Local Road Safety Plan

City of Sequim, WA

Prepared by Cityof Sequim

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1 Introduction

The City of Sequim is dedicated to addressing systemic transportation safety risk factors by modifying and improving citywide transportation networks for users of all modes, ages and abilities.

The City's commitment is to people-oriented travel, including vulnerable active transportation users of all ages and abilities. The City of Sequim seeks to reduce the total number of crashes and the severity of crashes that do occur. In order to address transportation safety more effectively, Sequim has created a Local Road Safety Plan (LRSP) which uses a data-based, proactive approach to identifying potential safety concerns. In addition to guiding spot treatments, the LRSP allows the City to identify systemic improvements to the transportation network addressing historical crashes and proactively mitigating future crashes.

2 Implemented Safety Projects

The City of Sequim has a history of working to improve the safety of the City's roadways and active transportation facilities. Safety is and has been an intentional consideration in the selection of improvement projects.

The City's recent and current transportation safety improvement projects include the following:

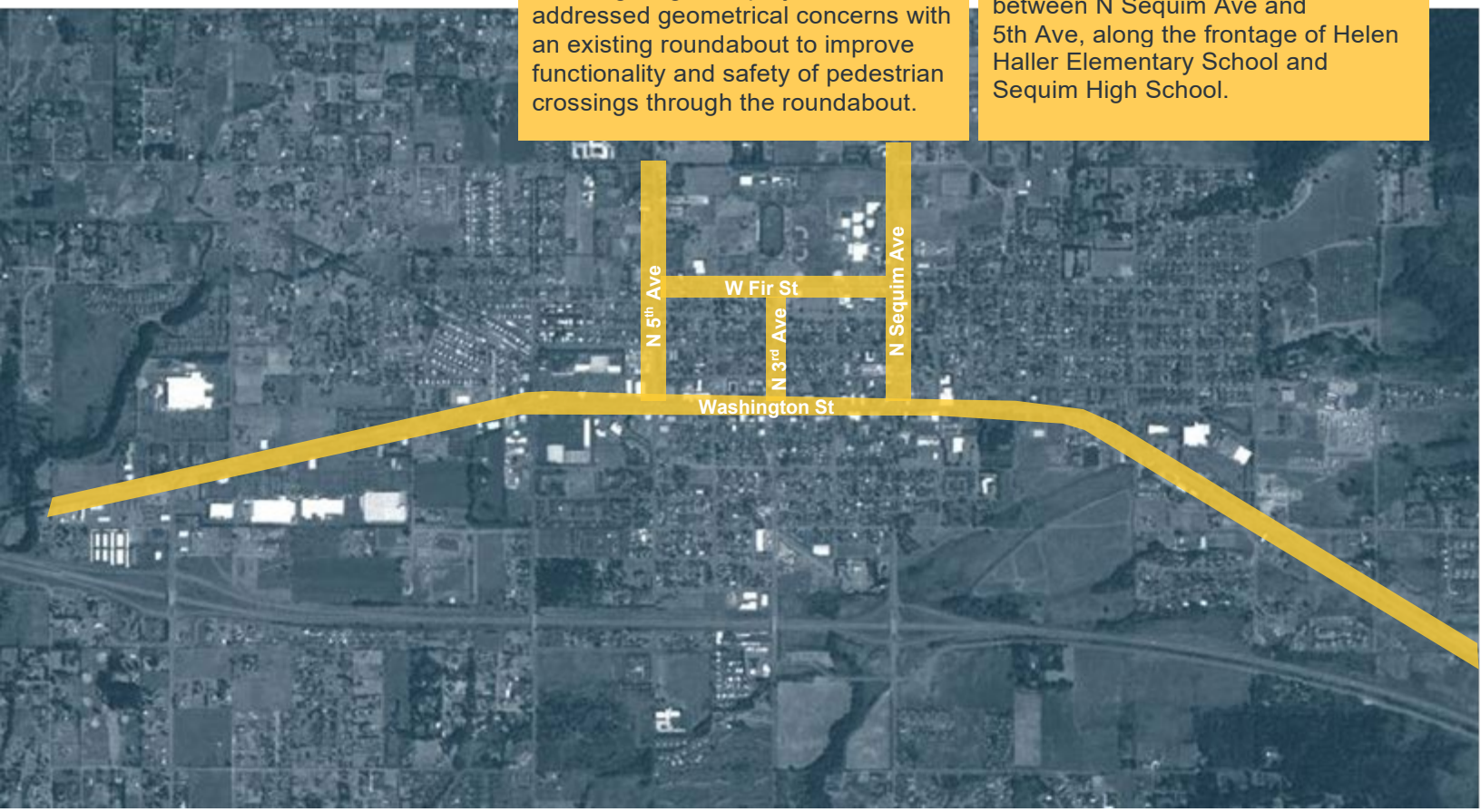
Systemic Signalized Intersections & Pedestrian Safety Improvements
Phase 1 of this project is slated for completion in 2026 and will provide safety improvements to 3 signalized intersections along Washington St including leading pedestrian intervals, blank out reds, and flashing yellow arrows. Crosswalk enhancements will be made along 7th Ave, 3rd Ave, and Hendrickson Rd including high visibility crosswalk markings, signing, and rectangular rapid flashing beacons.

