White Salmon City Council Meeting
A G E N D A

March 04, 2026 – 6:00 PM
119 NE Church Ave and Zoom Teleconference
Zoom Meeting ID: 852 6430 2518
Call In: 1 253 215 8782 US (Tacoma)

I. Call to Order
- A. Land Acknowledgement Statement
- B. Pledge of Allegiance

II. Roll Call

III. Additions or Corrections to the Agenda

IV. Public Comment

Any member of the public attending the meeting, either in person or via Zoom, will have an opportunity to provide general public comment. No registration is required, and each speaker will be allowed up to three minutes. Written comments may also be submitted by emailing them to erikac@whitesalmonwa.gov by Wednesday at 12:00 p.m. All submitted comments will be included in the Council packet and the official record.

V. Presentations
- A. Heritage Month Presentation
- B. City Highlights with the Mayor

VI. Consent Agenda
- A. Approval of Meeting Minutes - February 18, 2026
- B. Authorization to Submit Grant Application - 2026 WSDOT City Safety Program (HSIP) Grant
- C. Pay App No. 6 - Slateco, LLC - Buck Creek Roof Replacement Project
- D. Approval of Vouchers

VII. Reports and Communications
- A. Council Member/Committee Reports
- B. Department Head Reports

VIII. Executive Session (if needed)

IX. Adjournment

File Attachments for Item:

A. Approval of Meeting Minutes - February 18, 2026

Draft

White Salmon City Council
MEETING MINUTES

February 18, 2026 – 6:00 PM
119 NE Church Ave and Zoom Teleconference

Attendance:

Council Members:	**Staff:**
David Lindley, Mayor Pro Tempore	Shawn MacPherson, City Attorney (Phone)
Ben Giant (Zoom)	Erika Castro Guzman, City Clerk
Patty Fink	Jennifer Neil, Director of Finance and Operations (Zoom)
Doug Rainbolt	Chris True, Director of Public Works
Morella Mora (Zoom)	Mike Hepner, Police Chief

I. Call to Order (6:00 p.m.)

Mayor Pro Tempore David Lindley called the meeting to order at 6:00 p.m. A total of four members of the public were in attendance, both in person and via teleconference.

A. Land Acknowledgement (6:00 p.m.)

The Land Acknowledgement was delivered.

B. Presentation of the Flag (6:01 p.m.)

The Presentation of the Flag was conducted.

II. Roll Call (6:02 p.m.)

The meeting was called to order with all Council members present, constituting a quorum.

III. Additions or Corrections to the Agenda (6:03 p.m.)

Director of Public Works Chris True noted an adjustment to the Anderson-Perry agreement, adding Public Records Act language that was distributed for review earlier in the afternoon. Mayor Pro Tempore David Lindley confirmed no agenda change was needed, as it only flagged additional documentation.

IV. Public Comment (6:03 p.m.)

Peter DeVaris, Inside City Resident (6:03 p.m.)

Peter DeVaris, a city resident, expressed concern about a proposed property division and potential new house at 276 NE Washington Street, which could obstruct his view of the Gorge. He asked whether plans are available for public review and if there will be opportunities for discussion before approval. Staff noted he could follow up with City Hall and that the planner would contact him to address questions.

DeVaris also asked about a streetlight charge on his PUD bill; Council Member Patty Fink clarified that the utility is a separate entity from the city, and staff agreed to look into the charge and follow up.

V. Presentation (6:07 p.m.)

A. Heritage Month Presentation (6:07 p.m.)

Ben Giant gave a brief introduction noting that a speaker from Black in the Gorge could not attend but is expected to attend at the first March meeting, alongside a presentation recognizing Women's History Month. In observance of Black History Month, he introduced a short PBS *Mossbacks Northwest* titled "Frank Waldron and the Jason Street Jazz Scene" highlighting the life and legacy of Frank D. Waldron and the Whangdoodle Orchestra and their role in Seattle's 20th-century jazz scene.

The PBS *Mossbacks Northwest* video described how Seattle's Jazz Age grew during Prohibition, with clubs along Jackson Street fostering a vibrant, interracial music scene despite segregation. It highlighted venues like the Black and Tan and the influence of musician Frank Waldron, whose teaching and compositions shaped generations of artists, including Quincy Jones. The segment noted the scene's lasting legacy on later musicians such as Ray Charles, Ernestine Anderson, and Jimi Hendrix. Full Video: https://www.pbs.org/video/frank-waldron-wang-doodle-orchestra-kfagml/

Council thanked Council Member Giant for arranging the presentation, noting it was always interesting and informative.

VI. Consent Agenda (6:15 p.m.)

A. Approval of Anderson Perry - Agreement for Consulting Services

B. Approval of Buck Creek Roof Replacement - Change Order No. 4

C. Approval of Pay App No. 8 - Ajax NW - N Main Spring Street Improvement

D. Approval of Pay App No. 5 - Slateco LLC Buck Creek Roof Replacement Project

E. Approval of Meeting Minutes - January 7, 2026 Council Minutes - February 4, 2026 Council Minutes

F. Approval of Vouchers

Vouchers audited and certified as required by RCW 42.24.080 and expense reimbursement claims as required by RCW 42.24.090 as of this 18th day of February 2026.

Type	Date	Beginning Check	Ending Check	
Claims	01/05/2026	EFT	EFT	$1,195.96
	01/10/2026	EFT	EFT	$7,920.00
	02/05/2026	EFT	EFT	$1,208.56
	02/05/2026	43220	43222	$269,418.18
	02/10/2026	EFT	EFT	$7,920.00
	2/15/2026	EFT	EFT	$240.00
	02/18/2026	43223	43269	$245,462.02
			Claim Total	**$533,364.72**
Payroll	02/20/2026	EFT	EFT	$86,892.21
			Payroll Total	**$86,892.21**
			Toal Vouchers	**$620,256.93**

Discussion (6:16 p.m.)
Regarding the Item A. Approval of Anderson Perry – Agreement for Consulting Services, Councilor Doug Rainbolt thanked staff for the thorough preparation and Director of Public Works Chris True's responsiveness, noting the legal review had been completed and confirming the contract's "not to exceed" amount is set by the agreement terms.

Moved by Patty Fink. Seconded by Ben Giant.
Motion to approve Consent Agenda and Vouchers for $620,256.93.

Giant – Aye, Fink – Aye, Rainbolt – Aye, Mora – Aye, Lindley – Aye.
MOTION CARRIED 5-0

VII. Reports and Communications (6:17 p.m.)

A. Council Member Reports (6:17 p.m.)

Council Member Ben Giant confirmed that a Community Development Committee meeting will be held at 5:00 p.m. on Monday, February 23.

Councilor Morella Mora shared she is recovering and looking forward to upcoming meetings, with no major updates. She also raised a neighborhood concern about a cougar sighting; Police Chief Mike Hepner explained that police responded and coordinated with Fish and Wildlife, who attempted to track the cougar with hounds but were unable to locate it, and it likely returned to the canyon.

Councilor Doug Rainbolt encouraged attendance at the upcoming open house on the Phase 1R2A water transmission main improvements and noted he is working on refreshing the city's service impact fee analysis using comparisons with similar cities.

Councilor Patty Fink reported that Tree Fest is scheduled for March 21, with an Arbor Day proclamation and a draft tree walk in progress pending property owner approvals; she also shared plans for an April community cleanup at Gaddis Park in coordination with Public Works and community partners.

Mayor Pro Tempore David Lindley added that the City Operations Committee and City Lab meetings were postponed to the following week, including a field visit to water infrastructure

B. Department Head Reports (6:25 p.m.)

No questions were raised for staff regarding the department head reports, and no further updates were reported.

VIII. Executive Session (None)

IX. Adjournment

The meeting was adjourned at 6:25 p.m.

David Lindley, Mayor Pro Tempore

Erika Castro Guzman, City Clerk

File Attachments for Item:

B. Authorization to Submit Grant Application - 2026 WSDOT City Safety Program (HSIP) Grant

COUNCIL REPORT

☐ **Business Item** ■ **Consent Agenda**

Needs Legal Review:	No
Meeting Date:	March 4, 2026
Agenda Item:	Authorization to Apply – 2026 WSDOT City Safety Program (HSIP) Grant
Presented By:	Chris True, Public Works Director

Action Required:

Council authorization for the Public Works Director to submit a grant application to the Washington State Department of Transportation (WSDOT) 2026 City Safety Program (Highway Safety Improvement Program – HSIP) for systemic intersection improvements and downtown corridor lighting upgrades.

Motion for Business Item / Proposed Motion for Consent Agenda:

Move to authorize the Public Works Director to submit an application to the WSDOT 2026 City Safety Program (HSIP) for Systemic Stop-Controlled Intersection Improvements and Downtown Corridor Lighting Improvements identified in the City's 2025 Local Road Safety Plan.

Background of Issue:

In December 2025, the Local Road Safety Plan (LRSP) was completed and provided to the City of White Salmon. The LRSP analyzed crash data from 2019–2023 and identified key crash trends and risk factors within city limits.

The analysis determined that:
• 56.6% of crashes were intersection-related
• A majority of intersection crashes occurred at stop-controlled intersections
• Dark/dusk/dawn lighting conditions were overrepresented in crash data
• Jewett Boulevard (SR 141) is one of the highest-priority corridors for safety improvements

Based on this data-driven process, the LRSP prioritized systemic intersection improvements and identified corridor safety upgrades along Jewett Boulevard (SR 141) as key safety strategies.

Explanation of Issue:

The proposed grant application will include two complementary safety components:

1. Systemic Stop-Controlled Intersection Improvements
Installation of low-cost safety countermeasures at stop-controlled intersections throughout the city, including oversized stop signs, doubled-up signs, stop-ahead warning signs, high-visibility sheeting, and enhanced pavement markings. These countermeasures are recognized by FHWA and WSDOT as Proven Safety Countermeasures.

2. Downtown Corridor Lighting Improvements – E. Jewett Boulevard (SR 141)
Upgrading and improving lighting along the downtown corridor to address crash risk factors associated with dark/dusk/dawn conditions. Improvements will focus on increasing visibility for motorists and pedestrians in the city's primary commercial corridor and high-priority crash area identified in the LRSP.

The lighting component is safety-focused and intended to reduce the likelihood of nighttime and low-visibility crashes.

Council Options:

City Council has the following options available currently:
1. Accept the Staff Recommendation and approve the authority of the Public Works Director to submit this application.
2. Revise the Staff Recommendation.
3. Other action as may be desired by the City Council.
4. Refer this issue back to staff for further work.
5. Take no action on this matter.

Fiscal Analysis:

The WSDOT City Safety Program provides up to 100% federal funding for eligible HSIP projects authorized prior to April 30, 2029.

No local match is required if authorized within the eligibility window.

Recommendation of Staff/Committee:

Staff recommends approval to allow Public Works Director to submit this grant application.

Follow Up Action:

If authorized, staff will finalize and submit the grant application to WSDOT prior to the March 6, 2026, deadline and return to Council with an agreement for acceptance should the City be awarded funding.

B.

2026 City Safety Program
Application for Funding

Washington State Department of Transportation

Part 1: Agency Information

List the contact information for questions about the project(s) in this application:

- Agency name: City of White Salmon Public Work
- Contact name: Christopher True
- Title: Public Works Director
- Phone: (509) 281-4093
- Email: ChrisT@whitesalmon.gov

Regional Transportation Planning Organization / Metropolitan Planning Organization

- List the county's regional or metropolitan planning organization name:
  Southwest Washington Regional Transportation Council
- Are the proposed projects in this application consistent with the RTPO/MPO plan? Yes
  If no, please explain.

WSDOT Region where work will occur: See https://wsdot.wa.gov/sites/default/files/2021-10/wsdot-regions-map.pdf for more information.

☐ Northwest ☐ Olympic ☒ Southwest ☐ North Central ☐ South Central ☐ Eastern

Part 2: Project Information

Notes:

1. Provide all the following information for every project within the priority list described below. Use the formats shown below.
2. The information below must be determined assuming the project will be constructed by design-bid-build or design-build and not by the agency's forces.
3. Include a vicinity map for each project showing the location of all improvements/countermeasures.
4. For projects that add or revise travel lanes or sidewalks, include a conceptual plan and cross section showing the existing and final configurations.
5. The project information below must be consistent with the city's local road safety plan. Include the local road safety plan with this application.
6. Include a detailed cost estimate for each phase (preliminary engineering, right of way, and construction).
7. For projects upgrading an intersection's control type from traffic signs, the city must evaluate a roundabout and provide justification if a roundabout is not selected.

Project Title: Provide a title for every project within the priority list described below.

Districts the project falls within: See http://app.leg.wa.gov/districtfinder/ for more information on the following.

- State legislative district #(s): 17
- Congressional district #(s): 4

Description of Work: List improvements/countermeasures separately for each project. List projects in order from highest to lowest priority.

B.

Project 2: **Systemic Stop-Controlled Intersection Improvements (Systemic)**

Location 1: SR 14 /Dock Grade Road

- Direction 1: South
  (2) Oversized Stop Signs
  (2) Stop Ahead Signs
  (1) Cross Traffic Does Not Stop Signs

Location 2: Tohomish Street/Estes Avenue

- Direction 1: East
  (2) Oversized Stop Signs
  (2) Stop Ahead Signs
  (1) Cross Traffic Does Not Stop Signs
- Direction 1: West
  (2) Oversized Stop Signs
  (2) Stop Ahead Signs
  (1) Cross Traffic Does Not Stop Signs

Location 3: Oak Street/Dock Grade Road

- Direction 1: North
  (2) Oversized Stop Signs
  (2) Stop Ahead Signs
- Direction 2: South
  (2) Oversized Stop Signs
  (2) Stop Ahead Signs
  (1) Do Not Enter Signs

Location 4: SR 141/Dock Grade Road

- Direction 1: North
  (2) Oversized Stop Signs
  (2) Stop Ahead Signs
  (1) Cross Traffic Does Not Stop Signs

Location 5: SR 141/Wauna Avenue

- Direction 1: South
  (2) Oversized Stop Signs
  (2) Stop Ahead Signs
  (1) Cross Traffic Does Not Stop Signs

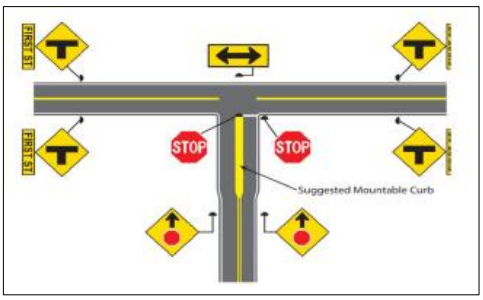

Figure 1: POTENTIAL STOP-CONTROLLED INTERSECTION VISIBILITY IMPROVEMENTS

Commented [A1]: Odd but this is identified as 'project 2' because it is 'Priority 2' in the LRSP.

Project Schedule (estimated milestones): Copy this table for each project.

Project added to the Statewide Transportation Improvement Program (STIP)	02/2026
Project agreement signed with WSDOT Local Programs	12/2026
Begin PE (PE phase authorized by FHWA through WSDOT Local Programs)	04/2027
Community/stakeholder engagement complete	11/2027
Environmental documents (required for every project) approved by WSDOT Local Programs	11/2027
Begin right-of-way (RW phase authorized by FHWA through WSDOT Local Programs)	05/2027
Right-of-way completed (certification by FHWA through WSDOT Local Programs)	11/2027
Contract advertised	01/2028
Contract awarded	04/2028
Construction/project complete	12/2028

Project Cost, Match Amount, and Requested Funding: Copy this table for each project.

When we do the cost estimating for each sign. Total up each sign for each intersection and then total all together.

B.

When we do the cost estimating each pavement marking included in the project you will total all locations together. Example if the project includes centerline striping, total up the linear feet for each roadway that will have centerline striping and then add all the totals together. That will be your cost for centerlines. Do the same for edge lines, crosswalks, turn arrows, etc.

Phase	Cost of entire phase	Match amount	Amount requested from this program
Preliminary Engineering (PE)	$	$	$
Right-of-Way (RW)	$	$	$
Construction (includes construction administration) (CN)	$	$	$
Total	**$**	**$**	**$**

Table notes:

1. Round all numbers to the nearest $1,000.
2. Projects are eligible for 100% federal HSIP funding for all phases authorized prior to April 30, 2029. Any phases not authorized by this date may be subject to the remaining funds being rescinded.

Provide all the following information for every project within the priority list found in the local road safety plan.

1. **Limits of work:** Beginning: Ending:
2. **Project in adopted plan?:** If this project is in an adopted plan (transportation plan, ADA transition plan, etc.), list the plan name and date adopted: City of White Salmon Local Road Safety Plan adopted in 2026
3. **Has this project had community/stakeholder engagement?** ☐ Yes ☒ No
4. **Coordination with other jurisdictions:** If any roadways in this application are owned or managed by another jurisdiction, such as a city/town, Indian tribe, federal agency, or WSDOT, list the roadways here: WSDOT

   Include a letter or email from each of the other jurisdictions that indicates concurrence with this application. Projects on state routes shall be coordinated through the appropriate WSDOT regional office identified above. Contact the Region Local Programs Engineer at https://wsdot.wa.gov/business-wsdot/support-local-programs/contact-support-local-programs to start this process.

