ Foothills Trail

2.1. Calistoga Park

Calistoga Park has a parking lot with many potholes and no ADA parking stalls, which is non-compliant. ADA Parking stalls should be provided following Figure 1, and ADA access aisles should be provided to be compliant. A gravel path leads to one of the two playgrounds and the dog park, although it needs maintenance and does not continue into the dog park. This path does not provide access to the baseball field, which is non-compliant (Figure 5).

The playgrounds both have wood chip surfacing that needs maintenance to level it out and increase its compaction. The curb outlining the playgrounds must be altered to not be a barrier to an ADA accessible route. The playgrounds have seven elevated play components accessible via transfer system, five elevated play components not accessible via transfer system, and 10 ground-level play components (four of which are swings). This would be compliant if the ground-level play components were ADA accessible (Figure 3). However, two of the ground-level play components have no accessible walkway and the other four need surfacing maintenance to provide an ADA accessible route. As there are less than 20 elevated play components, a transfer system may be used to connect 50% of the elevated play components and it is compliant (Figure 4).

Ground Level Requirements Based on Elevated Play Components

The number and variety of ground-level play components required to be on an accessible route is also determined by the number of elevated components provided in the play area. The intent of this requirement is to provide a variety of experiences for individuals who choose to remain with their mobility devices, or choose not to transfer to elevated play components.

Table 240.2.1.2

Number of elevated play components provided	Minimum number of ground-level play components required to be on accessible route	Minimum number of different types of ground-level play components required to be on accessible route
1	Not applicable	Not applicable
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
More than 25	8 plus 1 for each additional 3 over 25, or fraction thereof	5

If ramps provide access to at least 50 percent of the elevated play components - which must include at least three different play types - then additional ground-level components are not required. An example: the composite structure of a play area has four elevated play components (bubble panel, slide, steering wheel, and tic-tac-toe panel). According to the table, a minimum of one ground level play component must be provided, and a minimum of one different type. The spring rider or swing can be used to meet the "one of each type" requirement and can also be used to meet the minimum number determined by Table 240.2.1.2. The number of ground-level components determined by "one of each type" can also fulfill the minimum ground level requirement that is indicated by the elevated play components table.

Figure 3. Ground Level Component Requirements (U.S. Access Board, n.d., Chapter 10: Play Areas)

A transfer system provides access to elevated play components within a composite system by connecting different levels with transfer platforms and steps. A transfer system provides access to elevated play components without the use of a wheelchair or mobility devices. At least 50 percent of the elevated play components can be connected by a transfer system in play areas with fewer than 20 elevated components. In play areas with 20 or more elevated play components, transfer systems may be used to connect up to 25 percent of the elevated play components and the rest of the elevated play components required to be on an accessible route must be connected by a ramp.

Figure 4. Transfer System Requirements (U.S. Access Board, n.d., Chapter 10: Play Areas)

Accessible routes must connect each area of sport activity. Areas of sport activities must comply with all ADAAG requirements, except that they are exempt from the requirement that surfaces must be stable, firm, and slip resistant, and from the restrictions on carpets, grating, and changes in level. They are also exempt from restrictions on protruding objects. These provisions are not required inside of the area of sport activity since they may affect the fundamental nature of the sport or activity. For example, an accessible route is required to connect to the boundary of a soccer field, but there is no requirement to change the surface of a field to an accessible surface.

Where light fixtures or gates are provided as part of a court sport or other area of sport activity, they must comply with ADAAG provisions for controls and operating mechanisms, and for gates and doors.