N Sequim Avenue Sidewalk and Bike Lanes
Completed in 2024, this project provided northbound and southbound paved bike lanes, ADA compliant concrete sidewalks on both sides of the street, new beacon-protected crossings, landscaped buffers, and street lighting. The project also addressed geometrical concerns with an existing roundabout to improve functionality and safety of pedestrian crossings through the roundabout.

2025 Curb Ramp Replacement
This city-wide project replaced 61 deficient curb ramps to address pedestrian safety concerns and improve accessibility for individuals with disabilities.

Washington Street Traffic Signal Improvements
A spring 2023 project addressed signal coordination and detection at select intersections along Washington Street and 5th Avenue. The signal coordination effort was identified to improve traffic flow, which can have a positive impact on rates of congested-related risk factors like rear end crashes.

W Fir St Rehabilitation
Fir Street was recently improved to add wide sidewalks, marked bike lanes, planter strip buffers, high comfort crossings and illumination between N Sequim Ave and 5th Ave, along the frontage of Helen Haller Elementary School and Sequim High School.



3 Local Road Safety Plan Process

Analysis

The City of Sequim's Local Road Safety Plan follows a process developed by the Federal Highway Administration (FHWA) and promoted by WSDOT to proactively identify and address safety concerns based on crash data. Transpo Group, on behalf of the City of Sequim, analyzed crash data summaries and reports to identify and prioritize risk factors. Crash analysis includes a statistical look at the rate that certain contributing factors were cited in crashes, as well as a spatial examination of the locations and groupings, or clusters, of crashes. Risk factors are prioritized by the number and severity of associated crashes. Consideration was given to the impact of crashes and risk factors on historically underserved or vulnerable populations in the City of Sequim. The City's transportation network and existing facilities were analyzed considering the risk factors and equity analysis to identify effective countermeasures and a balanced, city-wide program of prioritized systemic improvements.

Data Sources

Data for the City of Sequim's Local Road Safety Plan comes from WSDOT resources, which are coordinated with the Washington State Patrol and the local Sequim Police Department and Clallam County Sheriff's Office through the SECTOR system. The data for the LRSP is limited to a 5-year study period, January 1, 2020, through December 31, 2024. WSDOT verifies and calibrates crash data on a calendar year basis, therefore only data through the end of 2024 is included in the plan. Future updates to the plan will include a revised 5-year window and a historical comparison to identify trends or changes in crash frequency or severity.



4 Existing Transportation Infrastructure

Streets

The City's street system forms the backbone of the transportation network, and shapes how the community navigates the built environment. Most of Sequim's streets were designed with vehicular mobility as the primary objective, with less amenities focused on more vulnerable users such as pedestrians and bicyclists. One of the main streets in the City is Washington Street. Before the construction of US Highway 101 to the south, Washington Street was formerly a state highway. Now it acts as a main roadway providing access to many of the City's commercial land uses. US Highway 101 separates the downtown core from Sequim's suburban residential neighborhoods which take the form of sprawling cul-de-sacs nestled in the hills.

There are 54 miles of public streets inside Sequim's city limits, surrounded by several more miles of pedestrian and bike paths including the Olympic Discovery Trail. Some streets are furnished with curb, gutter, sidewalk and lighting, but there are also a number of streets, especially in the South Sequim area, with no defined curb or active mode facilities where all modes mix on low speed, low volume roadways. There are marked bike lanes on N Sequim Avenue (both sides) from E Fir to Old Olympic Hwy roundabout, N 5th Avenue (both sides), and on N 7th Avenue (both sides). Paved separated paths can be found along W Hendrickson Road, N Priest Road, and W Brackett Road. Multiple traffic calming measures and high visibility pedestrian crossings are installed on Washington Street.