5. **Current Project Information:** Is this a current project? ☒ No. ☐ Yes. If yes, answer the following questions.
   a. **Existing Project Number (if assigned – otherwise state "Not yet assigned"):**
   b. **Explain the project status and why your jurisdiction is applying for additional funds:**
   c. **Explain if the project description, schedule, or budget has changed and if so, how and why:**
   d. **Does the project have current federal funding?** ☒ No. ☐ Yes. Identify the funding program (Highway Safety Improvement Program, Surface Transportation Block Grant Program, etc.). Note: Federal funds cannot be used for match.

Crash data for Spot Location projects: List the fatal and serious injury crashes this project has the potential to address. The spot location project must address one or more fatal and/or serious crashes from 2020-2024.

Location	Crash Report Number	Year
1.		
2.		
Etc.		

Part 3: Current Project Delivery Status of Active City Safety Program and HSIP Awarded Projects

B.

Provide status updates on all active projects awarded funding through the City Safety Program and federal Highway Safety Improvement Program (HSIP) for your agency (including City Safety Program, County Safety Program, Section 130 Rail-Highway Crossing Safety Program, and federally allocated Safe Routes to School). Include current project delivery milestone/phase, expected construction obligation date, brief description of the status of the project including reasons for delivery delays as compared to the estimated delivery timeline at the time of project award (as shown in the project summary included as part of the award letter).

Fed Aid #:	Project Title:	Current Delivery Phase:	Expected Construction Obligation Date: Mo/Yr
Project delivery status (brief description):			

This request represents the first application by the City of White Salmon for HSIP City Safety Program funds.

Application submittal checklist:

- ☐ Completed application form (One application per agency which includes all projects being considered for funding in priority order as reflected in the agency local road safety plan.)
- ☐ Local Road Safety Plan/ Systemic Safety Plan
- ☐ Cost estimates for each project being considered for funding
- ☐ Vicinity map showing the location(s) of each project
- ☐ Project conceptual plans
- ☐ Project cross sections
- ☐ Cross jurisdictional letter(s) of concurrence (as applicable)
- ☐ Intersection control justification when upgrading from signing when a roundabout is not selected (as applicable)

Submit completed application and required documents to HLPGrants@wsdot.wa.gov not later than 11:59 PM, Friday March 6, 2026.

City of White Salmon
Local Road Safety Plan

December 2025

Acknowledgements

Southwest Washington Regional Transportation Council

Adam Fiss

City of White Salmon

Mayor Marla Keether
Chris True
Jason Kinley
Patricia Fink

DKS Associates

Justin Sheets
Nikki Davis
Hallie Turk

This Local Road Safety Plan was funded by the United States Department of Transportation (USDOT) through the Safe Streets & Roads for All (SS4A) Grant Program. Through this funding source, the USDOT is empowering Tribal, local, and regional efforts to save lives and reduce serious injuries on our roadways. The contents of this document do not necessarily reflect the views or policies of the USDOT.

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Introduction

PURPOSE

The City of White Salmon Local Road Safety Plan (LRSP) has been developed to enhance transportation safety for all who live, work, and travel within the community. White Salmon is located in Klickitat County along the Columbia River in southwest Washington. Together with Bingen, an adjacent city to the southeast, White Salmon is one of the main population centers of Klickitat County. With a population of approximately 2,600 residents and more than 170 businesses, safe and reliable mobility is essential to the city's vitality and growth.

This plan provides a data-driven framework for identifying roadway safety issues, prioritizing needs, identifying funding sources, and implementing effective solutions. By analyzing recent crash trends, key risk factors, and high-crash locations, the LRSP outlines targeted strategies designed to reduce the frequency and severity of collisions. Special attention is given to vulnerable road users, such as pedestrians, bicyclists, and motorcyclists, and to crash types that are overrepresented in White Salmon compared to similar communities. The plan's analytical approach helps the City identify areas where roadway characteristics, traffic volumes, or user behaviors contribute to recurring safety risks. Understanding where and why crashes occur allows for the limited available funding and staff resources to be applied where they will have the most safety benefits.

Ultimately, the Local Road Safety Plan establishes a proactive path forward, equipping the City with the tools, strategies, and partnerships necessary to improve roadway safety and protect the well-being of all road users for years to come.

CITY SAFETY PLAN PROCESS

The purpose of the Local Road Safety Plan is to analyze crash data within city limits to identify trends, contributing circumstances, risk factors, and potential for safety improvements in White Salmon's road network. Following crash data analysis, appropriate strategies are identified and recommended for implementation to reduce the risk of crashes and improve safety. The following plan includes a summary of existing safety conditions in White Salmon, identification of safety needs, and recommended infrastructure-based projects to address high-priority crash types and locations.

The data used and process followed are consistent with the Washington State Department of Transportation (WSDOT) guidelines from the 2024 City Safety Program. **Appendix A: Countermeasures Toolbox** includes a description of each treatment, when it should be used, estimated costs, and crash modification factors.

The strategies and projects are eligible for funding via one or more of the following grant programs:

- WSDOT grant programs: City Safety, Safe Routes to School, Bicycle Pedestrian, and Railway-Highway Grade Crossings
- Transportation Improvement Board (TIB) grants, including Complete Streets
- Several Southwest Washington Regional Transportation Council (RTC) grants

Additional details regarding these grant programs are provided in **Appendix B: Grant Programs.**

White Salmon's At-Risk Population

A review of at-risk populations helps to understand the characteristics of residents who may be more vulnerable to roadway hazards. This data, shown in **Figure 1**, is used to identify demographic concerns and ensure that countermeasures protect those most at risk, such as seniors, people with disabilities, low-income households, and those without access to a vehicle. By tying roadway safety improvements to demographic realities, the plan ensures that investments serve the people and places where they are needed most.

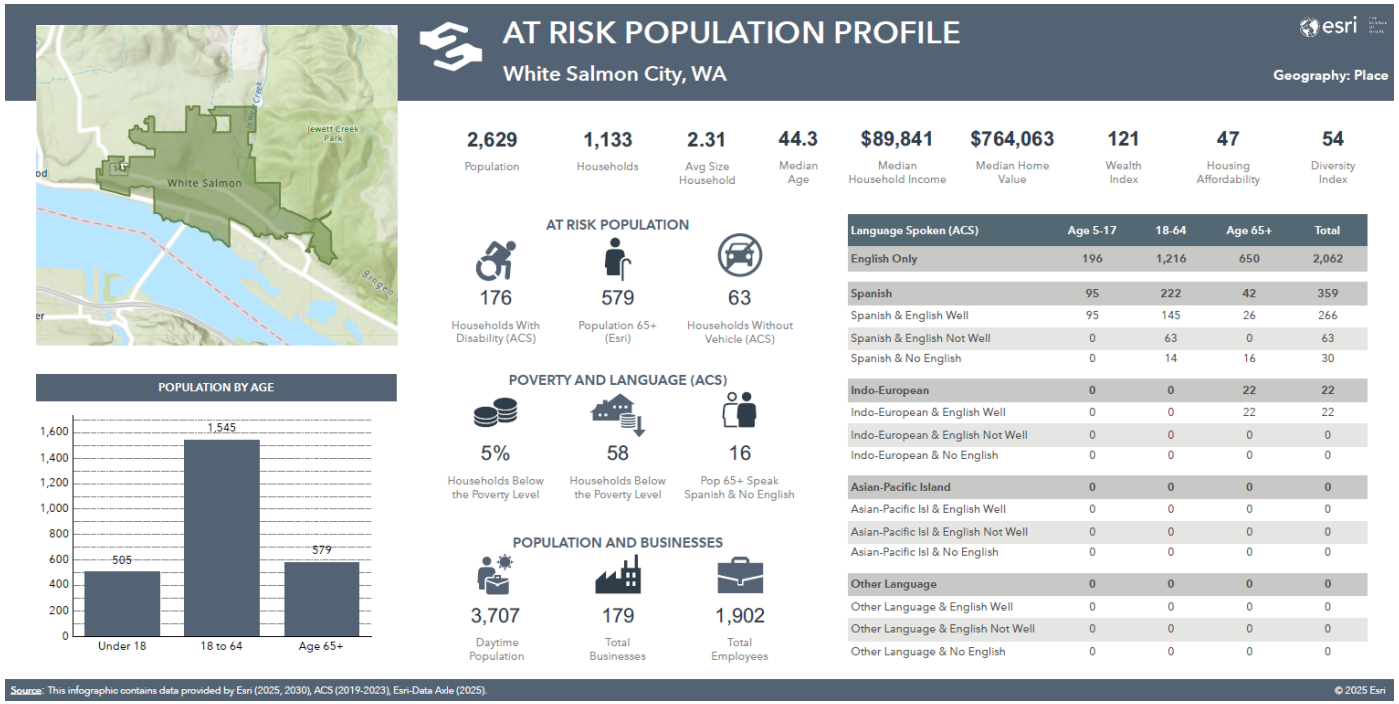


FIGURE 1: WHITE SALMON DEMOGRAPHIC DATA

In comparison with the Washington State average, White Salmon's population is older, with nearly one in four residents over 65, along with many households with disabilities and some without vehicle access. These factors heighten the need for safe pedestrian and roadway infrastructure. About 5% households live below the poverty line, emphasizing the importance of affordable and accessible travel options, while limited English proficiency, though rare, still requires attention in safety communications. Comprised of about 3,700 people during the day and a local economy of more than 170 businesses, White Salmon's road network must balance the needs of residents, commuters, and vulnerable users to ensure safe and equitable mobility.

Crash Trends

Crashes on all roadways in White Salmon for the most recent five years of available data (2019 to 2023) were examined for crash trends. The crash data is drawn from WSDOT's official crash database, consistent with state and federal reporting standards.

From 2019 to 2023, a total of 76 crashes were reported, as shown in **Figure 2.** A total of 59 crashes resulted in no apparent injury, five crashes resulted in possible injury, and seven crashes resulted in minor injury. Two crashes resulted in serious injury, and no crashes resulted in fatality. The number of crashes per year has generally increased since 2019, with a high of 22 crashes in 2023.

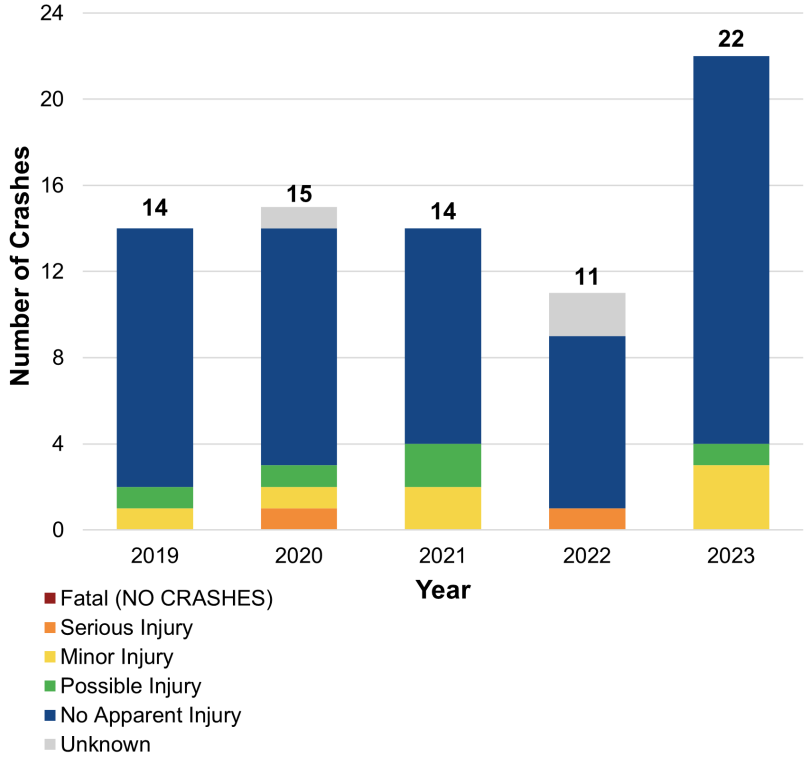


FIGURE 2: WHITE SALMON CRASHES BY YEAR AND SEVERITY

Crash Types

Identifying crash types is a critical step in developing a safety plan because it helps to move beyond general statistics, such as total crashes, to understand the patterns, causes, and risks that contribute to collisions. Although some crashes involve multiple crash types, crashes are categorized by the first crash type that occurred.

Definitions for each crash type are shown in **Table 1.**

TABLE 1: CRASH TYPE DEFINITIONS

CRASH TYPE	DEFINITION
ANGLE	Collision between two vehicles where the front of one vehicle strikes the side of another (commonly known as "T-bone" collision). Typically, one or both vehicles are traveling straight through the intersection
HIT PARKED	Collision between a moving vehicle and a parked vehicle
FIXED OBJECT	Single vehicle collision with a stationary object on the roadside such as a tree, pole, or barrier
REAR END	Collision between two vehicles where the front of one vehicle strikes the rear of another
TURNING	Collision between two vehicles where one vehicle is actively turning
SIDESWIPE	Collision between two vehicles where the side of one vehicle strikes the side of another
ANIMAL	Single vehicle collision with an animal
PEDESTRIAN/ BICYCLE	Collision between a vehicle and pedestrian or a vehicle and bicycle
BACKING	Collision between two vehicles where one vehicle making a backing movement strikes the front of another
ALL OTHERS	Other uncommon and miscellaneous crash types including but not limited to: • Collisions involving U-turns • Leaving or entering parked positions • Fire started in vehicle

Figure 3 illustrates the most common crash types reported in White Salmon during the study period. The most frequent crash types included angle (30.3%), hit parked vehicle (21.1%), fixed object (14.5%), rear end (13.2%), and left turning (6.6%). Fewer than five crashes were reported involving sideswipes, animals, pedestrians or bicyclists, and backing movements. Unique crashes categorized as "All others" involved various behaviors such as U-turns and leaving or entering parked positions.

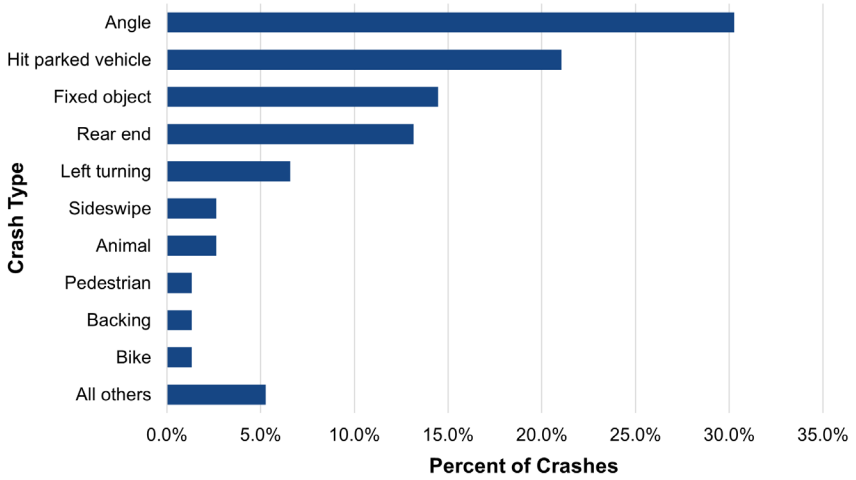


FIGURE 3: WHITE SALMON CRASH TYPES

Vulnerable Road Users

During the study period, two crashes involved vulnerable road users. One pedestrian crash occurred in 2022 resulting in serious injury, and one bicycle-involved crash occurred in 2021 resulting in possible injury. No crashes involved motorcyclists.

Figure 4 shows a heat map of the distribution of crashes in White Salmon between 2019 and 2023. The highest crash concentrations appear along Tohomish Street, Washington Street, and Main Avenue. Additional clusters are visible at intersections along Jewett Boulevard (SR 141) and SR 14, which reflect key conflict points where local and regional traffic intersect.

Lower frequencies of crashes are dispersed throughout residential and arterial streets, but the map clearly illustrates that the city's most pressing roadway safety concerns are concentrated in the downtown corridor and major connecting routes, forming the city's primary safety hotspots.