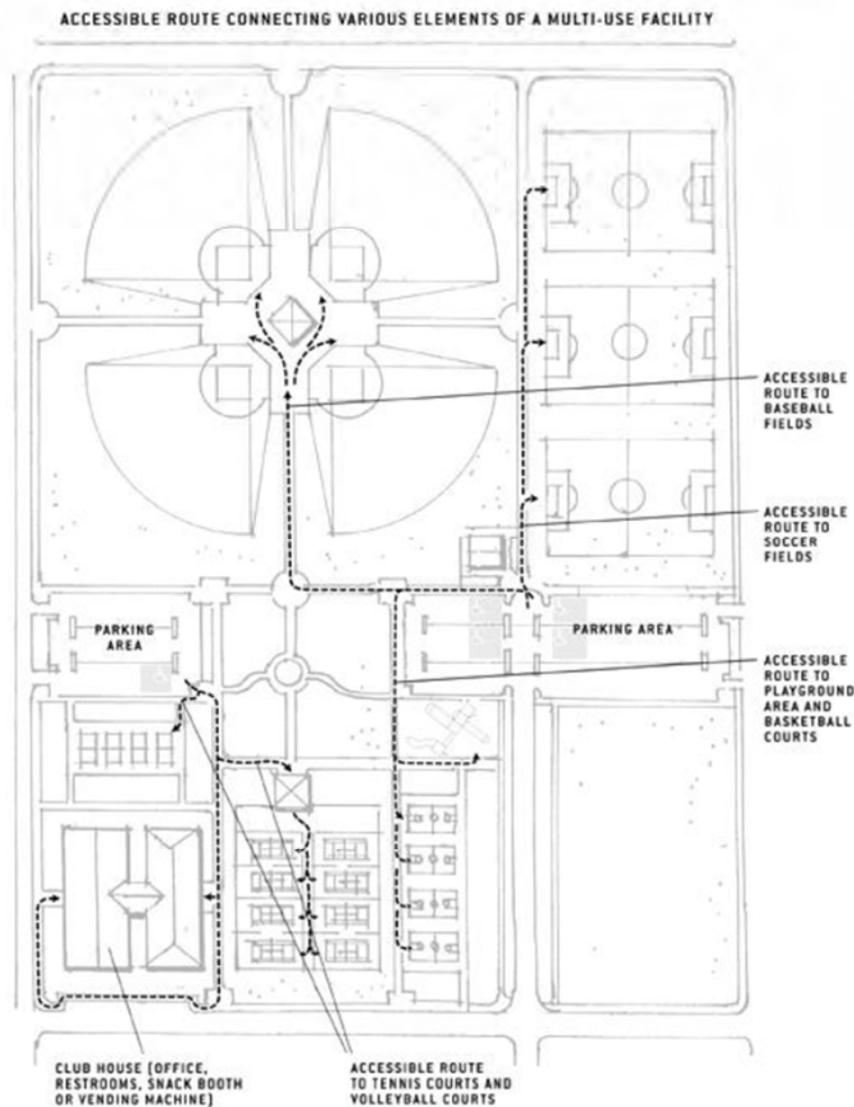


Figure 5. Accessible Routes to Facilities Requirements (U.S. Access Board, n.d., Chapter 10: Sports Facilities)

2.2. Cemetery

The cemetery has no parking lot or walking path, but it does have an ADA accessible portable toilet. It is unclear where an ADA accessible route to this portable toilet should be provided from, but access to this toilet should be provided to be compliant.

2.3. Charter Park

Charter Park has an accessible path to the skateboard park and two ADA parking spots with 38 total stalls.

2.4. Gratzer Sports Park

Gratzer Sports Park has a gravel parking lot with two ADA Parking spots noted. A gravel path starts at the parking lot, but this path must extend to the baseball fields and requires maintenance to meet ADA requirements (Figure 5). The ADA parking stalls, and an access aisle, should be paved to make them compliant and meet the firm, stable, and slip resistant surfacing requirement.

2.5. Main City Park

Main City Park has two gravel parking lots that each have one paved ADA parking spot, and since the parking lots are gravel, it is unclear how many total spots there are. The number is around 25 parking spots per lot, and having 25 spots or under means one ADA Accessible parking spot is all that is required so this parking lot is compliant (Figure 1).

The park provides an ADA compliant walkway to the permanent restrooms as well as the ADA compliant portable toilet. The basketball court lacks an accessible walkway (Figure 5), while the gazebo has one that fails the cross-slope test as it is turning to go up the gazebo. Both are non-compliant and should be updated. Several picnic tables have ADA access provided.

The structural components of the playground include seven ground-level play components and eight elevated play components. The playground surfacing needs maintenance to level out the surfacing and increase its compaction. The curb outlining the playgrounds must be altered to not be a barrier to an ADA accessible route. The structural components would be compliant if an accessible path reached three of them (Figure 3). The elevated components are connected with a transfer system, which is compliant (Figure 4).

2.6. Rainier Meadows Park

Rainier Meadows Park has a paved walkway connecting the playground to the sidewalk. The paved walkway does not provide access to the basketball court and needs maintenance as noted by a complaint from the public during the survey. The playground surfacing needs maintenance to level out the surfacing and increase its compaction. The curb outlining the playgrounds must be altered to not be a barrier to an ADA accessible route.