Sequim considers each street and its role or function within the context of the overall transportation network using a functional classification system. This system identifies the role of each street along with its planned future size and profile. Selected streets in Sequim are designated as freight routes to minimize the impact that large trucks have on already strained intersections like Sequim Avenue and Washington Street.

Sequim's Roadway Functional Classifications Include
Principal Arterials
Minor Arterials
Collector Arterials
Local Streets Including Residential, Local Access, And Shared Streets

In addition to their specific functional classifications, Sequim envisions a future network of Layered Street typologies that includes Boulevards, Urban Avenues, School Connections, Rural Transitions and Local Streets complimented by alleyways. The Layered Network plans the City's transportation network as a complete system that meets the needs of all users.

4 Existing Transportation Infrastructure



Location of intersections with traffic signals



Location of roundabouts

Intersection Control

The majority of the City's intersections are controlled by 2 or 4-way stop signs. The City owns eight (8) traffic signals, located on Washington Street and 5th Ave at the following intersections;

- N 5th Avenue and W Hendrickson Road
- N 5th Avenue and W Fir Street
- W Washington Street and 7th Avenue
- W Washington Street and 5th Avenue
- W Washington Street and 3rd Avenue
- Washington Street and Sequim Avenue
- W Washington Street and N Priest Road
- E Washington Street and Lee Chatfield

Three roundabouts are located within the City of Sequim street network, located at:

- N Sequim Avenue/Sequim Dungeness Way and Old Olympic Highway along the northeastern City limits
- Washington Street at River Road
- Washington Street at S. 9th Avenue

Active Transportation

Sequim's transportation system is "designed to move people and goods, not just cars and trucks" as cited in the City's Transportation Master Plan. Consideration is given to the development of multimodal options and the safety of pedestrians and the City's growing number of cyclists through a number of planning efforts and programmatic strategies such as the City's recently adopted ADA Transition Plan, the development of the Layered Network described in its Transportation Master Plan, and its commitment to maintaining its Bronze level "Bicycle Friendly Community" status, awarded by the League of American Bicyclists.

Sequim's location on the Olympic Peninsula places it near Olympic National Park recreation facilities and the Olympic Discovery Trail bisects the City, approaching from Sequim Bay to the east and continuing west to the City of Port Angeles with access to the Hurricane Ridge Visitor's Center in Olympic National Park. The City's gridded downtown network is also conducive to higher rates of active mode for access to businesses, services and recreation opportunities. Some of the City of Sequim's lower volume residential roadways have, historically, been used as shared spaces by drivers and those using active transportation. The City's recent projects have included several improvements to crossings and linear active mode facilities and the City intends to continue to seek funding partnerships to leverage local funds and grow the City's high comfort active mode network.

Transit

Sequim is connected to the region by Clallam Transit Interlink and Route 30 commuter service. Transit services are available weekdays and Saturdays. Interlink service is available on demand from 8:30am to 4:40pm within the designated service area without need for additional eligibility. Route 30 provides fixed route service between Port Angeles and Sequim between 6:45am and 10:05pm Monday through Friday and between 8:50am and 8:30pm on Saturdays with headways ranging from 30-60 minutes. Clallam Transit also provides Strait Shot Bus Service (Port Angeles to Kingston Ferry) with a stop in Sequim and Route 50 to Jamestown. Jefferson Transit also provides #8 Sequim Route from Port Townsend to Sequim.