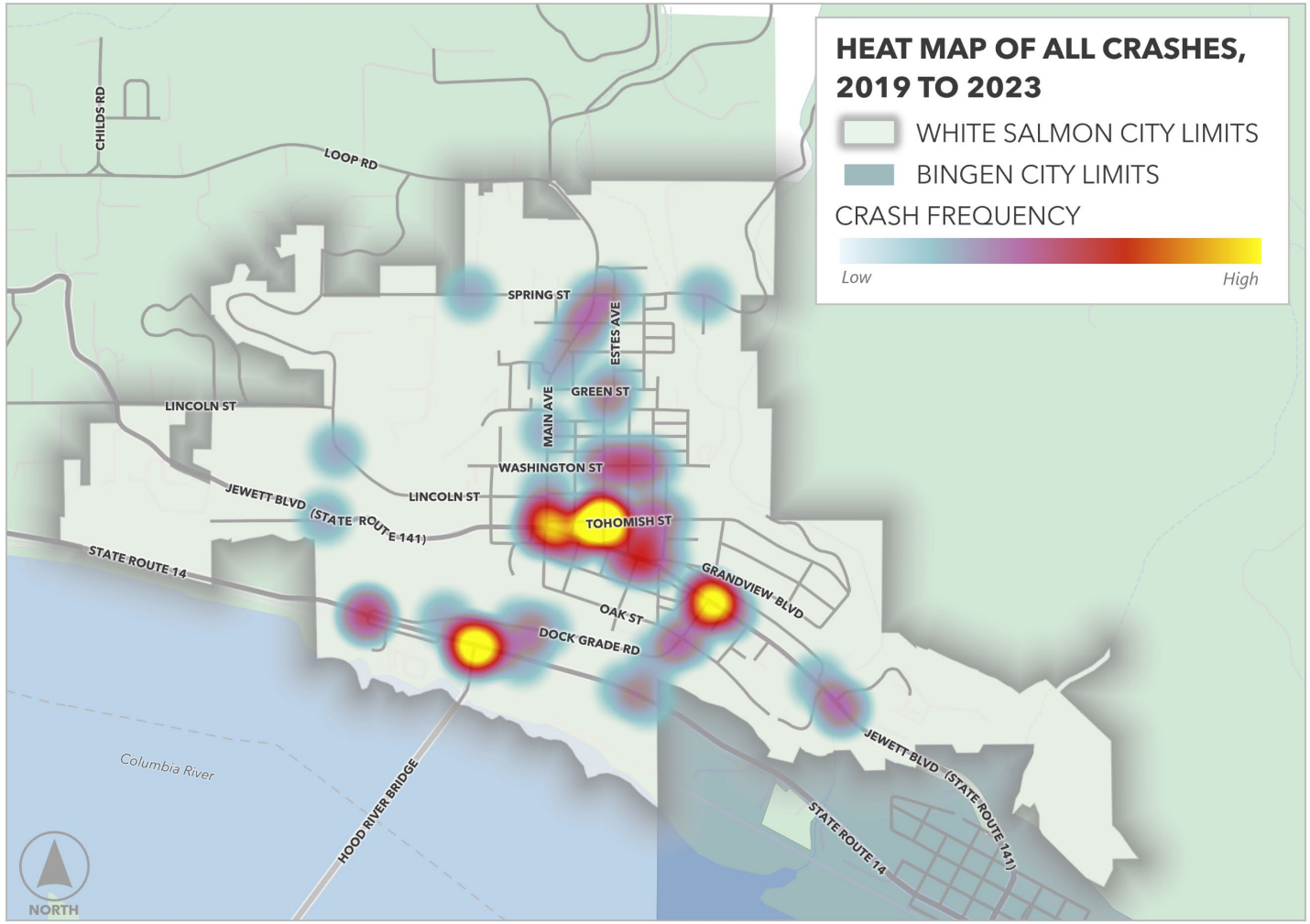


FIGURE 4: HEAT MAP OF WHITE SALMON CRASHES

CRASH HOTSPOTS

- Tohomish Street
- Washington Street
- Main Avenue
- Jewett Boulevard (SR 141)/Dock Grade Road
- SR 14/Hood River Bridge

White Salmon's Key Risk Factors

Table 2 lists the key risk factors or crash attributes for crashes in White Salmon and compares those to the small cities in the Gorge area (White Salmon, Bingen, Goldendale, and Stevenson in Klickitat and Skamania Counties). This comparison enables the City to identify crash attributes that are overrepresented in White Salmon. For example, angle crashes accounted for over 30% of all crashes in White Salmon, but only 27.6% of crashes throughout all small cities in the Gorge. The number of fatal or serious injury crashes reported in White Salmon is also listed for each attribute.

TABLE 2: WHITE SALMON CRASH ATTRIBUTES

Data Element	Crash Attribute	Total Crashes	Percent of all White Salmon Crashes with this Attribute	Fatal or Serious Injury Crashes in White Salmon	Percent of Gorge Small Cities Crashes with this Attribute
Citywide	*Any*	*76*	-	*2*	*Total of 253 crashes*
Collision Type	Lane departure	24	31.6%	0	34.6%
	Roadway departure	23	30.3%	0	32.7%
	Angle	23	**30.3%**	0	27.6%
	Hit parked vehicle	16	21.1%	0	21.7%
	Fixed object	11	14.5%	0	16.5%
	Rear end	10	**13.2%**	1	8.7%
	Left turning	5	6.6%	0	7.9%
	Sideswipe	2	2.6%	0	4.3%
	Animal	2	**2.6%**	0	1.6%
	Pedestrian	1	1.3%	1	2.4%
	Bicycle	1	**1.3%**	0	0.8%
	Overturn	0	0.0%	0	1.2%
	All others	5	6.6%	0	6.7%

B.

Data Element	Crash Attribute	Total Crashes	Percent of all White Salmon Crashes with this Attribute	Fatal or Serious Injury Crashes in White Salmon	Percent of Gorge Small Cities Crashes with this Attribute
Contributing Circumstance	Exceeding Reasonable Safe Speed or Exceeding Stated Speed Limit	6	**7.9%**	0	7.5%
	Alcohol Impairment	7	**9.2%**	0	5.9%
	Drug Impairment	0	0.0%	0	0.8%
	Distraction	18	23.7%	0	26.4%
Motor Type/ Road User	Motorcycle	0	0.0%	0	0.4%
	Heavy Vehicle	5	**6.6%**	1	6.3%
	Pedestrian Involved	1	1.3%	1	2.4%
	Bicycle Involved	1	**1.3%**	0	0.8%
	Driver Age 16-25 Involved	24	**31.6%**	0	26.8%
	Driver Over Age 65 Involved	25	**32.9%**	1	30.7%
	Unrestrained Occupants	1	**1.3%**	0	1.2%
Environmental Conditions	Dark/Dusk/Dawn Lighting	23	**30.3%**	1	27.2%
	Wet Road Surface	11	**14.5%**	0	13.0%
	Icy Road Surface	3	**3.9%**	0	3.1%
	Snow/Slush Road Surface	4	**5.3%**	0	4.7%
Intersection	At Intersection or Intersection Related	43	**56.6%**	1	48.8%

Bold/Highlighted = Crash attribute overrepresented in White Salmon

Table 2 shows that compared to other small cities in the Gorge area, the following attributes[1] are overrepresented in White Salmon:

- Angle *(most often Intersection-Related)*
- Rear End *(most often Intersection-Related)*
- Animal
- Bicycle Involved
- Exceeding Reasonable Safe Speed or Exceeding Stated Speed Limit
- Alcohol Impairment
- Heavy Vehicle
- Driver Age 16-25
- Driver Over Age 65 Involved
- Unrestrained Occupants
- Dark/Dusk/Dawn Lighting
- Wet, Icy, and Snow/Slush Road Surface
- Intersection-Related

On August 5, 2025, the consultant team met with City of White Salmon staff to discuss the crash data and observations and to get feedback from the City. The team reviewed the high-crash locations and discussed potential engineering countermeasures. The city also provided input on safety priorities and community concerns regarding safety issues. Pedestrian safety and connectivity in the downtown area was mentioned as a potential area for improvement, in addition to the top risk factors identified in the safety analysis.

The overrepresentation of intersection-related crashes, including angle and rear end crash types—combined with risks tied to older drivers, impaired driving, and nighttime road conditions—provides insight to where the City should focus its efforts to improve safety. By implementing targeted countermeasures, White Salmon can directly address its highest-risk crash types and locations, not only to reduce the likelihood of severe crashes but also improve safety and mobility for vulnerable users, laying the groundwork for the prioritized projects that follow in this plan.

Maps in **Appendix C** illustrate the locations of crashes with White Salmon's most prominent attributes that can be addressed with engineering countermeasures. These maps were used to identify the high-crash locations examined in the following section.

[1] Although some crashes involve multiple crash types, crashes are categorized as the first crash type. Therefore, there is some overlap among crash types, and some crashes may exhibit a combination of factors. For example, intersection-related crashes may include both angle and left-turning crashes, and lane departure crashes may include both head on and fixed object crashes.

Based on the overrepresented crash attributes, City staff input on safety priorities, and applicability of engineering countermeasures to address the crash patterns, the following three key risk factors were selected for targeted strategies in White Salmon. These risk factors were used to prioritize crash hotspots for project development:

- **At Intersection or Intersection-Related**
- **Dark/Dusk/Dawn Lighting**
- **Pedestrian-Involved**

While there is no requirement for a certain number of risk factors, it should be noted that too many risk factors can dilute the value of the plan with too many strategies and actions to feasibly implement. However, too few can result in missed opportunities to reduce fatal and serious injury crash risks. For this reason, the consultant team consolidated risk factors where appropriate and used City input to refine the list of risk factors.

High-Crash Locations

Intersections with at least one crash resulting in injury are shown in **Table 3** by total number of crashes. Traffic control is listed for each intersection. Jewett Boulevard (SR 141)/Dock Grade Road and Tohomish Street/Estes Avenue are also included at the bottom of the table, as both have a significant history of no apparent injury crashes.

TABLE 3: WHITE SALMON HIGH-CRASH INTERSECTIONS

INTERSECTION	FATAL OR SERIOUS INJURY CRASHES	MINOR OR POSSIBLE INJURY CRASHES	NO APPARENT INJURY CRASHES	TOTAL NUMBER OF CRASHES
SR 14/Hood River Bridge ***(Signal)***	0	2	6	8
SR 14/Dock Grade Road ***(Stop-Controlled)***	0	1	2	3
Jewett Boulevard (SR 141)/Wauna Avenue ***(Stop-Controlled)***	1	0	1	2
Jewett Boulevard (SR 141)/6th Place ***(Stop-Controlled)***	0	2	0	2
Oak Street/Dock Grade Road ***(Stop-Controlled)***	0	1	0	1
Jewett Boulevard (SR 141)/Dock Grade Road * ***(Stop-Controlled)***	0	0	6	6
Tohomish Street/Estes Avenue * ***(Stop-Controlled)***	0	0	5	5

* Although Jewett Boulevard (SR 141)/Dock Grade Road and Tohomish Street/Estes Avenue do not have a history of injury crashes in the last five years, both were included as high-crash intersections because they experienced the second and third-highest number of total crashes in the City, respectively. All reported crashes at these locations resulted in no apparent injury.

One intersection-related crash resulting in fatal or serious injury was reported during the study period. The crash took place at Jewett Boulevard (SR 141)/Wauna Avenue, a three-leg, two-way stop-controlled intersection. A vehicle was making a westbound right turn from Jewett Boulevard (SR 141) to head north onto Wauna Avenue when it struck a pedestrian in the road (not using a crosswalk). The crash occurred in 2022 on a clear, dry day.

High-crash segments are listed in **Table 4** by total number of non-intersection-related crashes.

TABLE 4: WHITE SALMON HIGH-CRASH SEGMENTS

SEGMENT	FATAL OR SERIOUS INJURY CRASHES	MINOR OR POSSIBLE INJURY CRASHES	NO APPARENT INJURY OR UNKNOWN CRASHES	TOTAL NUMBER OF CRASHES
Main Avenue *from Jewett Boulevard (SR 141) to Spring Street (0.54 miles)*	0	1	5	6
SR 14 *from Hood River Bridge to Charters Road (0.73 miles)*	1	0	3	4
Dock Grade Road *from SR 14 to Oak Street (0.73 miles)*	0	2	2	4
Jewett Boulevard (SR 141) *from Main Avenue to Dock Grade Road (0.40 miles)*	0	0	2	2

One serious injury crash occurred in 2020. It was a rear-end crash on SR 14 near Shore Drive. A vehicle traveling east on SR 14 struck an eastbound semitruck stopped near MP 65.43, about 100 ft west of Shore Drive. The contributing factor was listed as following too closely. This crash occurred in dawn lighting conditions on a dry road surface.

Figure 5 shows all high-crash locations in White Salmon, including intersections and segments.

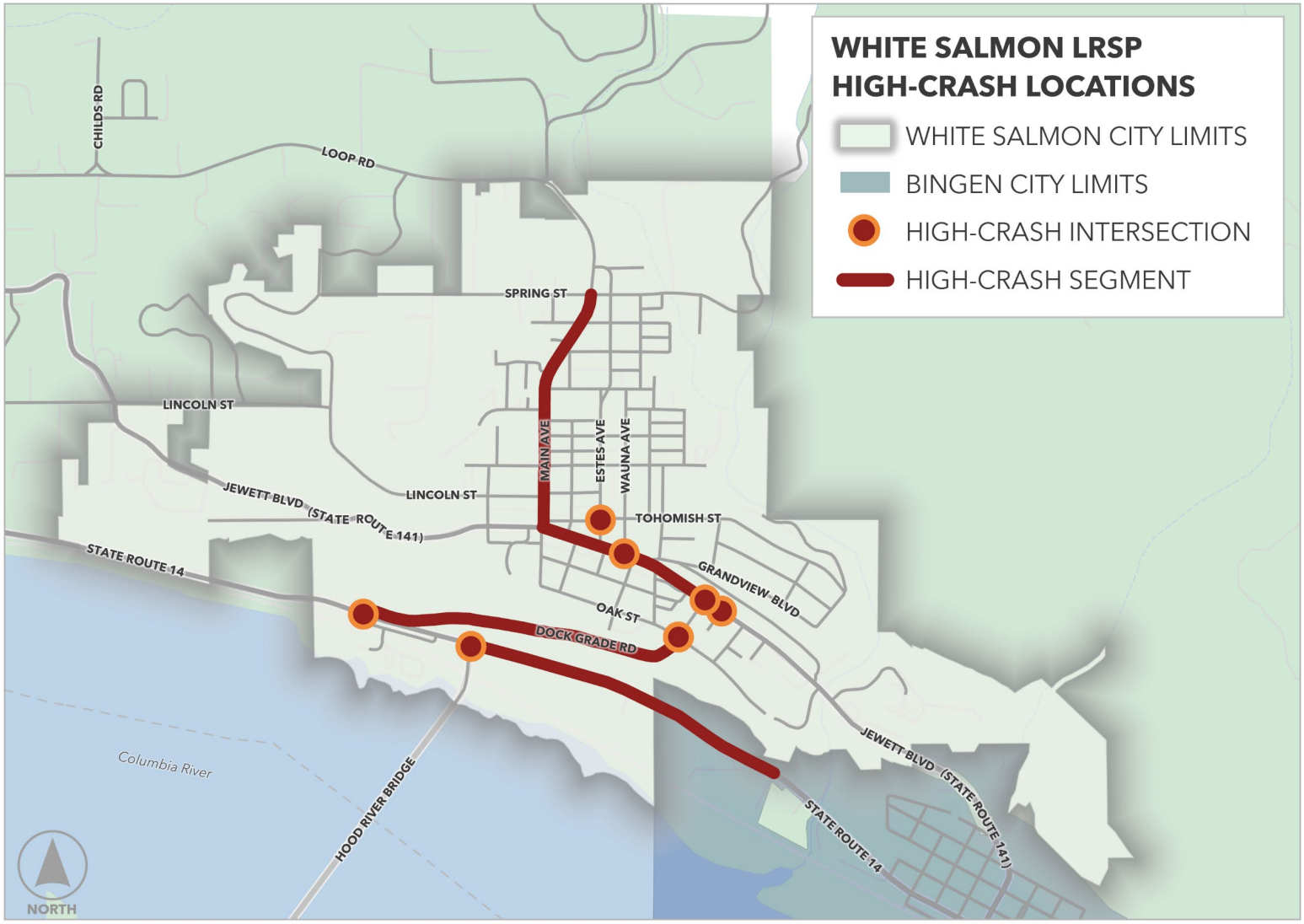


FIGURE 5: WHITE SALMON HIGH-CRASH LOCATIONS

Identifying high-crash locations is a crucial step to understanding safety in the context of the overall roadway network. This LRSP prioritizes high-crash locations to focus resources on areas with the highest potential for crash reduction.

Prioritized Crash Locations

Table 5 lists the high-crash locations, ranked by number of risk factors in reported crashes. Locations at the top of the table have a history of crashes with more key risk factors and therefore are the highest-priority locations in White Salmon. This prioritization process connects the data-driven crash analysis to an actionable list of project locations.

TABLE 5: HIGH-CRASH LOCATIONS BY NUMBER OF KEY RISK FACTORS

LOCATION	INTERSECTION-RELATED	DARK/ DUSK/ DAWN	PEDESTRIAN	NUMBER OF RISK FACTORS
SEGMENT: Jewett Boulevard (SR 141) *from Main Avenue to Dock Grade Road (0.40 mi)*	✓	✓	✓	3
SEGMENT: Main Avenue *from Jewett Boulevard (SR 141) to Spring Street (0.54 mi)*	✓	✓	-	2
INTERSECTION: SR 14/Hood River Bridge *(Signal)*	✓	✓	-	2
INTERSECTION: SR 14/Dock Grade Road *(Stop-Controlled)*	✓	✓	-	2
INTERSECTION: Jewett Boulevard (SR 141)/Dock Grade Road *(Stop-Controlled)*	✓	✓	-	2
INTERSECTION: Tohomish Street/Estes Avenue *(Stop-Controlled)*	✓	✓	-	2
INTERSECTION: Jewett Boulevard (SR 141)/Wauna Avenue *(Stop-Controlled)*	✓	-	-	1
INTERSECTION: Jewett Boulevard (SR 141)/6th Place *(Stop-Controlled)*	✓	-	-	1
INTERSECTION: Oak Street/Dock Grade Road *(Stop-Controlled)*	✓	-	-	1
SEGMENT: SR 14 *from Hood River Bridge to Charters Road (0.73 mi)*	-	✓	-	1
SEGMENT: Dock Grade Road *from SR 14 to Oak Street (0.73 mi)*	-	✓	-	1

Notably, four of the eleven high-priority locations are located along Jewett Boulevard (SR 141), including the highest-priority location. Over half of the locations experienced intersection-related crashes and crashes in dark/dusk/dawn lighting.