The structural components of the playground include one ground level component and six elevated play components. To be compliant, the playground should provide two ADA compliant and accessible ground level components as well as an accessible route to the transfer system (Figure 3). The transfer system is compliant (Figure 4).

2.7. Whitehawk Park

Whitehawk Park has a paved parking lot with two ADA accessible parking spots and 18 total parking spots. There is an ADA accessible route connecting the parking lot, the basketball court, and the playground. This route does not connect to the baseball field, which is non-compliant (Figure 5). There is a portable toilet provided, but it is not ADA compliant, which means an ADA compliant one should be provided as well or in place of it (Figure 6).

The playground has nine elevated play components and four ground-level play components (Figure 3). The playground surfacing needs maintenance to level out the surfacing and increase its compaction. The curb outlining the playgrounds must be altered to not be a barrier to an ADA accessible route. At least three of the ground-level play components must be on an accessible route, as well as the transfer system. The transfer system for the elevated play components is compliant (Figure 4).

Required Compliance

[\[§213\]](#)

Plumbing and building codes address the number and type of toilet rooms and toilet fixtures required for a facility. The ADA Standards, on the other hand, do not address the number of toilet rooms or fixtures required for a facility, but instead specify which ones must be accessible where provided. In new construction, access is required to all toilet rooms, including those for employees. However, where single user toilet rooms are clustered in one location, at least half for each use must comply (§213.2., Ex. 4). In the case of single user portable units, access is required to at least 5% at each cluster, excluding those on construction sites for construction personnel which are fully exempt (§213.2, Ex. 3, §203.2).

Figure 6. ADA Accessible Portable Toilet Requirements (U.S. Access Board, n.d., Chapter 6: Toilet Rooms)

2.8. Williams Park

Williams Park has a paved ADA accessible route through it with access to a bench and a picnic table.

2.9. 3 Corners Park

3 Corners Park has a gravel walkway through it that needs maintenance to be ADA accessible (Figure 7).

Surface [1017.2]



The surfaces of trails, passing spaces, and resting intervals must be firm and stable. A firm trail surface resists deformation by indentations. A stable trail surface is not permanently affected by expected weather conditions and can sustain normal wear and tear from the expected uses between planned maintenances.

Paving with concrete or asphalt may be appropriate for highly developed areas. For less developed areas, crushed stone, fine crusher rejects, packed soil, soil stabilizers, and other natural materials may provide a firm and stable surface. Natural materials also can be combined with synthetic bonding materials to provide greater stability and firmness. These materials may not be suitable for every trail.

DESIGN TIP—Building a firm and stable surface

A firm and stable surface does not always mean concrete and asphalt. Some natural soils can be compacted so that they are firm and stable. Other soils can be treated with stabilizers without drastically changing their appearance. Designers are encouraged to investigate the options and use surfacing materials that are consistent with the site's level of development and that require as little maintenance as possible.

Figure 7. Trail Surfacing Requirements (U.S. Access Board, n.d., Chapter 10: Outdoor Developed Areas)

2.10. Memorial Park

Memorial Park has a paved ADA accessible route through it.

2.11. North Park

North Park has a paved ADA accessible route to the building and most of the benches. However, the building was locked so it is unclear what is inside.

2.12. Triangle Park

Triangle Park has a paved ADA accessible sidewalk around it and a gravel route through it with access to a bench. This gravel walkway needs maintenance to be considered accessible (Figure 7).

2.13. Foothills Trail

The Foothills Trail is a paved path through the City of Orting. Although sections of it could use maintenance, it provides the 5' ADA accessible route throughout the city. Many of the street crossings for this trail are noncompliant and need maintenance as noted in the curb ramp section of the plan.



3 References

ADA. (2012, March 08). *Americans with Disabilities Act Title III Regulations*. United States Department of Justice. <https://www.ada.gov/law-and-regs/regulations/title-iii-regulations/#part-36-nondiscrimination-on-the-basis-of-disability-in-public-accommodations-and-commercial-facilities-as-amended-by-the-final-rules-published-on-august-11-2016-and-december-2-2016>

U.S. Access Board. (n.d.) *About the ABA Guide*. Guide to the ABA Accessibility Standards. <https://www.access-board.gov/ada/guides/>.