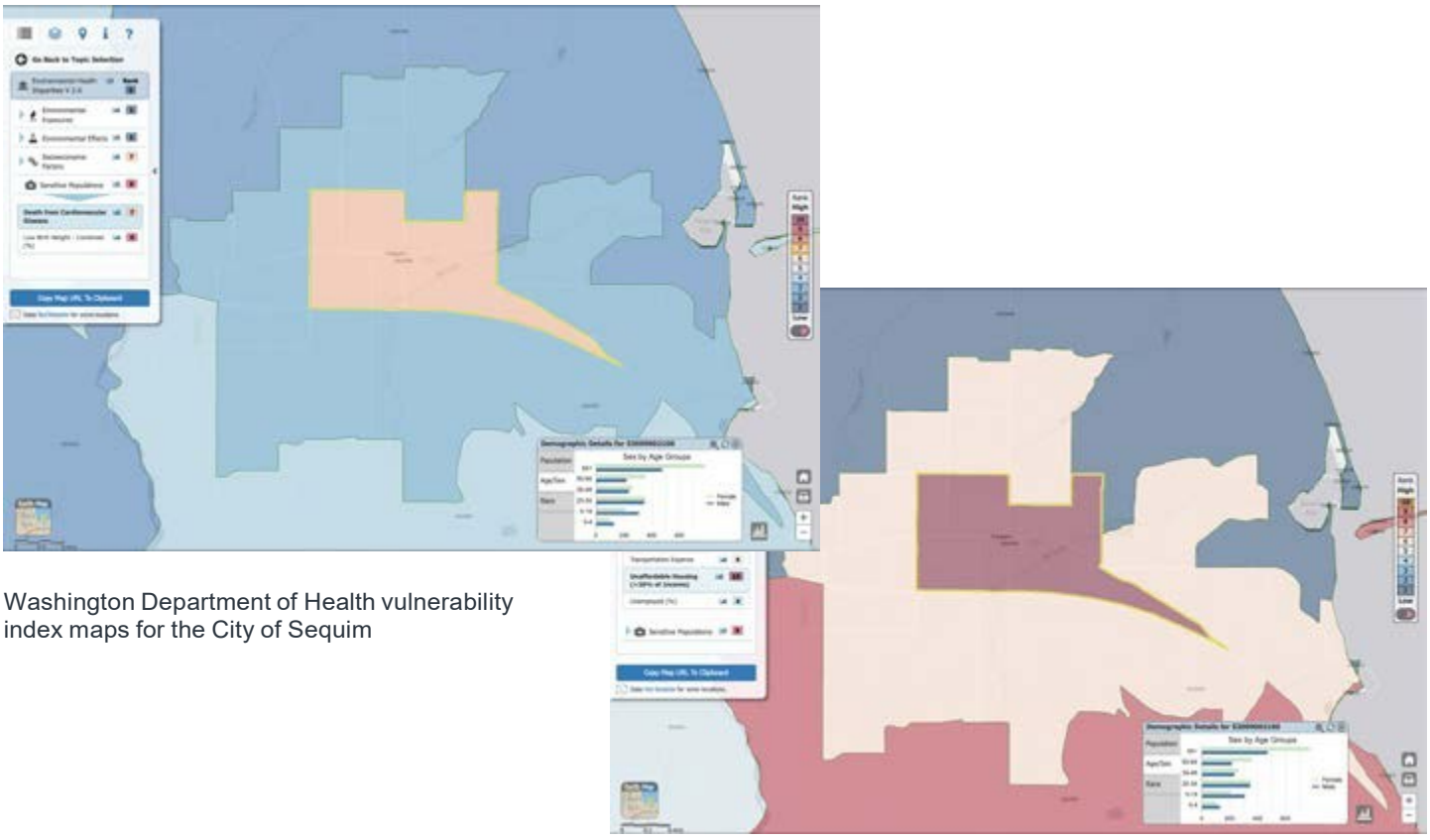
Rideshare and taxi services are very limited in the City and are not considered a viable option for most trips within the City.

5 Equity Analysis

A high-level equity analysis was performed to determine if there are disadvantaged groups or priority populations that are more heavily impacted with a higher rate or severity of crashes. The equity analysis was also performed to inform the location of projects, to ensure that areas of potentially historical underinvestment were strongly considered for systemic, data-based safety countermeasure projects. Equity data was obtained from the Washington State Department of Health and the US Census and 2023 American Community Survey. Maps depicting equity data are included in the appendix and excerpts are shown below.

The Department of Health's vulnerability indices maps identify areas based on census tracts that have higher potential for disproportionate impacts from various environmental and socioeconomic factors. Because of Sequim's relatively low population, the granularity of the data is not very specific, as there are only two census tracts that cover the majority of the City. The central census tract, covering an area roughly from 7th Avenue to Blake Avenue and Hendrickson Road to US 101 indicates high vulnerability to several social factors. A high percentage of population over 65, with a disability, and lower median household incomes are the basis of the vulnerability. Additionally, a high risk for populations without access to a private vehicle is present in the central census tract, indicating a need to prioritize safety factors related to active mode transportation. Environmental vulnerabilities across Sequim are low and primarily relate to the income levels identified in the social risk index.