Projects

Using the list of countermeasures in Appendix A, potential safety strategies were identified for the highest-priority locations in **Table 5**. Projects were developed by combining the selected strategies and clusters of locations and crash types. The list of prioritized projects is shown in **Table 6**.

TABLE 6: WHITE SALMON PRIORITIZED SAFETY PROJECTS

PROJECT NAME	PROJECT DESCRIPTION	FUNDING OPPORTUNITIES
1. SR 141 Complete Streets Paving Project	Reconstruct 1.77 miles of SR 141 (Jewett Boulevard) from White Salmon to Bingen. Install bike facilities and sidewalks throughout corridor and other pedestrian visibility treatments (curb extensions, signing, and striping improvements) at select locations	Consider other funding opportunities in Appendix B
2. Systemic Stop-Controlled Intersection Improvements	Install low-cost signing and pavement marking treatments to upgrade visibility (e.g. doubled-up or oversized signs, high-visibility sign sheeting, additional pavement markings) at stop-controlled intersections	Apply for 2026 WSDOT City Safety Program Grant

PRIORITY 1: SR 141 Complete Streets Paving Project

Identified Safety Needs. Together, the cities of White Salmon and Bingen comprise a key population center in the Columbia River Gorge, and Jewett Boulevard (SR 141) is the key arterial roadway connecting the city centers. Out of the 120 total crashes reported in White Salmon and Bingen, 31 crashes (over 25%) took place along Jewett Boulevard (SR 141), including the only bicycle-involved crash and one of four pedestrian crashes reported in the two cities.

Potential Safety Treatments. The SR 141 Complete Streets Paving Project (extents shown in **Figure 6**) has already undergone the pre-design phase by WSDOT with several design alternatives. WSDOT has performed community engagement for the project and will continue the design process in identifying and refining the preferred alternative. At this stage, no funding source has been identified in the near-term.

FIGURE 6: SR 141 COMPLETE STREETS PAVING PROJECT LOCATION
Source: WSDOT Project Webpage. Accessed November 6, 2025.

PRIORITY 2: Systemic Stop-Controlled Intersection Improvements

Identified Safety Needs. More than half of all crashes in White Salmon during the five-year period occurred at intersections. Of these crashes, more than 80% took place at stop-controlled intersections (**Figure 7**). The most common crash type at stop-controlled intersections was angle (60%), followed by rear end (8%), left turning (8%), fixed object (6%), and hit parked vehicle (6%). The most common contributing circumstances were failure to grant right-of-way and distraction.

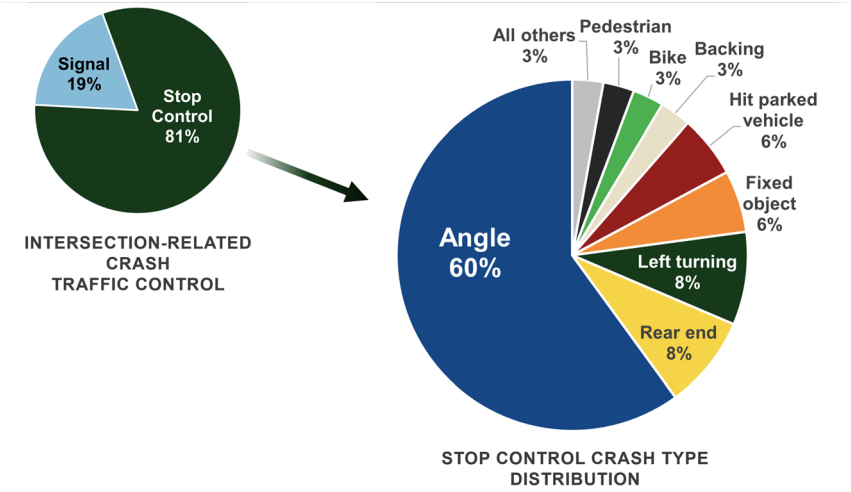


FIGURE 7: INTERSECTION-RELATED CRASH TRAFFIC CONTROL AND CRASH TYPES

Potential Safety Treatments. Low-cost systemic safety countermeasures at unsignalized intersections consist primarily of signing and pavement marking. Installing these treatments, shown in **Figure 8**, is an FHWA Proven Safety Countermeasure. Treatments include doubled-up signs, additional pavement marking, fluorescent yellow sign sheeting, advance warning signs, and oversized signs.

To address the safety risks at stop-controlled intersections, the City will consider a combination of these treatments at the following stop-controlled intersections (and others with similar features):

- SR 14/Dock Grade Road
- Tohomish Street/Estes Avenue
- Oak Street/Dock Grade Road
- Intersections along Main Avenue, Tohomish Street, Washington Street, and Estes Avenue
- Stop-controlled approaches to Jewett Boulevard (SR 141), including:
  - Jewett Boulevard (SR 141)/Dock Grade Road
  - Jewett Boulevard (SR 141)/Wauna Avenue
  - Jewett Boulevard (SR 141)/6th Place

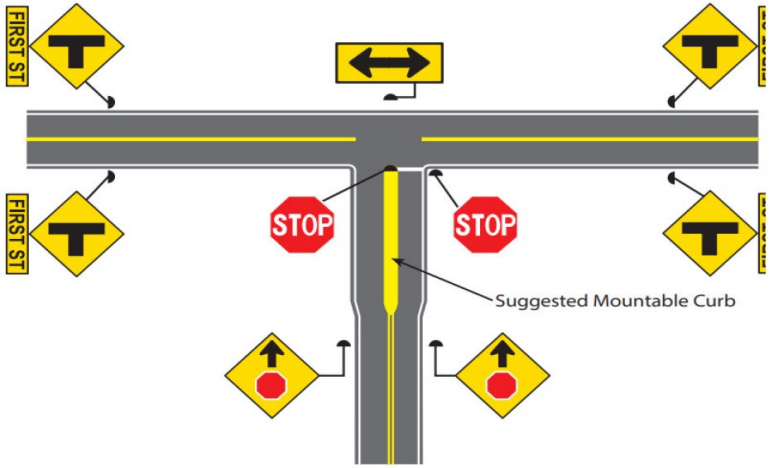


FIGURE 8: POTENTIAL STOP-CONTROLLED INTERSECTION VISIBILITY IMPROVEMENTS

Appendix

A. Countermeasures Toolbox

B. Grant Programs

C. Network Screening Maps

Appendix A Countermeasures Toolbox

Signalized Intersections

S1. Improve Intersection Lighting

A permanent source of artificial light applied to signalized intersections that have a disproportionate number of night-time crashes and do not currently provide sufficient lighting at the intersection or at its approaches.

Benefit-Cost

» Implementation of this treatment reduces nighttime injury crashes by 38% and nighttime pedestrian crashes by 42%. (WSDOT)

» 20 years of expected life

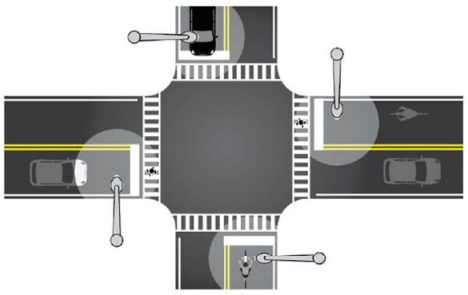
» Estimated $75,000

» The provision of lighting involves both a fixed cost for lighting installation and an ongoingmaintenance and power cost which results in a moderate to high cost.

Sources: CA-Local Roadway Safety Manual, FHWA, WSDOT

EXISTING CONDITION

IMPLEMENTATION



S2. Improve Signal Hardware (lenses, back-plates, mounting, size, number of heads)

Applicable at signalized intersections with a high frequency of right-angle and rear-end crashes because drivers are unable to see traffic signals sufficiently in advance to safely negotiate the intersection being approached. Examples include increasing the size of indications from 8 in. to 12 in. and adding supplemental heads (e.g., side-mount, near-side mount).

Benefit-Cost

» Implementation of this treatment can reduce crashes by 3-7% (WSDOT).

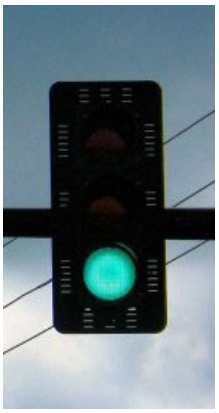
» 10 years of expected life

» Estimated $40,000 per intersection

» Cost varies based on size/number of signal heads.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION



IMPLEMENTATION

S3. Improve Signal Timing (coordination, phasing, clearance intervals)

Effective at locations that have a crash history at multiple signalized intersections. Signalization improvements may include adding phases, lengthening clearance intervals, eliminating or restricting higher-risk movements, and coordinating signals at multiple locations. This treatment addresses all types of crashes that occur on the approaches / influence area of the new signal timing. For projects coordination signals along a corridor, the crashes related to side-street movements should not be applied.

Benefit-Cost

» Implementation of this treatment reduces all crashes by 16%, and particularly angle crashes by 32% (WSDOT).

» 10 years of expected life

» Estimated $1,000 per intersection

» Cost variation based on number of signal heads and number of movements.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

S4. Install Left-turn Lane and Add Turn Phase

Installed at signalized intersections that have a significant crash problem and the only alternative is to change the nature of the intersection itself. This treatment addresses all type of crashes and the measure can be very effective at intersection with complex geometry and intersection with frequent left-turn movements. A properly timed protected left-turn phase can also help reduce rear-end, broadside, and sideswipe crashes between left-turning vehicles and the through vehicles as well as vehicles behind them. This countermeasure only applies to crashes occurring on the approaches / influence area of the new left turn phases.

Benefit-Cost

» Implementation of this treatment reduces all crashes by 35% and head on crashes by 69% (WSDOT).

» 20 years of expected life

» Estimated $12,000 per intersection

» If the existing traffic signal only requires a minor modification to allow for a protected left-turnphase, then the cost would also be low (installation is short because no actual construction). In-house signal maintainers can perform this operation once the proper signal phasing is determined so the cost is low.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

S5. Pavement Marking and RPMs through Intersection

Raised Pavement Markers (RPMs) and pavement marking installed in intersections where the lane designations are not clearly visible to approaching motorists. Can also be applied at intersections noted as being complex and experiencing crashes that could be attributed to a driver's unsuccessful attempt to navigate the intersection.

Benefit-Cost

» Implementation of this treatment reduces run off road, opposite direction and night crashes by 21% (WSDOT).

» 10 years of expected life

» Estimated $2,000 per installation

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

S6. Improve Pavement Friction (High Friction Surface Treatment

Improvement for signalized Intersections noted as having crashes on wet pavements or under dry conditions when the pavement friction available is significantly less than needed for roadway approach speeds. This treatment is intended to target locations where skidding and failure to stop is determined to be a problem in wet or dry conditions and the target vehicle is unable to stop due to insufficient skid resistance. In addition, treatment also addresses night crashes all other crashes. This treatment does not apply to standard chip-seal or open-graded maintenance projects for long segments of corridors or structure repaving projects intended to fix failed pavement.

Benefit-Cost

» Implementation of this treatment reduces crashes by 40% (WSDOT).

» 10 years of expected life

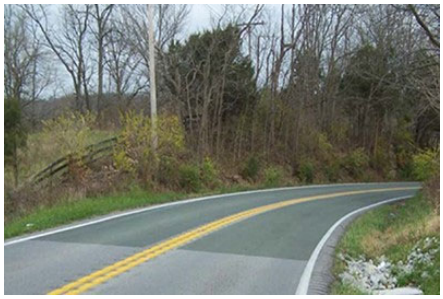
» Estimated $5,000 per intersection for materials and equipment

» Cost variation based on size of intersection and material (Estimated $30/sq.yd.).

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION



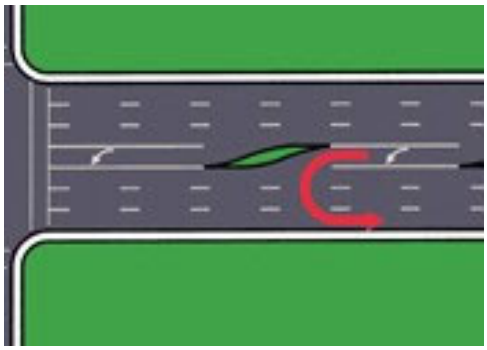
B.

S7. Add Median Openings to Allow or Restrict Left-turns and U-turns

Install medians to reduce crashes related to turning maneuvers include angle, rear-end, pedestrian, and sideswipe (involving opposing left turns) type crashes. This treatment only applies to crashes occurring in the intersection/influence area of the new directional openings.

EXISTING CONDITION

IMPLEMENTATION



Benefit-Cost

- Implementation of this treatment reduces crashes by 51% (WSDOT).
- 20 years of expected life
- Estimated $75,000 per installation
- The cost of this strategy will depend on the treatment.

Sources: CA-Local Roadway Safety Manual

S8. Install Right-turn Lane

Setting up right-turn lane may be appropriate in situations where there are an unusually high number of rear-end collisions on a single major road approach. The need for right turn lanes should be assessed on an individual approach basis. It is also important to ensure that the right-turn lanes are of sufficient length to allow vehicles to decelerate and "queue up" before turning, ideally without affecting the flow of through traffic. This treatment addresses read-end crashes. When considering new right-turn lanes, potential impacts to non-motorized user should be considered and mitigated as appropriate.

EXISTING CONDITION

IMPLEMENTATION

Benefit-Cost

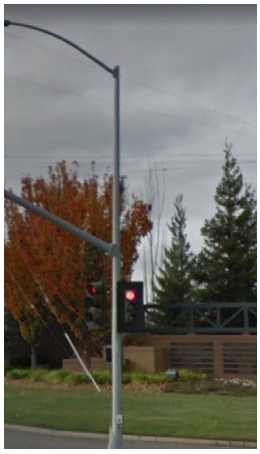
- Implementation of this treatment reduces crashes by up to 8% for all crashes and 17% for fatal/injury crashes (WSDOT).
- 20 years of expected life
- Estimated $300,000 per right turn lane
- Installing right turn lanes require substantial time for development and construction that canvary the cost.

Sources: CA-Local Roadway Safety Manual

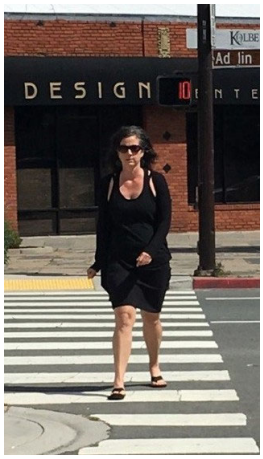
S9. Install Pedestrian Countdown Signal Heads

Install at signals that have signalized pedestrian crossing with WALK / DON'T WALK indications and where there have been pedestrian-vehicle crashes. The countermeasure addresses both pedestrian and bicycle collisions. This countermeasure only applies to "Ped & Bike" crashes occurring in the intersection/crossing with the newcountdown heads.

EXISTING CONDITION



IMPLEMENTATION



Benefit-Cost

- Implementation of this treatment reduces pedestrian crashes by 70% (WSDOT).
- 20 years of expected life
- Estimated $1,500 per signal head (does not include push button or pole cost)
- Costs and time of installation will vary based on the number of intersections included in this strategy and if it requires new signal controllers capable of accommodating the enhancement. This countermeasure can be effectively and efficiently implemented using a systematic approach with numerous locations, resulting in moderate cost projects that are more appropriate to seek stateor federal funding.

Sources: CA-Local Roadway Safety Manual

S10. Flashing Yellow Arrow Left Turn Signal

Flashing yellow arrow (FYA) traffic signals feature a flashing yellow arrow in addition to the standard red, yellow, and green arrows. When illuminated, the flashing yellow arrow allows waiting motorists to make a left-hand turn after yielding to oncoming traffic.

A national study demonstrated that drivers found flashing yellow left-turn arrows more understandable than traditional yield-on-green indications (green ball). Flashing yellow arrow treatment at signalized intersections can reduce the likelihood of left-turn crashes during permissive left-turn phasing. They can be used in either permissive-only or protected-permissive left-turn phasing schemes.

EXISTING CONDITION

IMPLEMENTATION

Benefit-Cost

- Implementation of this treatment reduces left turn crashes by 19% (WSDOT).
- 10 years of expected life
- Estimated $200,000 per intersection (assuming 4 new installations)
- Depending on the existing signal heads, signal controller, and signal cabinet, this treatment may require a controller replacement, which would increase the cost of installation.

Sources: FHWA, NACTO, Minnesota DOT

S11. Leading Pedestrian Interval

A leading pedestrian interval (LPI) gives pedestrians the opportunity to enter the crosswalk at an intersection 3-7 seconds before vehicles are given a green indication. Using this "head start," pedestrians can better establish their presence in the crosswalk before vehicles have priority to turn right or left.

LPIs provide increased visibility of crossing pedestrians and increased likelihood of motorists yielding to pedestrians. This results in reduced conflicts between vehicles and pedestrians, improving intersection safety. LPI is particularly useful at signalized intersections with a high volume of turning movements.

Benefit-Cost

» Implementation of this treatment reduces pedestrian-vehicle crashes by 13-48% (FHWA, WSDOT, City of Seattle).