U.S. Access Board. (n.d.) *About the ADA Accessibility Standards*. Guide to the ADA Accessibility Standards. <https://www.access-board.gov/ada/>.

U.S. Access Board. (n.d.) *About the ADA Guides*. Guide to the ADA Accessibility Standards. <https://www.access-board.gov/ada/guides/>.

Appendix F

City of Orting Website Accessibility Report



- Public Notices
- Project Updates
- Permits
- Pay Utility Bill
- Orting Alerts
- Orting's Flood Informa Center

EVENTS

- MAY 27** City of Orting offices are closed - Memorial Day
12:00 AM
- MAY 29** City Council Meeting
07:00 PM
- JUN 05** CGA Committee Meeting
09:00 AM
- JUN 05** Public Works Committee Meeting
02:30 PM
- JUN** Public Safety Meeting

NEWS

- City Council Meeting - Wednesday, May 29th, 2024 - 7:00pm**
The City of Orting City Council Meeting will be held in person at Orting City Hall located at 104 Bridge St S. Orting, WA 98360 and on Zoom.
- City Council Study Session - Wednesday, May 15th, 2024 - 6:00pm**
The City of Orting Study Session will be held in person at Orting City Hall located at 104 Bridge St S. Orting, WA 98360 and on the platform Zoom.
- Water Main Flusing - May 6th - May 24th - 9:00pm - 5:00am**
Orting Public Works annually flushes our water system to maintain clean, reliable drinking water. Flushing removes rust, sediment, and mineral deposits, ensuring optimal water quality.
- The City of Orting is hiring!**
The City of Orting is hiring for a Term Limited Maintenance Assistant and also for 2024 Summer Day Camp Counselors.
- City Council Meeting - Wednesday, May 8, 2024 - 7:00pm**
The Orting City Council meeting will be held in person at Orting City Hall located at 104 Bridge St S. Orting, WA 98360 and on Zoom.

Website Accessibility Report

City of Orting

May 24, 2024

Evaluation Criteria

Under the American Disabilities Act (ADA)¹, websites for public use are asked to meet WCAG 2.1 AA accessibility requirements.² In order to determine if websites pass, an accessibility checker, Silktide, was used. It is a tested and approved tool by the Web Accessibility Initiative (WAI)³. The following sections detail what failed this test on the City of Orting website.

Text Contrast

To comply with WCAG AA, the color of text must sufficiently contrast with its background color, so that people with moderate visual impairments can read it. The following elements of the Orting website fail this.

1. White Text on Green Background

This specific color green does not provide enough contrast for the white text on it. To remedy this, the color contrast should be increased or a new color with a 4.5:1 contrast ratio selected.



The image shows a screenshot of a website with two green buttons. The top button is labeled "Public Notices" and has a calendar icon. The bottom button is labeled "Project Updates" and has a cursor icon. A red box highlights the "Public Notices" button. To the right is a color contrast tool interface. It shows the foreground color as #FFFFFF and the background color as #72A45B. The tool indicates a contrast ratio of 2.93:1 / 4.5:1, which is a FAIL.

Link Purpose

The purpose of a link should be clear from the text inside the link. Links like "learn more" are not helpful to users with assistive technology.

1. Search Bar

The link text associated with the search bar icon is just "go." It is too generic and doesn't help users understand what the link does in isolation. "search site" would be a more descriptive way to do that.

¹ADA Act Requirements for websites: <https://bit.ly/ADAReqs>

² WCAG AA Standards Quick Reference Guide: <https://www.w3.org/WAI/WCAG22/quickref/>