The data for the American Community Survey, conducted in 2023, are slightly more granular, with four sub-blocks within the census tract in central Sequim. The ACS data reinforce that in the area bounded by 7th Avenue, Sequim Avenue, Washington Street and US 101, high percentages of populations over 65 years of age, and with low household incomes will require special focus on the impacts of crashes that could disproportionately affect those populations.



Washington Department of Health vulnerability index maps for the City of Sequim

6 Crash Data Summary

During the 5-year study period (2020-2024), the total number of crashes on City roads was 377. Of those collisions, 10, (2.7 percent) resulted in a serious injury or fatality (F/S), of which 3 involved pedestrians in marked crosswalks, 2 crashes involved bicyclists using the roadway, and 1 crash involved a bicyclist using the shoulder. Table 1 Displays the total and F/S crashes for each of the years in the 2020-2024 period compared to the total and F/S crash rates for the previous five-year period.

The total number of crashes was 10 percent lower in the current 5-year (2020-2024) period than the previous 5-year period (2015-2019). The number of crashes that resulted in a serious outcome (F/S) increased by 200% compared to the previous 5-year period. The one fatal crash in Sequim in the last 10 years of data occurred in 2020 in a marked crosswalk. While the current five-year period shows an increase in fatal and serious injury crashes, it is not necessarily indicative of an overall long-term trend in total crashes within the City.

Table 1. Summary of all Crashes, Highlighting Serious Injury and Fatal Outcomes

	2020	2021	2022	2023	2024	Most recent 5-Year Period 2020–2024	Previous 5-Year Period 2015–2019
Fatal Crashes	1	0	0	0	0	1 (0.3%)	0
Serious Injury Crashes	0	2	1	4	2	9 (2.4%)	3 (0.7%)
Total Crashes	73	72	69	81	82	377	421

Source: WSDOT, November 2025
Note: Table does not include data for US 101

7 Crash Data Statistical Analysis

The summary data for reported crashes on City roads was compared to statewide and western Washington crash statistics to identify overrepresented causes of crashes related to the transportation user (drivers, cyclists, and pedestrians) and the transportation environment (roadway geometry, characteristics, enhancements, etc.). Contributing factors or conditions which were cited in severe injury or fatal (F/S) crashes within Sequim are identified. Crash data statistical analysis includes targeted research into the causes related to the transportation user, and the transportation environment that are contributing to crashes. Identifying trends in the historical data can help to identify a systemic, prioritized approach of countermeasures to proactively address future crashes. While the focus of the LRSP is on crashes with severe injuries or fatalities, in order to avoid any statistical bias that could miss larger crash trends, the data for all crashes was analyzed for over-representation of contributing factors.

WSDOT crash data is separated between western, eastern and all-state data due to the general differences in size and layout of cities in the two halves of the state. The crash data for all cities is provided. The crash data for Sequim is in many instances similar to or lower than that of other cities. While crashes involving pedestrians and cyclists typically have a higher chance of resulting in fatality or serious injury, both of these crash types are cited in a lower percentage of all crashes in the City than in other comparable cities. Rates of F/S rear end crashes were cited in a lower percentage of Sequim crashes compared to other cities, as were F/S crashes involving cyclists. Crash statistics lower than comparable locations could be due to limited exposure (i.e. lower numbers of pedestrians and cyclists present on City roads compared to other locations), and positive design elements on City roads. The City's historical and ongoing efforts to address transportation safety have been effective and are represented in the crash data. Contributing factors to crashes on City streets, which do appear to be overrepresented in the data, fall into the following categories.

Pedestrian-Involved Crashes

Pedestrian-involved crashes accounted for 20 percent of the F/S crashes in Sequim, compared to 26 percent on Western Washington city streets, and 26 percent on city streets throughout Washington. Sequim F/S pedestrian crashes are about 6 percent less frequent than other cities. Total pedestrian crashes in Sequim are similar to other cities.

67 percent of total crashes involving a pedestrian, and 100 percent of serious injury or fatal pedestrian crashes happened in marked crosswalks.

Cyclist-Involved Crashes

3 percent of total crashes in Sequim involved a cyclist, of which 3 resulted in a severe outcome (severe injury or fatality). Crashes involving cyclist account for 30 percent of the severe and fatal injury crashes in Sequim, which is about 20 percent higher than other Western Washington cities. In comparison to total crashes in other jurisdictions, cyclist crashes accounted for 2 percent in other Western Washington cities, and 2 percent on all city streets in Washington. Sequim experiences a higher percentage of cyclist crashes than other cities, which could be a result of increased exposure relative to overall traffic volumes.