» 10-20 years of expected life

» Estimated $200-10,000 (based on whether existing controller can accommodate the change)

Sources: FHWA, City of Seattle, WSDOT

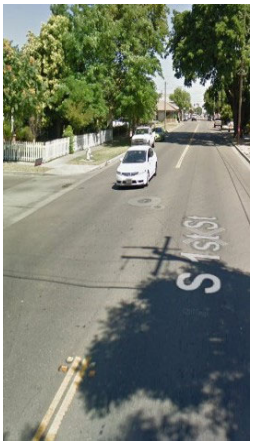
IMPLEMENTATION

Countermeasures for Non-Signalized Intersections

NS1. Add Intersection Lighting

Effective at unsignalized intersections that have a disproportionate number of nighttime crashes and do not currently have lighting. This treatment improves the safety of the intersection during nighttime by making drivers more aware of the surroundings at the intersection, enhancing driver'savailable sight distances and improving the visibility of non- motorists. This countermeasure only applies to nightcrashes (all types) occurring within limits of the proposed roadway lighting 'engineered' area.

EXISTING CONDITION



IMPLEMENTATION

Benefit-Cost

- Implementation of this treatment reduces nighttime injury crashes by 38% and nighttime pedestrian crashes by 42% (WSDOT).
- 20 years of expected life
- Estimated $8,000 per intersection
- Cost variation based on cost for lighting installation and an ongoing maintenance and powercost.

Sources: CA-Local Roadway Safety Manual

NS2. Convert to All-way Stop Control

Applicable at unsignalized intersection locations (currently with two-way stop control or two-way yield control) with a crash history and have no controls on the major roadway approaches. The all-way stop control is suitable only at intersections with moderate and relatively balanced volume levels on the intersection approaches. This treatment addresses to all type of crashes and only applies to crashes occurring in the intersection and /or influence area ofthe new control. All-way stop warrant should be considered.

EXISTING CONDITION

IMPLEMENTATION

Benefit-Cost

- Implementation of this treatment reduces crashes by 18-75% (ODOT).
- 10 years of expected life.
- Estimated $5,000 per intersection.
- Cost variation based on numbers of locations.

Sources: CA-Local Roadway Safety Manual

B.

NS3. Install Roundabout

Effective at intersections that have a high frequency of right-angle and left-turn type crashes, primarily at unsignalized intersections with moderate-volumes. This countermeasure only applies to crashes occurring inthe intersection and/or influence area of the new control and is not eligible for use at existing all-waystop intersections.

Benefit-Cost

» Implementation of this treatment at 2-way stop controlled intersection reduces crashes by 25% and fatal/injury crashes by 35% (WSDOT).

» 20 years of expected life.

» Estimated $750,000 per intersection.

» Cost variation based on the environmental process, right-of-way acquisition and implementationunder an agency's long-term capital improvement program.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

NS4. Implement Unsignalized Intersection Signing and Marking Improvements

Target unsignalized intersections with patterns of rear-end, right- angle, or turning collisions related to lack of driver awareness of the presence of the intersection. The set of low-cost countermeasures is designed to increase drivers' alertness to the presence of the intersection and reduce potential conflicts with other entering vehicles. These treatments can include advanced intersection warning signs, oversized signs, doubled-up signs, stop ahead signs or painted on side street to supplement STOP sign.

Benefit-Cost

» Implementation of this treatment reduces crashes by 25% (WSDOT).

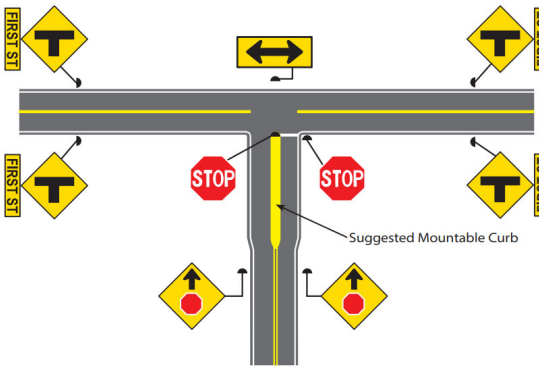
» 10 years of expected life.

» Estimated $700 per intersection.

» Cost variation based on the number of signs.

Sources: CA-Local Roadway Safety Manual

IMPLEMENTATION



NS5. Install Transverse Rumble Strips

Transverse rumble strips are installed in the travel lane for providing an auditory and tactile sensation for each motorist approaching the intersection. They can be used at any stop or yield approachintersection, often in combination with advance signing to warn of the intersection ahead. This countermeasure applies to all crashes occurring on the approach / influence area of the new rumble strips.

Benefit-Cost

» Implementation of this treatment reduces all crashes by up to 6% and fatal/injury crashes by 7% (WSDOT).

» 10 years of expected life.

» Estimated $5,000 per intersection.

» Cost variation based on the length of the rumble strips.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

NS6. Install Raised Median

Used at Intersections noted as having turning movement crashes near the intersection as a result of insufficient access control. Application of this countermeasure should be based on current crash data and a clearly defined need to restrict or accommodate the movement. Angle crashes are addressed through this countermeasure. When agencies opt to install landscaping in conjunction with new raised medians, these locations must be excluded from their federally funded HSIP application scope. This countermeasure only applies to crashes occurring on the approaches / influence area of the new raised median.

Benefit-Cost

» Implementation of this treatment reduces all crashes by up to 39% and fatal/injury crashes by 44% (WSDOT).

» 20 years of expected life.

» Estimated $200,000+ (depends on length, right-of-way, and surface treatment).

» Cost variation based on the size of the new median.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

B.

NS7. Install Right-turn Lane

Applicable when many collisions at unsignalized intersections are related to right-turn maneuvers. This countermeasure provides exclusive right-turn lanes, particularly on high-volume and high-speed major-roadapproaches to minimizing the collisions and applies to crashes occurring on the approaches / influence area of the new right-turn lanes.

Benefit-Cost

» Implementation of this treatment reduces all crashes by up to 8% and fatal/injury crashes by 17% (WSDOT).

» 20 years of expected life.

» Estimated $200,000 per intersection.

» Cost variation based on how wide the new right lane.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

NS8. Install Enhanced Pedestrian Crossing wish Advanced Features

Applicable at non-signalized intersections without a marked crossing, where pedestrians are known to cross, that involve significant vehicular traffic. They are important at school crossings and intersections with right and/or left turns pockets. Rectangular rapid flashing beacons (RRFBs), overhead flashing beacons, curb extensions, advanced stop or yield lines and other safety features should be added to complement the standard crossing elements. This countermeasure reduced pedestrian crashes occurring in the crossing (influence area) with the new enhanced safety features.

Benefit-Cost:

» Implementation of this treatment reduces pedestrian crashes by 40% (WSDOT).

» 20 years of expected life

» Estimated $ 50,000 per intersection

» Cost variation based on the length of the pedestrian crossing and the amount of safety signs.

Sources: CA-Local Roadway Safety Manual

IMPLEMENTATION

B.

NS9. Install Pedestrian Crossing (signs and markings only)

Applicable when many collisions at unsignalized intersections are related to left-turn maneuvers. This countermeasure provides exclusive left-turn lanes, particularly on high-volume and high-speed major-road approaches to minimizing the collisions. This countermeasure applies to crashes occurring on the approaches /influence area of the new left- turn lanes, but is not eligible for use at existing all-way stop intersections.

Benefit-Cost

- Implementation of this treatment reduces pedestrian crashes by 40% (WSDOT).
- 20 years of expected life
- Estimated $200,000 per intersection
- Cost variation based on how wide the new left lane.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

B.

Countermeasures for Roadway Segments

R1. Add Segment Lighting

Applied to night-time crashes. In particular, patterns of rear-end, right-angle, turning or roadway departure collisions on the roadways may indicate that night-time drivers can be unaware of the roadway characteristics. This treatment addresses only to all night type crashes.

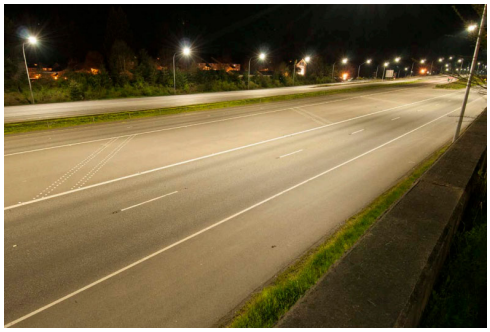
Benefit-Cost

- Implementation of this treatment reduces injury crashes by 28% (HSM).
- 20 years of estimated life
- Estimated $8,000 per installation
- Cost variation depending if lighting connected to signal box.

Sources: CA-Local Roadway Safety Manual, Highway Safety Manual

EXISTING CONDITION

IMPLEMENTATION



R2. Remove or Relocate Fixed Objects

Applicable to known locations or roadway segments prone to collisions with fixed objects such as utility poles, drainage structures, trees, and other fixed objects, such as the outside of a curve, end of lane drops, and in traffic islands. This treatment addresses fixed object crashes that occur within the current clear zone.

Benefit-Cost

- Implementation on this treatment reduces run off road crashes by 38% (WSDOT).
- 20 years of expected life
- Varies. Up to estimated $50,000 per deployment
- Costs will generally be low, assuming that in most cases the objects to be removed are within the right-of-way.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

B.

R3. Install Guardrail

Guardrail is installed to reduce the severity of lane departure crashes. This treatment addresses fixed object and run-off road crashes. Its value in reducing collisions should only be applied to locations where past crash data or engineering judgement suggests the guardrail may result in a few or less severe crashes because the guardrail itself is a fixed object.

Benefit-Cost

- Implementation on this treatment reduces run off road crashes by 7-34% (ODOT).
- 20 years of expected life
- Estimated $50,000 per installation

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

R4. Install Roadside Impact Attenuators

Impact attenuators are typically used to shield rigid roadside objects such as concrete barrier ends, steel guardrail ends and bridge pillars from oncoming automobiles. This treatment addresses fixed object and run-off road that occur with the limits of the new attenuators. This countermeasure and corresponding collision reduction benefits should only be applied to locations where past crash data or engineering judgement applied to existing conditions suggests the upgraded attenuators may result in a few or less severe crashes.

Benefit-Cost

- Implementation of this treatment reduces crashes by 25%.
- 10 years of expected life
- Estimated $5,000 for steel railing, $2,500 for traffic barrels
- Costs depending on the scope of the project, type(s) used, and associated ongoing maintenance costs.

Sources: CA-Local Roadway Safety Manual

EXISTING CONDITION

IMPLEMENTATION

B.

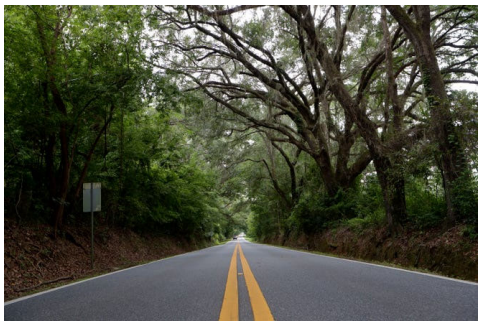
R5. Add 2 ft Paved Shoulder

Installed in roadways that have a frequent incidence of vehicles leaving the travel lane resulting in an unsuccessful attempt to reenter the roadway. The probability of a safe recovery is increased if an errant vehicle is provided with an increased paved area in which to initiate such a recovery. This type of countermeasure addresses Fixed object, Run-off Road, and Sideswipe collisions.

Benefit-Cost

- Implementation on this treatment reduces crashes by 5-13% (ODOT).
- 20 years of expected life.
- Estimated $150,000 (cost depends on need for right-of-way or if roadside modification isneeded).
- Shoulder widening costs would depend on whether new right-of-way is required and whether extensive roadside modification is needed. Since shoulder widening can be a relatively expensive treatment, one of the keys to creating a cost-effective project with at least a medium B/C ratio is targeting higher-hazard roadways.

EXISTING CONDITION



IMPLEMENTATION

Sources: CA-Local Roadway Safety Manual

R6. Add Unpaved Shoulder

Appropriate to roadways with a frequent incidence of vehicles leaving the travel lane resulting inan unsuccessful attempt to reenter the roadway. This countermeasure addressed all types of crashes. Unless shoulder widening requires additional right-of-way and environmental impacts, these treatments can be implemented in a relatively short timeframe. This countermeasure only applies to crashes occurring within the limits of the new shoulder.

Benefit-Cost

- Implementation on this treatment reduces crashes by 3-6% (ODOT).
- 20 years of expected life
- Estimated $50,000 (varies)
- The cost of adding a navigable non-paved shoulder would depend whether extensive roadside modification and shoulder stabilization are required.

IMPLEMENTATION

Sources: CA-Local Roadway Safety Manual

R7. Install Chevron Signs on Horizontal Curves

IMPLEMENTATION

Set up on roadways that have an unacceptable level of crashes on relatively sharp curves during periods of light and darkness. Ideally this type of safety countermeasure would be combined with other sign evaluations and upgrades (install warning signs, delineators, markers, beacons, and relocation of existing signs per MUTCD standards). This treatment can address all types of crashes; but, specifically, run-offroad crashes occurring near curves. This treatment only applies to crashes occurring within the influence area of the new signs (i.e. only through the curve).

Benefit-Cost:

- Implementation of this treatment reduces crashes by 64% (WSDOT).
- 10 years of expected life.
- Estimated $1,000 per curve
- Costs for implementing this strategy are nominal and depend on the number of signs. When considered at a single location, these low-cost improvements are usually funded through localfunding by local maintenance crews. However, this treatment can be effectively and efficientlyimplemented using a systematic approach with numerous locations, resulting in moderate cost projects that are more appropriate to seek state or federal funding.

Sources: CA-Local Roadway Safety Manual

R8. Add Speed Feedback Signs

IMPLEMENTATION

This type of treatment addresses all crashes caused by motorist traveling too fast, including horizontal curves. Before choosing this treatment, the agency needs to confirm the ability to provide power to the site (solar may be an option).

Benefit-Cost

- Implementation on this treatment reduces crashes by 46% (WSDOT).
- 10 years of expected life
- Estimated $20,000-100,000
- Cost varies by type of implementation.

Sources: CA-Local Roadway Safety Manual

IMPLEMENTATION

R9. Install Edge Line and Centerline Pavement Marking

Applicable on any road with a history of run-off-road right, head-on, opposite-direction-sideswipe, or run-off-road-left crashes is a candidate for this treatment. This treatment addresses all types, specifically impacts head-on and run-off road crashes. It only applies to crashes occurring within the limits of the new centerlines and/or edge lines. The treatment is not intended to be used for general maintenance activities (i.e. the replacement of existing striping) and must include upgraded safety features over the existing striping. For two lane roadways allowing passing, a striping audit must be done to ensure the passing limits meeting the MUTCD standards. Both the centerline and edge lines are expected to be upgraded.

Benefit-Cost

» Implementation on this treatment reduces run off road, opposite direction and nighttime crashes by 21% (WSDOT).

» 10 years of expected life

» Estimated $4,000 (depends on number and length of segment, as well as striping material)

» Costs for implementing this strategy are nominal and depend on the number and length of segment as well as the striping material (paint, thermoplastic, etc.). This countermeasure can be effectively implemented using a systemic approach with numerous and long locations.

Sources: CA-Local Roadway Safety Manual

IMPLEMENTATION

R10. Install No Passing Zone

Installed on roadways that have a high percentage of head-on crashes suggesting that many head-on crashes may relate to failed passing maneuvers. No Passing Zones should be installed where drivers' "passing sight distance" is not available due to horizontal or vertical obstructions. This treatmentaddresses all types of crashes that occur when drivers cannot differentiate the centerline markings between passing and no-passing area. This treatment only applies to crashes occurring within the limits of the new or extended no-passing zones.

Benefit-Cost

» Implementation of this treatment reduces crashes by 45%.

» 10 years of expected life

» Estimated $2,000 (varies)

» When considered at a single location, these low cost improvements are usually funded through local funding by local maintenance crews. However, This treatment can be effectivelyand efficiently implemented using a systematic approach with numerous and long locations, resulting in low to moderate cost projects that are more appropriate to seek state or federalfunding.

B.

R11. Install Centerline Rumble Strips/Stripes

IMPLEMENTATION

Center Line rumble strips/stripes should be used on segments with a history of head-on crashes. This treatment addresses head-on and opposite-direction side-swipe crashes by alerting drivers who travel into the oncoming travel lane.

Benefit-Cost

» Implementation of this treatment reduces crashes by 20%.

» 10 years of expected life

» Estimated $3,000 per mile

» Costs for implementing this strategy are nominal and depend on the number and length oflocations.

Sources: CA-Local Roadway Safety Manual

R12. Install Edge Line Rumble Strips/Stripes

IMPLEMENTATION

Shoulder and edge line milled rumble strips/stripes should be used on roads with a history of roadway departure crashes. This treatment addresses run-off road crashes by providing an auditory and tactile warning when driven on, alerting drivers drifting outside their travel lanes.

Benefit-Cost

» Implementation of this treatment reduces opposite direction crashes by 40% and fatal/injury crashes by 8%.

» 10 years of expected life

» Estimated $3,000 per mile

» Costs for implementing this strategy are nominal and depend on the number and length oflocations.

Sources: CA-Local Roadway Safety Manual

B.