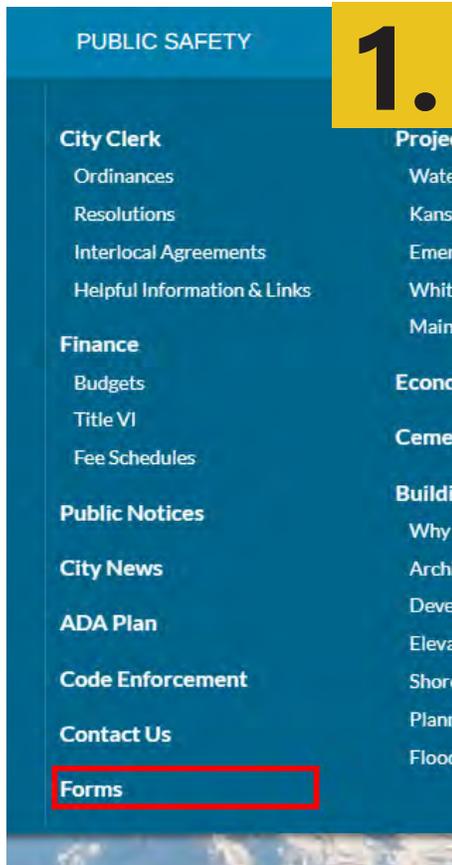
³ WAI approved tools: <https://www.w3.org/WAI/test-evaluate/tools/list/>

Links with Different Destinations

Screen reader users will see links on a page listed without context, so you should ensure the same link text is not used to point to different web addresses.

1. Forms

There are multiple links labeled forms that go to different places.



1. This link takes you here: <https://www.cityoforting.org/government/forms>

2. This link takes you here: <https://www.cityoforting.org/public-safety/police-department/forms>

2. Contact

There are multiple links labeled Contact that go to different places.



1. This link takes you here: <https://www.cityoforting.org/public-safety/police-department/contact>

2. This link takes you here: <https://www.cityoforting.org/public-safety/municipal-court/contact>

WCAG 2.2 AAA

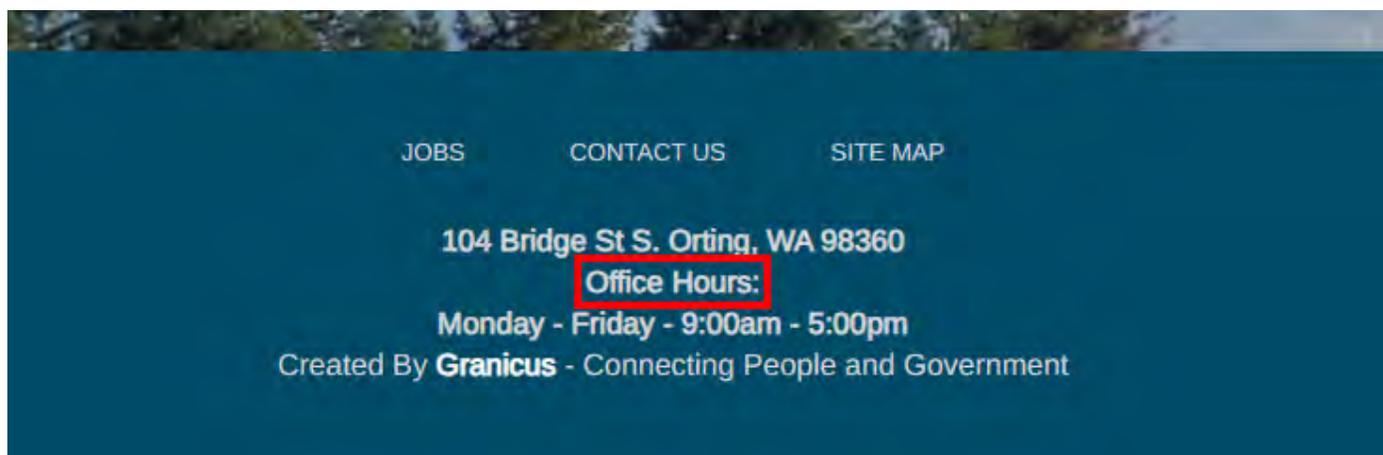
While not required to meet AAA standards, WCAG suggests that, whenever possible, they should be met to be considered truly accessible. They acknowledge that at many junctures this level of accessibility may not be possible.

Text Contrast

To comply with the strictest accessibility standard (WCAG AAA), the color of text must strongly contrast with its background color, so that people with significant visual impairments can read it.

1. Smaller white text on navy background

The footer text does not meet the contrast ratio for text that small. It can be either be made slightly larger (about 2pts) or the color contrast should be increased slightly.