7 Crash Data Statistical Analysis

Active Transportation Facility Crash Relationship

The rate of pedestrians being struck in marked crosswalks in Sequim is high compared to other locations for both total and serious outcome crashes. Cyclist crashes for total crashes are comparable in Sequim to other Washington cities; however, serious outcome crash rates are significantly higher, regardless of the type of facility used. The higher percentage of cyclist crashes occurring in the roadway may indicate a smaller existing network of designated bike facilities. The percent of crashes involving these active mode facilities is shown in Table 2.

Table 2. Summary of Active Transportation Related Crashes

	% of Total Crashes			% of Serious Injury & Fatal Crashes		
	All WA City Roads	Western WA City Roads	Sequim Roads	All WA City Roads	Western WA City Roads	Sequim Roads
Pedestrian Crashes	2.9% (5,818)	3.1% (4,646)	1.3% (5)	25.2% (1,444)	25.7% (1,140)	20% (2)
Pedestrian in Marked Crosswalk	42.6% (2,756)	43.9% (2,263)	66.7% (4)	31.5% (515)	32.2% (413)	100% (3)
Bicycle Crashes	1.8% (3,713)	2.0% (3,002)	2.7% (10)	8.6% (494)	9.0% (399)	30% (3)
Cyclist using Designated Bike Route	20.4% (773)	0.9% (48)	0% (0)	20.2% (105)	22.6% (95)	0% (0)

Source: WSDOT, November 2025. Note: Table does not include data for US 101

7 Crash Data Statistical Analysis

Angle Crashes

The vast majority of all collisions during this time period in Sequim were angle type crashes. An angle type crash is one where one vehicle hits the side panel of another in a roughly perpendicular configuration. During the study period, angle crashes happened about 10 percent more frequently in Sequim than on all city roads in the state, and about 11 percent more than in other west-side cities. Severe outcomes resulting from angle crashes were reported 6 to 8 percent less frequently than other locations as shown in Table 3.

Table 3. Summary of Angle Crashes

	% of Total Crashes			% of Serious Injury & Fatal Crashes		
	All WA City Roads	Western WA City Roads	Sequim Roads	All WA City Roads	Western WA City Roads	Sequim Roads
Angle Crashes	39.7%	38.6%	50.1%	28%	26.4%	20%

Source: WSDOT, November 2025. Note: Table does not include data for US 101

Rear End Crashes

The second most frequent crash type in Sequim, rear end crashes, occurred at a slightly higher rate than other locations for crashes of all outcomes, but at lower rates for severe crashes, summarized in Table 4. Sequim's increased rate of rear end crashes is indicative of congestion, especially on Washington Street, and could also be a consequence of the concentration of Sequim's traffic volumes on Washington Street.

Table 4. Summary of Rear End Crashes

	% of Total Crashes			% of Serious Injury & Fatal Crashes		
	All WA City Roads	Western WA City Roads	Sequim Roads	All WA City Roads	Western WA City Roads	Sequim Roads
Rear End Crashes	17.4%	17.4%	19.6%	4.2%	4.3%	0%

Source: WSDOT, November 2025. Note: Table does not include data for US 101

8 Crash Data Spatial Analysis

Location of Crashes

The City of Sequim obtained crash-by-crash data from SECTOR and WSDOT public records for reported crashes during the study period in Sequim, including coordinates, to produce maps of crash locations and reported contributing circumstances. Mapping of crash data allows for identification of patterns by physical location and by the roadway environment. The spatial analysis compliments the statistical analysis and helps to identify specific risk factors for future crashes. A selection of the maps generated, matched to the analyses below, are included in the Appendix.

Angle Crashes

Analysis of angle crashes revealed that intersections most frequently associated with high rates of both all angle crashes and F/S angle crashes were those with two-way stop controls. Along several corridors in the City, angle crashes occurred during the study period at nearly every intersecting roadway. The regularity of the crashes at each intersection indicates that there may be a systemic concern that is contributing to an increased crash risk for intersections in these corridors.