R13. Rail Crossing Treatments

IMPLEMENTATION

Four Quadrant Gates extend across all roadway lanes on both the approach and the departure side of the crossing. Unlike two-quadrant gate systems, four-quadrant gates provide additional visual constraints and inhibit most traffic movements over the crossing after the gates have been lowered. Safe guards are put in place to ensure vehicles are not trapped on the tracks.

Four Quadrant Gate

Wayside Horns can be used as an adjunct to train-activated crossing warning systems to provide audible warning of an approaching train for traffic on each approach to the highway-rail crossing. A wayside horn system consists of a horn or series of horns located at a public highway-rail crossing and directed at oncoming motorists. The wayside horn system simulates a train horn and sounds at a minimum of 15 seconds prior to the train's arrival at the highway-rail crossing, until the lead locomotive has traversed the crossing. It is typically used at locations where the train horn is not sounded.

Wayside Horn

Benefit-Cost

- Quantified benefits unknown.
- 10 Years of expected life
- Estimated $700,000 for four quadrant gate system
- Estimated $500,000 for wayside horn system

Sources: FHWA, FRA

R14. No Passing Zone Signs

IMPLEMENTATION

A No Passing Zone, indicated by a solid yellow line on the left side of the driver's direction of travel, indicates a zone through which sight distance is restricted or where other conditions make overtaking and passing inappropriate. No Passing Zones are regulatory and legally enforceable.

In situations where head-on collision history is observed, a NO PASSING ZONE pennant can provide additional information to drivers at the beginning of the No Passing Zone, discouraging passing maneuvers. The NO PASSING ZONE sign is installed on the left side of the roadway.

Additionally, DO NOT PASS signs can be added as a supplement to No Passing Zone pavement markings to emphasize the restriction on passing. It can be installed at the beginning of, and at intervals within, the No Passing Zone.

Benefit-Cost

- Quantified benefits unknown.
- 10 Years of expected life
- Estimated $200 per sign

Sources: FHWA

B.

Figure Links

S1a https://www.aaroads.com/california/ca-238.html S1b https://www.aaroads.com/california/ca-262.html
S2a https://safety.fhwa.dot.gov/provencountermeasures/lighting.cfm
S2b http://wishtv.com/2016/02/16/new-traffic-signals-aim-to-reduce-crashes/
S3a http://www.k-state.edu/roundabouts/ada/news/USNews.htm
S3b https://parade.com/19072/marilynvossavant/what-would-traffic-light-synchronization-cost/
S4a https://www.fhwa.dot.gov/publications/research/safety/09036/index.cfm
S4b http://www.madriverunion.com/samoa-boulevard-traffic-light-system-changed-up/
S5a https://dohanews.co/qatars-civil-defense-junction-is-now-a-proper-intersection/
S5b http://www.gulf-times.com/story/461946/Ashghal-opens-signal-controlled-intersection-on-New-Rayyan-Road
S6a http://www.cochraneeagle.com/article/Cochrane-familes-celebrate-cultural-diversity-20170803
S6b https://rspcb.safety.fhwa.dot.gov/noteworthy/html/edccasestudy_ky.aspx
S7a https://bouldercolorado.gov/transportation/median-maintenance
S7b Unknown
S8a Google Streetview
S8b https://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/through-bike-lanes/
S9a Google Streetview
S9b Google Streetview
S10 https://www.sacbee.com/news/local/article239121918.html
S11 https://safety.fhwa.dot.gov/provencountermeasures/lead_ped_int.cfm

NS1a Google Streetview
NS1b Google Streetview
NS2a Google Streetview
NS2b http://www.ite.org/uiig/types.asp
NS3a https://www.flickr.com/photos/repowers/2933707788/
NS3b Google Streetview
NS4a https://alchemistsdiary.wordpress.com/2017/07/22/
NS4b https://safety.fhwa.dot.gov/intersection/other_topics/fhwasa09020/fhwasa09020.pdf
NS5a http://www.cleveland.com/berea/index.ssf/2012/11/berea_changes_stop_sign_parkin.html
NS5b https://radiobintangsembilan.com/2016/03/07/hindari-kecelakaan-anak-sekolah-warga-minta-garis-kejut/
NS6a http://www.jurist.org/hotline/2014/03/zachary-heiden-maine-panhandling.php
NS6b https://www.edmonton.ca/transportation/on_your_streets/neighbourhood-traffic-concerns.aspx
NS7a Google Streetview
NS7b https://ux.stackexchange.com/questions/42867/how-does-the-projection-angle-of-road-arrows-change-drivers-expectations-of-the
NS8a https://en.wikipedia.org/wiki/Uncontrolled_intersection
NS8b https://safety.fhwa.dot.gov/provencountermeasures/crosswalk-visibility.cfm
NS9a Google Streetview
NS9b https://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/major-street-crossing/

R1a https://www.shutterstock.com/nb/video/clip-9830723-4k-driving-car-on-highway-roadway-night
R1b https://www.wsdot.wa.gov/research/reports/fullreports/847.1.pdf
R2a Google Streetview
R2b Google Streetview
R3a Google Streetview
R3b https://www.reddit.com/r/funny/comments/4zcplq/a_local_plumbers_truck_decal/
R4a Unknown
R4b http://lslee.com/attenuators/Impact-Attenuators
R5a Unknown
R5b https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa11018/
R6b https://www.fhwa.dot.gov/publications/research/safety/15030/009.cfm

B.

b https://safety.fhwa.dot.gov/provencountermeasures/enhanced_delineation.cfm
R8b https://www.fhwa.dot.gov/publications/research/safety/15030/009.cfm
R9b https://www.fhwa.dot.gov/publications/research/safety/15030/009.cfm
R10b https://www.shutterstock.com/nb/search/double+yellow+lines
R11b https://safety.fhwa.dot.gov/roadway_dept/pavement/rumble_strips/bike_ig/
R12b https://safety.fhwa.dot.gov/roadway_dept/pavement/rumble_strips/bike_ig/
R13a https://cms.cityoftacoma.org/PublicWorks/RR_Crossing/Dome_OldTown/Option4_S_C_St_Poster_1of2.pdf
R13b https://safety.fhwa.dot.gov/hsip/xings/com_roaduser/fhwasa18040/
R14a https://safety.fhwa.dot.gov/older_users/fhwasa15088/ch4.cfm
R14b https://driving-tests.org/road-signs/do-not-pass-sign/

B.

Appendix B Grant Programs

Based on the projects included in the City Safety Plan, the City may be eligible to submit projects to the following grant programs.

WSDOT City Safety Program

WSDOT Local Programs sends out a call for projects each even-numbered year. This program's funding is for projects enhancing safety on city streets by reducing the severity of crashes and utilizing transportation engineering improvements and countermeasures.
https://wsdot.wa.gov/LocalPrograms/Traffic/CitySafetyProgram

WSDOT Pedestrian and Bicycle Program

WSDOT Active Transportation Program sends out a call for projects each even-numbered year. The Pedestrian and Bicycle Program objective is to improve the transportation system to enhance safety and mobility for people who choose to walk or bike.
https://wsdot.wa.gov/LocalPrograms/ATP/funding.htm

WSDOT Safe Routes to School Program

WSDOT sends out calls early in even numbered years for project awards in the following biennium. The purpose of the Safe Routes to Schools program is to improve safety and mobility for children by enabling and encouraging them to walk and bicycle to school. Funding from this program is for projects within two-miles of primary, middle and high schools (K-12).
https://wsdot.wa.gov/LocalPrograms/SafeRoutes/funding.htm

WSDOT Railway-Highway Crossings Program

Open call for projects depends on future federal funding and Washington State priorities. This program's funding is for projects enhancing safety at public grade crossings by reducing the severity of crashes and installing or upgrading protective mechanisms at railroad crossings.
https://wsdot.wa.gov/localprograms/traffic/railway-crossings-program

Transportation Improvement Board (TIB) Complete Streets

The Complete Streets Award is a funding opportunity for local governments that have an adopted complete streets ordinance. Board approved nominators may nominate an agency for showing practice of planning and building streets to accommodate all users, including pedestrians, access to transit, cyclists, and motorists of all ages and abilities.
http://www.tib.wa.gov/grants/grants.cfm?inav=3#other2

Surface Transportation Block Grant (STBG) - Urban

STBG – Urban is for jurisdictions above 5,000 population. The grant is approximately $6 million per year, with grant applications due in July and grant awards in September. Previous funded projects include bringing urban roads and intersections up to urban standards. Projects need to have a balance of capacity, safety, and economic development to get funding.
https://www.rtc.wa.gov/programs/tip/docs/tipcrit21.pdf

STBG - Rural

STBG – Rural is for smaller jurisdictions and rural areas awards approximately $1 million every other year (even-numbered years). Selection occurs with applications due in July and grant awards in September. Criteria are less stringent than urban, but support capacity, safety, and economic development. It has funded downtown improvements in smaller cities and for arterial preservation/safety on county road arterials that access cities.
https://www.rtc.wa.gov/programs/tip/call/

Congestion Mitigation and Air Quality (CMAQ) Improvement Program

This is available for projects that improve air quality. Available funding is approximately $3 million per year, with applications due in July and September grant awards. CAQ has the same criteria as STBG-Urban, but air quality points are tripled. Mostly funded projects are signalized intersections and transit-related projects.
https://www.rtc.wa.gov/programs/tip/call/

Transportation Alternatives (TA)

Approximately $1.3 million available every odd year (2023, 2025, etc.). Grant application due in April with grant awards in July. Criteria and process is outlined in https://www.rtc.wa.gov/programs/tap/docs/taGuidebook.pdf. Has funded pedestrian/bicycle improvements.

Appendix C Network Screening

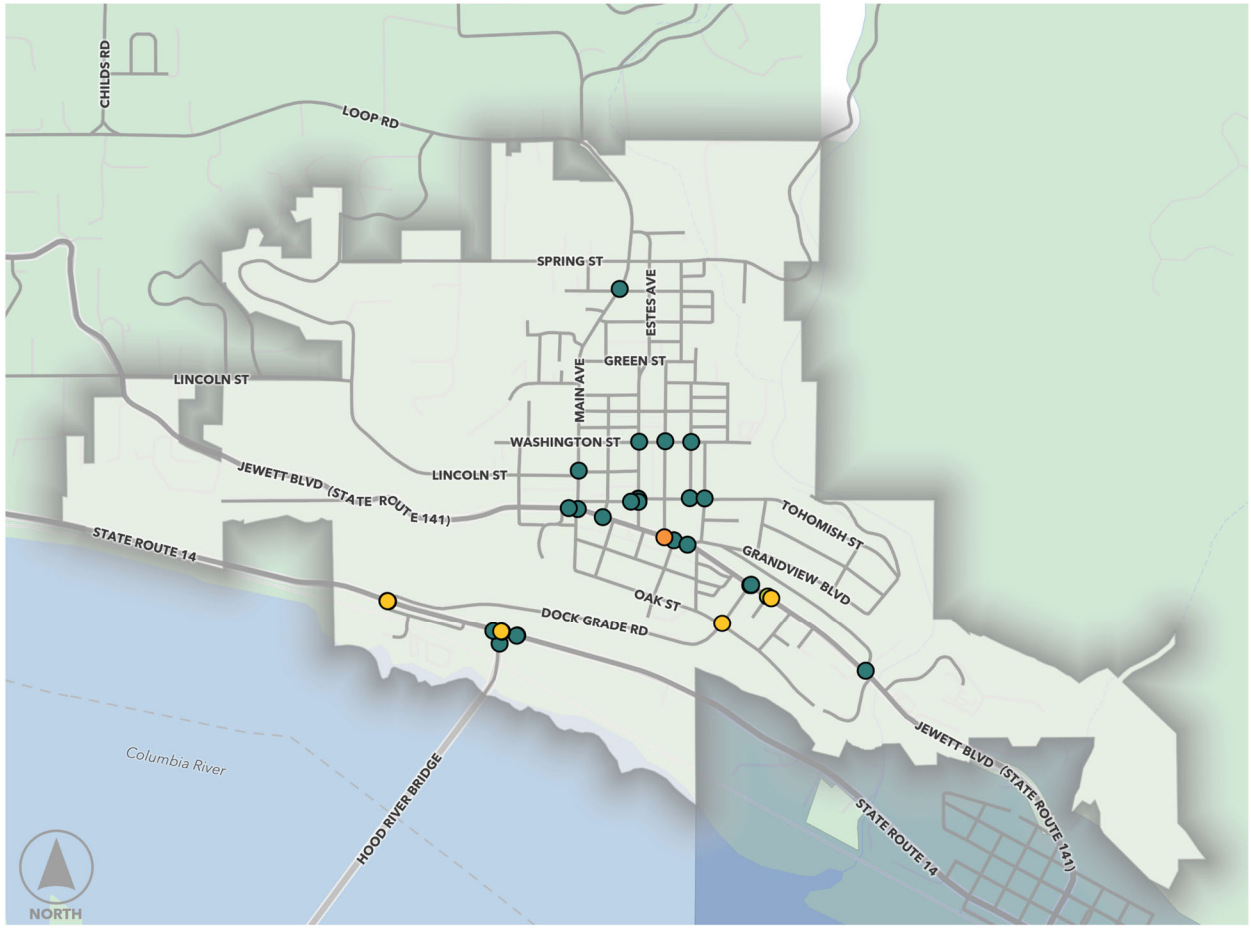
Locations with the highest frequency of intersection-related crashes are along Jewett Boulevard (SR 141), SR 14, Tohomish Street, Washington Street, Dock Grade Road, and Main Avenue. Intersections with the most severe crashes are listed in the LRSP in Table 3.

INTERSECTION-RELATED CRASHES, 2019 TO 2023

WHITE SALMON CITY LIMITS
BINGEN CITY LIMITS

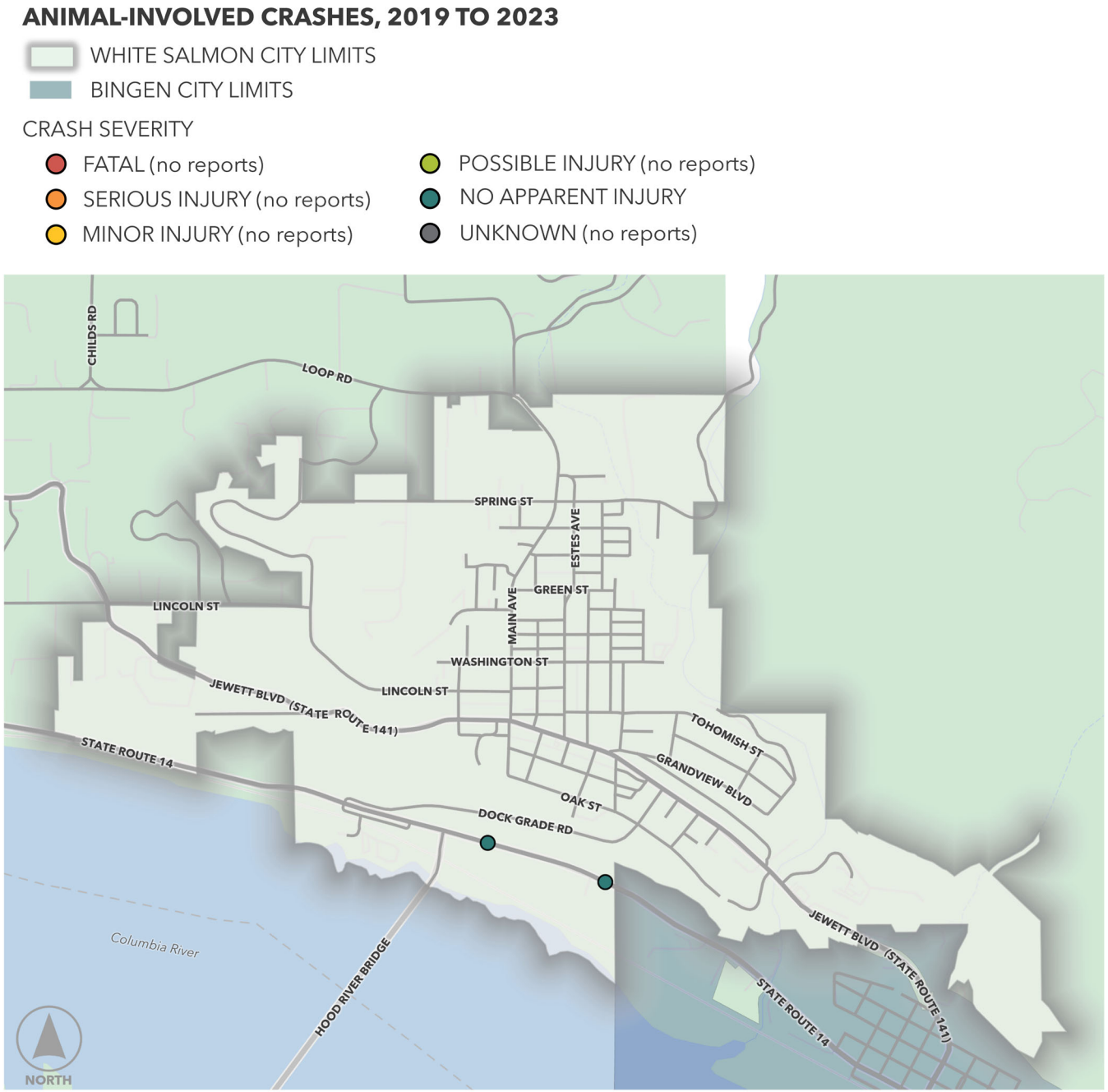
CRASH SEVERITY

- FATAL (no reports)
- SERIOUS INJURY
- MINOR INJURY
- POSSIBLE INJURY
- NO APPARENT INJURY
- UNKNOWN (no reports)



B.