Office Hours:

Foreground: #D5D5D5

Background: #004C68

T Small text (12pt)

Contrast ratio: 6.41:1 / 7:1 **FAIL**

Jobs

Foreground: #D5D5D5

Background: #004C68

T Small text (9.8pt)

Contrast ratio: 6.41:1 / 7:1 **FAIL**

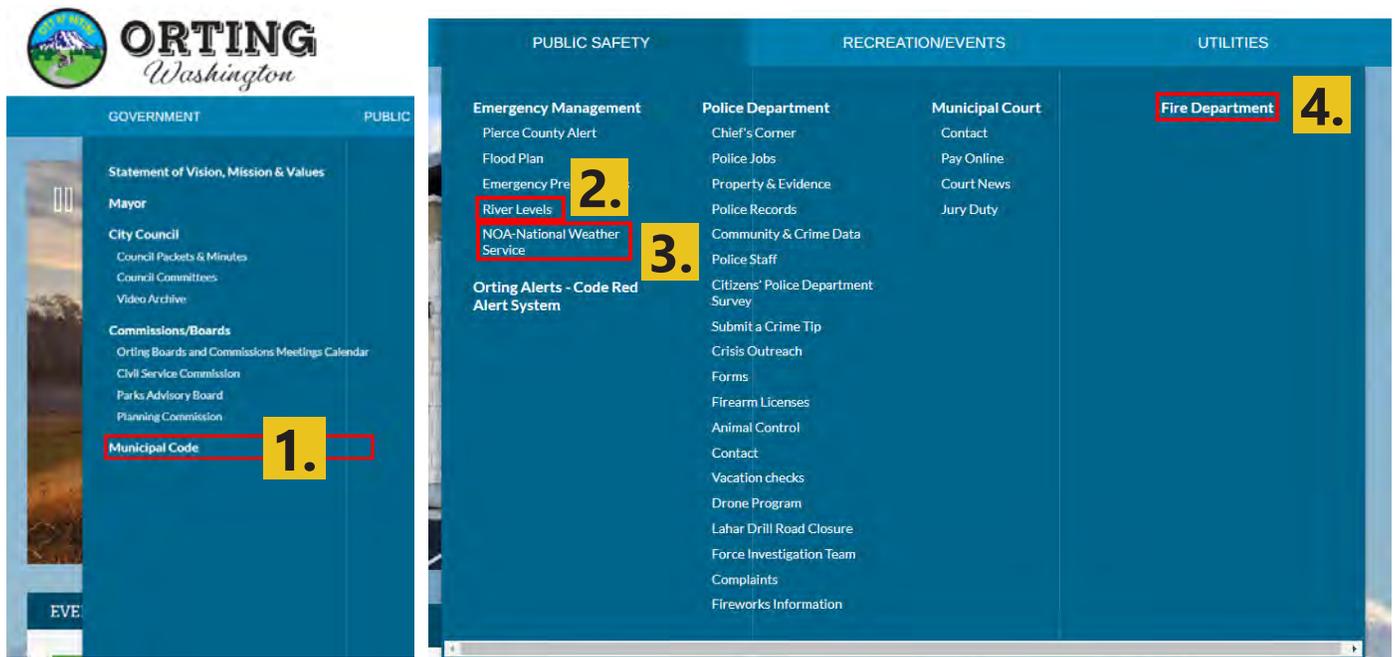
⁴Quick reference to WCAG 2.1 AAA standards: <https://www.w3.org/WAI/WCAG22/quickref/#top>

Explain Opening New Tabs

Avoid opening links in a new tab or window. Where you must do this, include an explanation in the text of the link.

1. Links in drop down menu

Several links in the drop down menu don't appear to say they open in a new tab or window. It probably shouldn't then be opening in a new window.



1. This link takes you here: <https://codelibrary.amlegal.com/codes/ortingwa/latest/overview>

2. This link takes you here: <https://www.usgs.gov/centers/washington-water-science-center>

3. This link takes you here: <https://forecast.weather.gov/MapClick.php?CityName=Orting&state=WA&site=SEW&textField1=47.0981&textField2=-122.203&e=0#.Xd2RDOhKhaS>

4. This link takes you here: <https://www.ovfr.org/>

2. Toolbar Link

This link also doesn't say it opens in a new tab or window. It probably shouldn't open in a new window.