Crashes where drivers struck an animal were reported along SR 14 east of the Hood River Bridge.



B.

Crashes involving bicyclists or pedestrians were reported along Jewett Boulevard (SR 141) at the following locations:

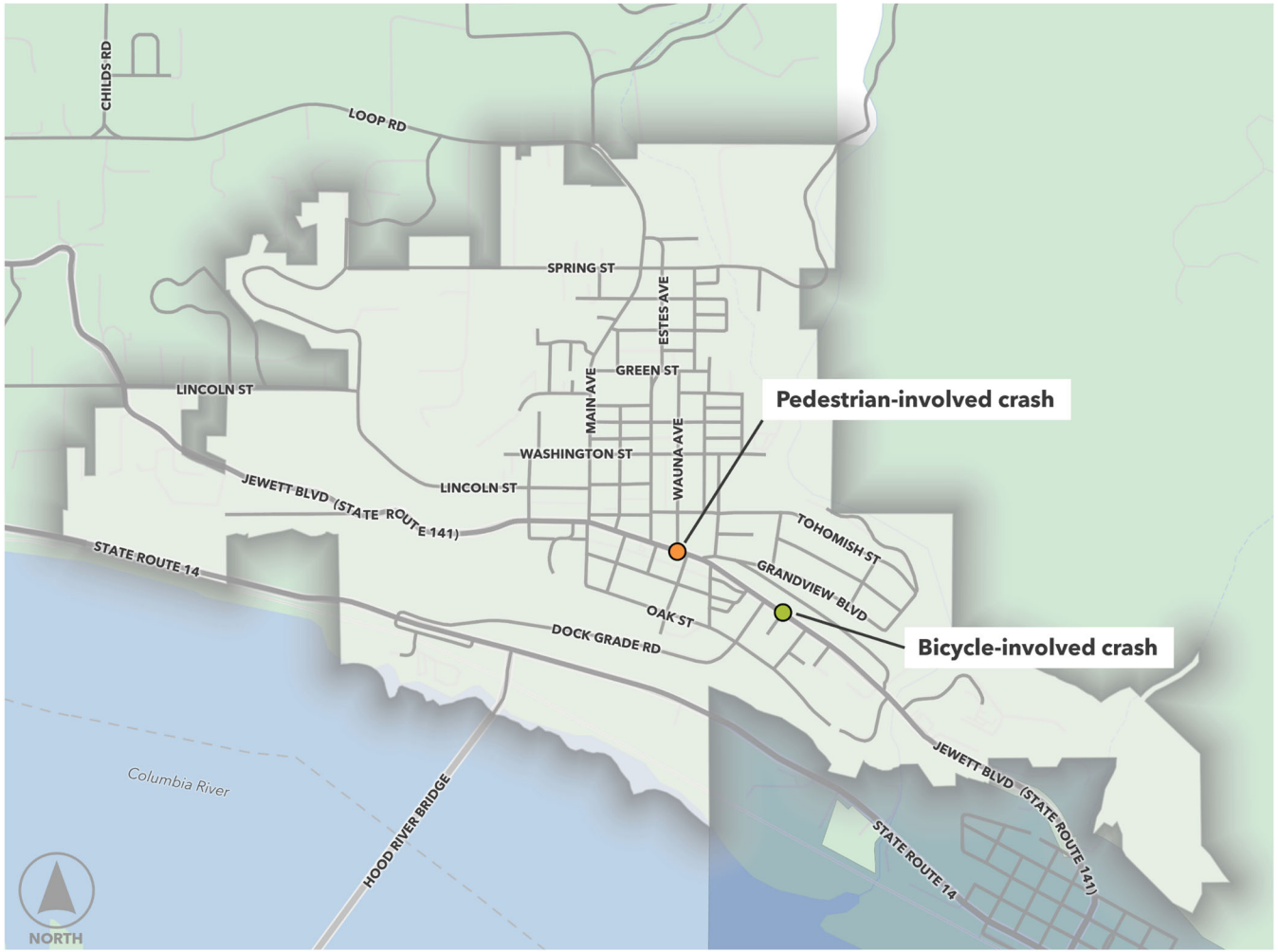
- **Jewett Boulevard (SR 141)/ Wauna Avenue** – Pedestrian-involved crash resulting in serious injury
- **Jewett Boulevard (SR 141)/ 6th Place** – Bicycle involved crash resulting in possible injury

BICYCLE AND PEDESTRIAN CRASHES, 2019 TO 2023

WHITE SALMON CITY LIMITS
BINGEN CITY LIMITS

CRASH SEVERITY

- FATAL (no reports)
- SERIOUS INJURY
- MINOR INJURY (no reports)
- POSSIBLE INJURY
- NO APPARENT INJURY (no reports)
- UNKNOWN (no reports)



B.

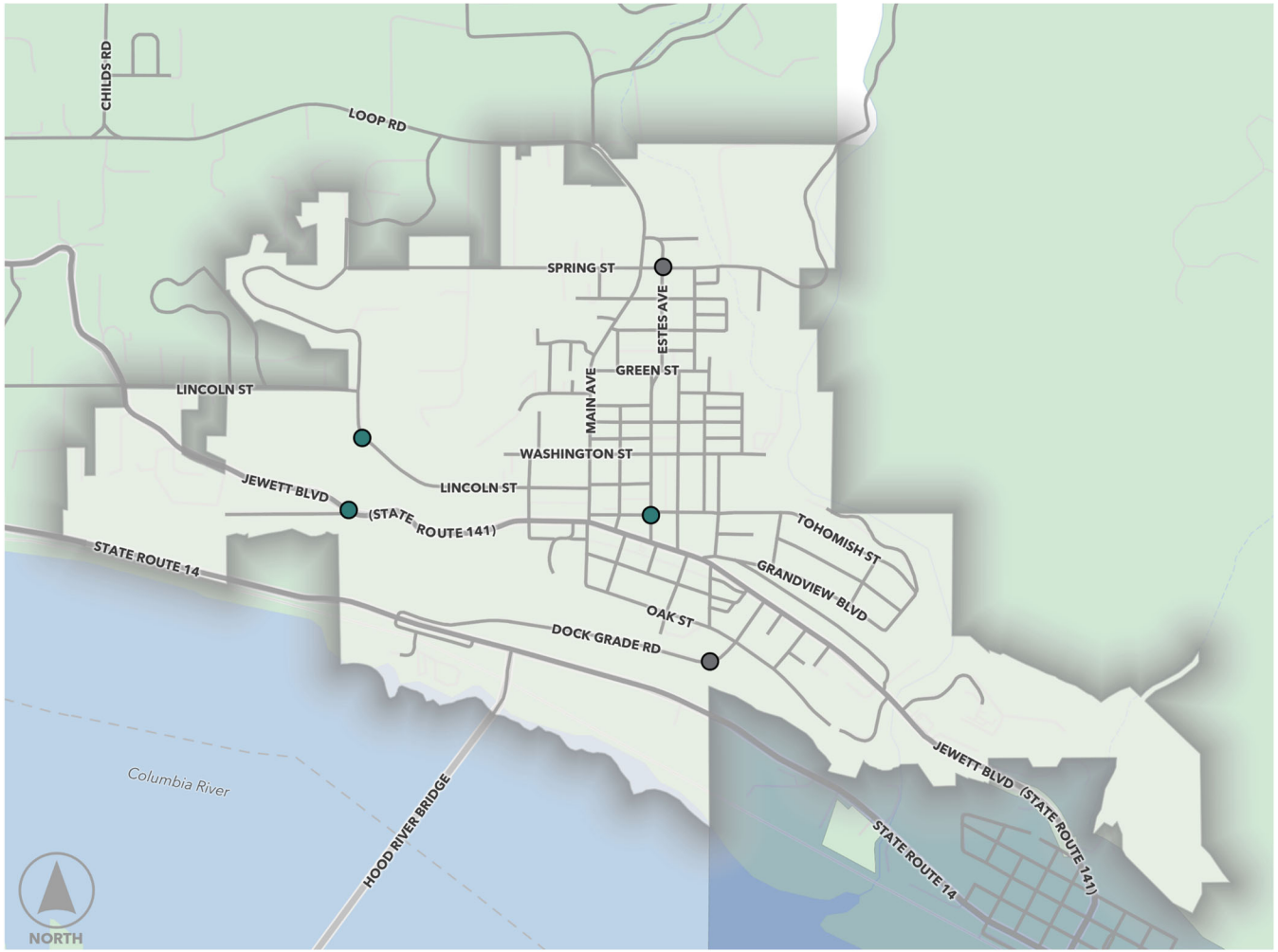
Crashes involving drivers exceeding reasonable safe speed or exceeding the stated speed limit took place along Jewett Boulevard (SR 141), Estes Avenue, and Lincoln Street.

SPEED-INVOLVED CRASHES, 2019 TO 2023

WHITE SALMON CITY LIMITS
BINGEN CITY LIMITS

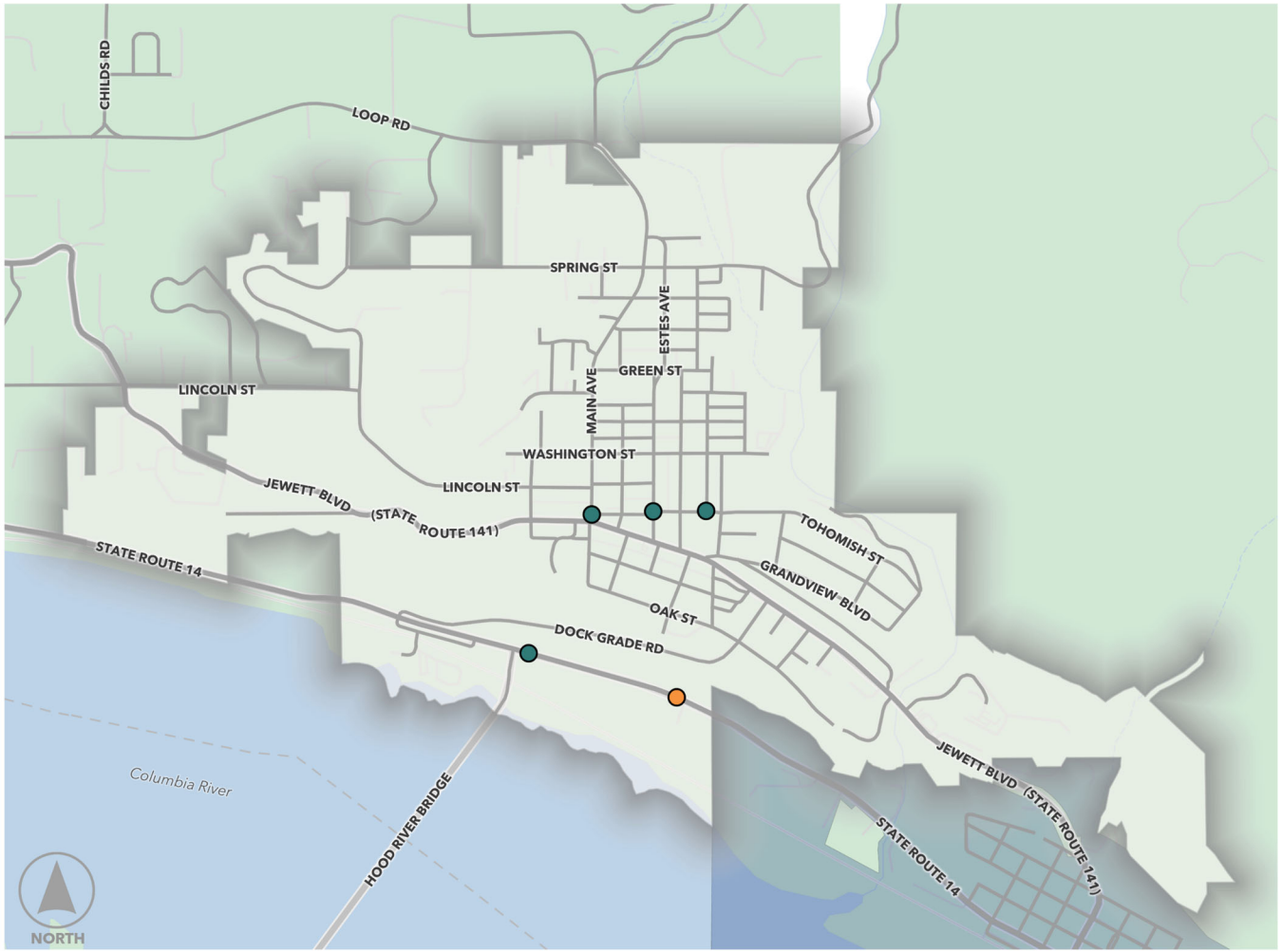
CRASH SEVERITY

- FATAL (no reports)
- SERIOUS INJURY (no reports)
- MINOR INJURY (no reports)
- POSSIBLE INJURY (no reports)
- NO APPARENT INJURY
- UNKNOWN



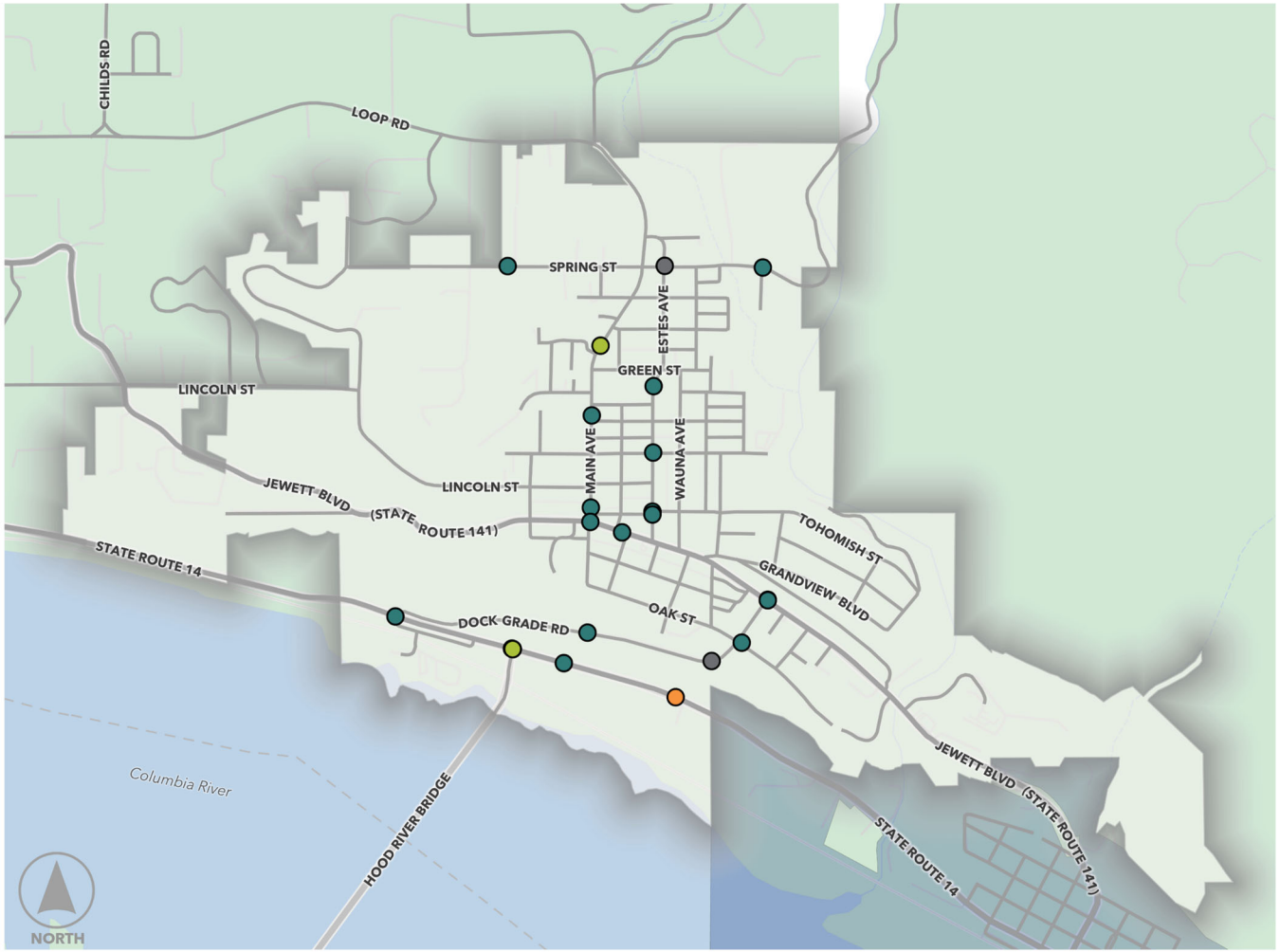
B.

Crashes involving heavy vehicles took place along Tohomish Street and SR 14.