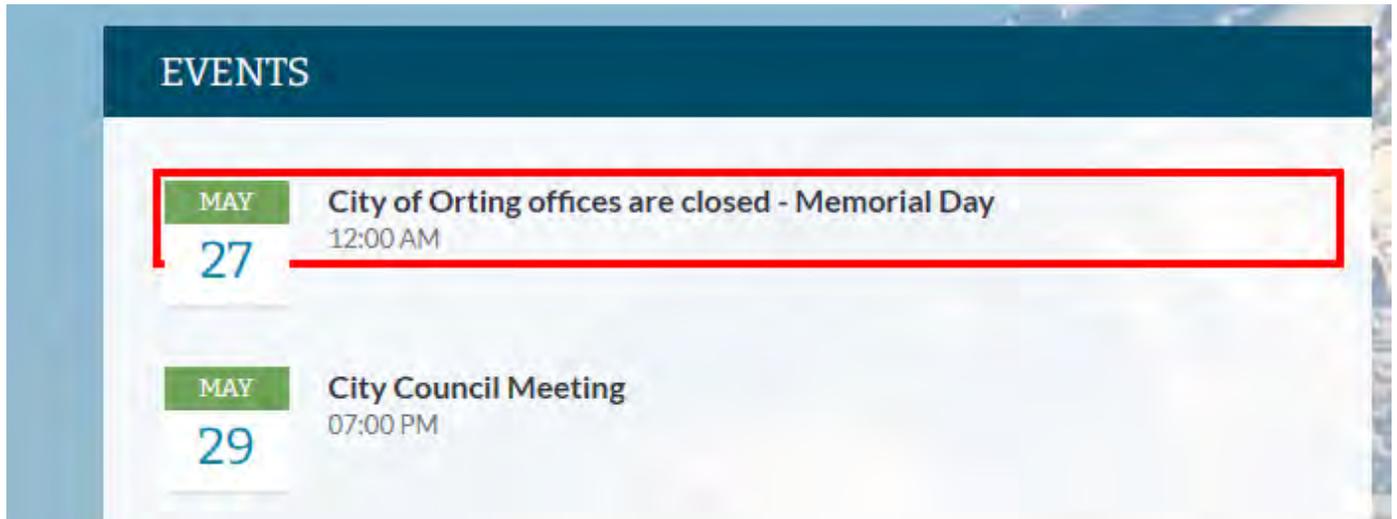
This link takes you here: <https://www.xpressbillpay.com/#/?org=Orting10907>

Large Enough Controls

All interactive components on a page, such as buttons or fields, should ideally be large enough to be easily used by people with motor impairments.

1. Calendar Links

All of the calendar links need to be taller to meet the size requirement.



```
<a href="/Home/Components/Calendar/Event/!<br>class="event-item">...</a>
```

Size: 590px x 37.7px

This element needs to be taller to meet the size requirement.

Appendix G

Outreach Poster

ADA Rights-of-Way Transition Plan



Providing Access to All



The City of Orting has developed a draft plan to make roads, sidewalks, and trails more accessible to the public, with the baseline being the standard in the Americans with Disabilities Act (ADA).

What is Rights-of-Way?

The area including roads, pedestrian ramps, and sidewalks.

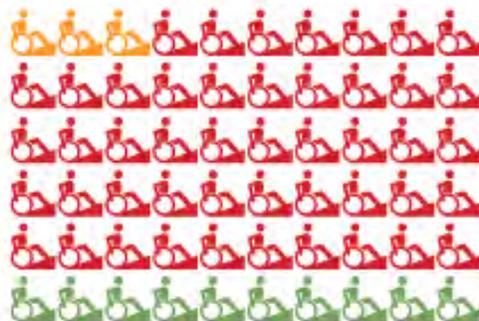
The Transition Plan reviews and develops the City's policies, practices, and programs involving upgrades to public rights-of-way.

Why are We Doing This?

This Plan is an opportunity to assess where the city is at in providing improved access opportunities to our population. As a first step we have evaluated city assets against the standards in the Americans with Disability Act, but we also want to know where the public finds access challenges based on your personal experience and unique mobility needs. This plan also can be used in grant applications for sidewalk and curb ramp improvement projects.

Curb Ramps

ADA accessible curb ramps allow for safe travel across streets and onto sidewalks. In the City of Orting there are 605 curb ramps in total, with only 304 being found to be compliant. Of the noncompliant, 208 just need a new detectable warning strip and the rest need to be fully replaced.



Help our city become more accessible!

Take our
Accessibility
Survey!



Scan the QR Code or type <https://bit.ly/OrtingADA> into your preferred web browser to be taken to the City of Orting ADA Survey.