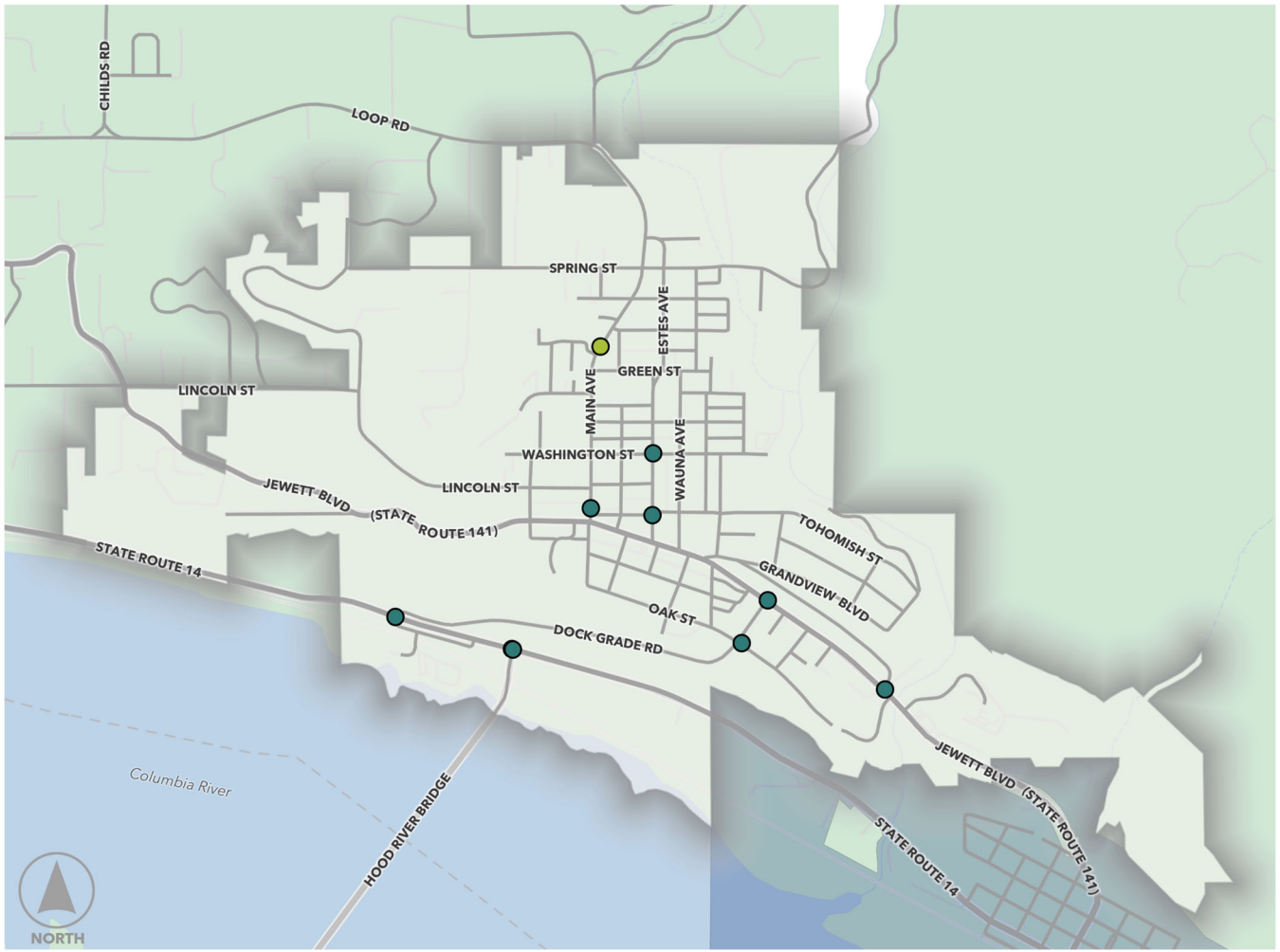
B.

Crashes in dark/dusk/dawn lighting conditions took place on SR 14, Jewett Boulevard (SR 141), Dock Grade Road, Spring Street, Main Avenue, Estes Avenue, and Oak Street.



B.

Crashes on a wet road surface were reported along SR 14, Jewett Boulevard (SR 141), Main Avenue, Estes Avenue, Tohomish Street, and Oak Street.



B.

Crashes on an icy, snow, or slush road surface took place along Jewett Boulevard (SR 141), Estes Avenue, Grandview Boulevard, and Spring Street.

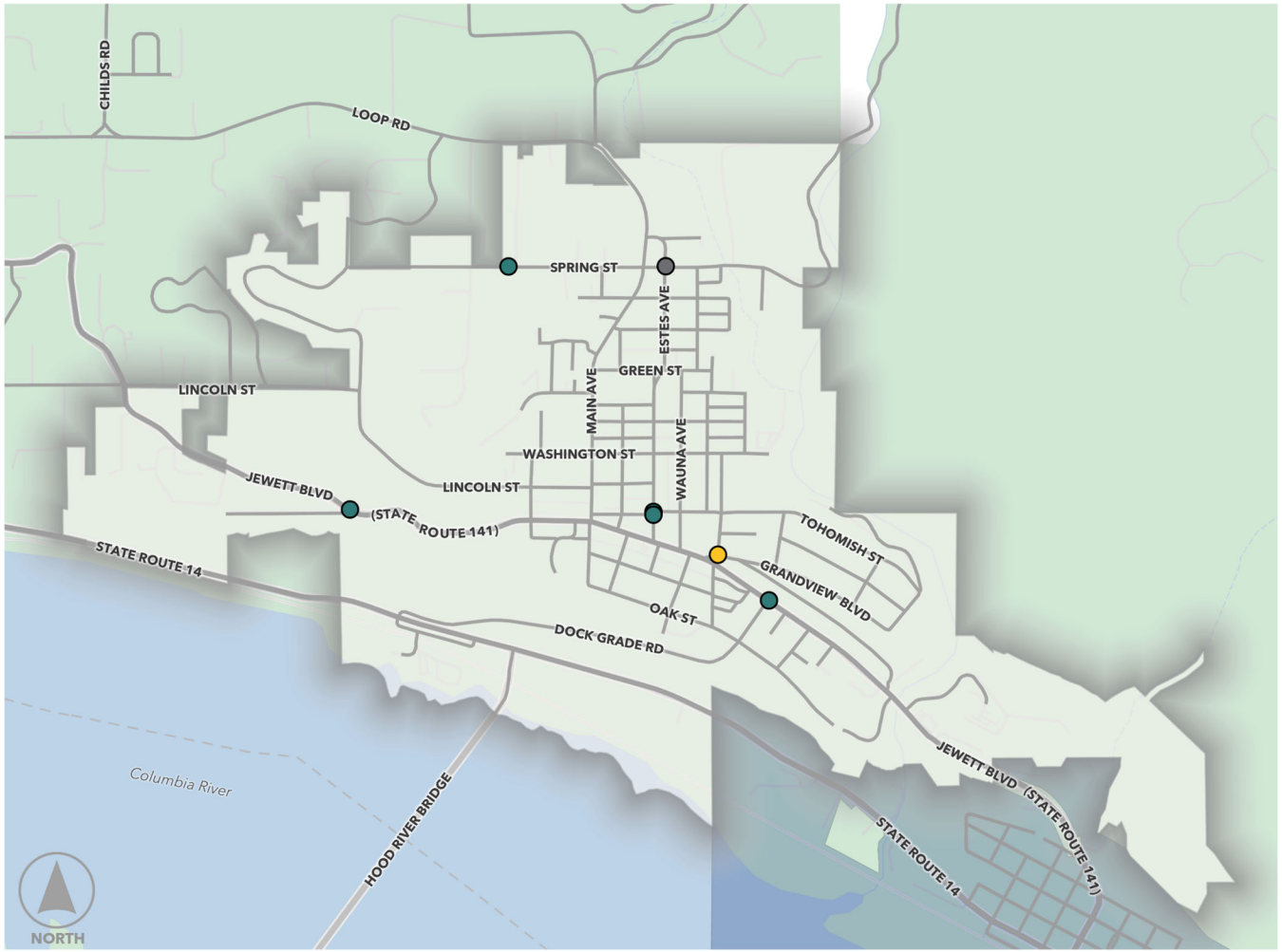
ICE/SNOW/SLUSH ROAD CRASHES, 2019 TO 2023

WHITE SALMON CITY LIMITS

BINGEN CITY LIMITS

CRASH SEVERITY

- FATAL (no reports)
- SERIOUS INJURY (no reports)
- MINOR INJURY
- POSSIBLE INJURY (no reports)
- NO APPARENT INJURY
- UNKNOWN



File Attachments for Item:

C. Pay App No. 6 - Slateco, LLC - Buck Creek Roof Replacement Project

C.

COUNCIL REPORT

☐ **Business Item** ■ **Consent Agenda**

Needs Legal Review:	No
Meeting Date:	March 4, 2026
Agenda Item:	Pay App No. 6 - Slateco, LLC Buck Creek Roof Replacement Project
Presented By:	Chris True, Public Work Director

Action Required:
Approval of Pay App No. 6 Slateco, LLC Buck Creek Roof Replacement project not to exceed $3,488.40.

Motion for Business Item / Proposed Motion for Consent Agenda:
Motion to approval of Pay App No. 6 Slateco, LLC Buck Creek Roof Replacement project not to exceed $3,488.40.

Background of Issue:
This payment covers work for change order No. 4 sheeting and vapor barrier over control room.

Council Options:
City Council has the following options available at this time:

1. Accept the Staff Recommendation.
2. Revise the Staff Recommendation.
3. Other action as desired by council.

Fiscal Analysis:
Funded through PWB.

Policy & Plan Implications:
WSP and CFIP

Recommendation of Staff/Committee:
Staff Recommends approval of Pay App No. 6 Slateco, LLC Buck Creek Roof Replacement project not to exceed $3,488.40.

C.

APPLICATION FOR PAYMENT NO. 6 - FINAL
CITY OF WHITE SALMON, WASHINGTON
BUCK CREEK WATER TREATMENT PLANT ROOF IMPROVEMENTS

TO **White Salmon, Washington** (OWNER)

FROM **Slateco, LLC** (CONTRACTOR)

For Work accomplished through the date of: February 12, 2026

1.	Original Contract Price	$	736,428.75
2.	Net Change by Change Orders and Written Amendments (+/-)	$	101,680.48
3.	Current Contract Price (1 plus 2)	$	838,109.23
4.	Total Work Completed and Materials On Hand to Date*	$	779,360.00
5.	Retainage: 5%	$	(38,968.00)
6.	Sales Tax: Sales Tax (7.5%)	$	36,159.75
6.	Sales Tax: Sales Tax (7.6%)	$	22,589.48
7.	Liquidated Damages	($	-)
8.	Less Previous Application for Payments	$	795,652.83
9.	**DUE THIS APPLICATION (4 minus 5, plus 6, minus 7 and 8)**	**$**	**3,488.40**

**** Line 4 may not match Line 3 on final Application for Payment due to bid versus constructed quantity differences on unit price work.***

Accompanying Documentation:

Contractor's Certification:

The undersigned Contractor certifies that (1) all previous progress payments received from Owner, if any, on account of Work done under the Contract referred to above have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Application; (2) title of all Work, materials, and equipment incorporated in said Work or otherwise listed in, or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Lien, security interest, or encumbrance); (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and not defective; and (4) Record Drawings and required job photos are up-to-date, accurate, and complete for Work performed.

Dated 2/17/2026

Slateco, LLC
CONTRACTOR

By: Ryan Massie

Digitally signed by Ryan Massie
DN: C=US, E=ryan@slateco.net, CN=Ryan Massie
Reason: I am approving this document
Contact Info: ryan@slateco.net
Date: 2026.02.17 09:31:15-08'00'

Payment of the above AMOUNT DUE THIS APPLICATION is recommended

Dated 2/17/2026

Anderson Perry & Associates, Inc.
ENGINEER

By: Jay Peninger

Digitally signed by Jay Peninger
Date: 2026.02.17 10:20:50-08'00'

APPROVED by Owner:

White Salmon, Washington
OWNER

Dated _____

By: _____

Title: _____

C.

APPLICATION FOR PAYMENT NO. 6 - FINAL
CITY OF WHITE SALMON, WASHINGTON
BUCK CREEK WATER TREATMENT PLANT ROOF IMPROVEMENTS

Date: February 12, 2026

FROM: **Slateco, LLC**

TO: **White Salmon, Washington**

Date of Completion	Contract Amount		Date of Estimate	
Original: January 2, 2026	Original Amount of Contract:	$ 736,428.75	From:	February 6, 2026
Revised: February 10, 2026	Change Orders: (+ or -)	$ 101,680.48	To:	February 12, 2026
On Schedule: ■ Yes ☐ No	Current Contract Amount	$ 838,109.23		

Item No.	CONTRACT ITEMS Description	BID PRICES Qty.	Unit	Unit Price	PREVIOUS Qty.	PREVIOUS Amount	THIS PERIOD Qty.	THIS PERIOD Amount	TOTAL TO DATE Qty.	TOTAL TO DATE Amount
Base Bid										
1	Mobilization	All Req'd	LS	$62,000.00	100%	$62,000.00	0%	$0.00	100%	$62,000.00
2	Record Drawings (minimum bid $1,000)	All Req'd	LS	1,000.00	100%	1,000.00	0%	0.00	100%	1,000.00
3	SPCC Plan	All Req'd	LS	500.00	100%	500.00	0%	0.00	100%	500.00
4	Removal of Structures and Obstructions	All Req'd	LS	46,000.00	100%	46,000.00	0%	0.00	100%	46,000.00
5	Slow Sand Filter Roof Raise and Replacement	All Req'd	LS	385,000.00	100%	385,000.00	0%	0.00	100%	385,000.00
6	Lighting System	All Req'd	LS	30,000.00	100%	30,000.00	0%	0.00	100%	30,000.00
Additive Alternative 1										
1-1	Mobilization	All Req'd	LS	$12,000.00	100%	$12,000.00	0%	$0.00	100%	$12,000.00
1-2	Replacement of Sand Filter Media	650	CY	145.00	650	94,250.00	0	0.00	650	94,250.00
1-3	Replacement of Unsuitable Sand Filter Media	70	CY	190.00	70	13,300.00	0	0.00	70	13,300.00
Additive Alternative 2										
2-1	Mobilization	All Req'd	LS	$6,000.00	100%	$6,000.00	0%	$0.00	100%	$6,000.00
2-2	Removal of Structures and Obstructions	All Req'd	LS	12,000.00	100%	12,000.00	0%	0.00	100%	12,000.00
2-3	Roughing Filter Building Roof Replacement	All Req'd	LS	23,000.00	100%	23,000.00	0%	0.00	100%	23,000.00
				Total		**685,050.00**		**0.00**		**685,050.00**

Change Orders		Qty.	Unit	Unit Price	PREVIOUS		THIS PERIOD		TOTAL TO DATE	
Change Order No. 1										
1-1	Removal of Extg Plywood Underlayment/Hatch Replace	All Req'd	LS	$15,500.00	100%	$15,500.00	0%	$0.00	100%	$15,500.00
1-2	Replace Siding on Sedimentation Basin	All Req'd	LS	4,200.00	100%	4,200.00	0%	0.00	100%	4,200.00
1-3	Additional Haul for Replacement Sand	All Req'd	LS	35,000.00	100%	35,000.00	0%	0.00	100%	35,000.00
Change Order No. 2										
2-1	Additional Electrical Work	All Req'd	LS	8,510.00	100%	8,510.00	0%	0.00	100%	8,510.00
2-2	Scraping of Sand Prior to Replacement	All Req'd	LS	3,800.00	100%	3,800.00	0%	0.00	100%	3,800.00
Change Order No. 3										
3-1	Sales Tax Increase from 7.5% to 7.6% *(Informational Only - *added to contract)*			269.93						
3-2	Fence Repair	All Req'd	LS	23,900.00	100%	23,900.00	0%	0.00	100%	23,900.00
Change Order No. 4										
4-1	Control Room Plywood and Vapor Barrier	All Req'd	Ls	3,400.00	0%	0.00	100%	3,400.00	100%	3,400.00
				Total All Change Orders		**$ 90,910.00**		**$ 3,400.00**		**$ 94,310.00**

Materials on Hand:	Qty.	Unit	Unit Price	PREVIOUS Qty.	PREVIOUS Amount	THIS PERIOD Qty.	THIS PERIOD Amount	TOTAL TO DATE Qty.	TOTAL TO DATE Amount
			Total Materials on Hand		**$ 0.00**		**$ 0.00**		**$ 0.00**
			TOTAL WORK COMPLETED AND MATERIALS ON HAND		**$ 775,960.00**		**$ 3,400.00**		**$ 779,360.00**

SUMMARY

	PREVIOUS	THIS PERIOD	TOTAL TO DATE
1. Amount Earned	**$ 775,960.00**	**$ 3,400.00**	**$ 779,360.00**
2. Amount Retained 5%	**$ (38,798.00)**	**$ (170.00)**	**$ (38,968.00)**
3. Sales Tax (7.5%) **Work Performed & Materials Purchased Prior to January 1, 2026*	**$ 36,159.75**	**$**	**$ 36,159.75**
4. Sales Tax (7.6%) **Work Performed & Materials Purchased After to January 1, 2026*	**$ 22,331.08**	**$ 258.40**	**$ 22,589.48**
5. Liquidated Damages	**$ 0.00**	**$ 0.00**	**$ 0.00**
Amount Due for Payment	**$ 795,652.83**	**$ 3,488.40**	**$ 799,141.23**
Amount Due for Payment this Estimate		**$ 3,488.40**	
Estimated % Job Completed:	100%		