Three corridors were specifically targeted for further analysis and potential improvement:

- N 5th Avenue from Washington Street to W Hendrickson Road
- Spruce Street from N 3rd Avenue to N Brown Road
- W Maple Street from S 3rd Avenue to S Sunnyside Avenue

Rear End Crashes

Over 85% of the rear end type crashes occurred on or within 1 block of Washington Street, and an additional 5% occurred at signalized intersections on 5th Avenue. Analysis of rear end crash locations showed clusters of crashes along Washington Street, with concentrations at 7th Avenue, 5th Avenue, and Sequim Avenue. Additional locations with lesser concentrations of rearend crashes include W Hendrickson Road and N 5th Avenue, Washington Street at S Prairie Road, and the SR 101 interchange at River Road. Because the rear end crashes were concentrated in the signalized intersection corridors, the likely cause is congestion due to the signal operations. The lack of severity of rear end crashes in Sequim, combined with the spatial location in the signalized corridors makes rear end crashes a lower priority for countermeasure projects.

Active Mode Crashes

S Sequim Avenue from E Maple street to E Fir Street had the highest number of active mode crashes. Other locations with higher concentrations of pedestrian and cyclist involved crashes included Washington Street, N 5th Avenue, and River Road. A fatal pedestrian crash happened in the mid-block marked crosswalk located on E Maple Street, east of S Sequim Avenue. Failure to use the crosswalk was cited as a contributing factor in the serious injury pedestrian crash that occurred at 7th Street and W Washington Street. Serious injury crashes occurred on 5th Avenue and River Road involving cyclists with failure to signal and non-motorist on the wrong side of the road listed as contributing factors. There was also a serious injury crash involving a cyclist on S 7th Avenue with improper passing listed as a contributing factor.

8 Crash Data Spatial Analysis

Location of Crashes

Using information gathered from the City of Sequim's Transportation Master Plan, crashes were spatially mapped and compared to volumes on roadway segments throughout the City. Maps depicting the crash rate spatial analysis can be found in the appendix. Information gathered on crash rates through the spatial analysis informed the selection of project locations for countermeasures.

Spatial data and analysis on the concentration of crashes and rates of crashes in certain areas of the City contributed to the prioritization and location of projects identified in Chapter 10.

Crash Concentration

Washington Street had the highest concentration of crashes, which is not an unexpected result given the roadway's classification, importance to the City's transportation network and overall traffic volume. The highest rates of crashes on segments of Washington Street occurred between River Road and Sequim Avenue. The least concentration of crashes on Washington Street occurred between West Sequim Bay Road and Simdars Road.

Other segments with significant crash concentration included E Washington from Sequim Avenue to Blake Road, S Sequim Avenue, 7th Avenue north and south of Washington Street, W Hendrickson Rd, Spruce Street from 7th Avenue to Sequim Avenue, S 3rd Avenue, and River Rd from Washington Street to Hwy 101.

Crash Rate by Volume

The crash concentration rates calculated were evaluated against the traffic volumes on non-local roads (i.e. collectors and arterials). For each roadway segment, the total crashes was divided by the volume to obtain a normalized crash rate. Using this methodology, the roadway segments in the City with the highest crash rate by volume were not located on Washington Street.

The segments with the highest crash rates include;

- 3rd Avenue from Spruce Street to Washington Street and from W Pine Street to Dominion Terrace
- Spruce Street between N 3rd Avenue and N Brown Road
- E Washington Street between West Sequim Bay Road and Simdars Road
- W Prairie Street from Sequim Avenue to 3rd Avenue

Washington Street between River Road and Sequim Avenue, as well as remained higher than the average of crash rates, but were not as high in crash rate as the other listed segments. Areas of the City to the southwest of the intersection of Sequim Avenue and Washington Street tended to have lower overall crash rates than other areas of the City.

9 Risk Factors

Based on a combination of the statistical and spatial analysis of the crash data for Sequim, the following risk factors were identified. **The risk factors are presented in order of priority for the City and will guide the City's implementation of countermeasures in a proactive effort to reduce the risk and severity of future crashes.** The priorities are based on the data and spatial analysis, including the equity analysis, and consideration of the most vulnerable users to severe outcomes of crashes on Sequim's multimodal transportation network.



Pedestrian Crashes

A focus on pedestrian-related crashes is the highest priority risk factor. Sequim's demographics and equity analysis reinforce the need to address pedestrian concerns as there is a high percentage of the City's population that does not have access to a vehicle, or who otherwise rely on active modes as their primary form of transportation.

The countermeasures for pedestrian crashes include proactive measures that address risks at signalized intersections, as well as at uncontrolled crossing locations.



Angle Type Crashes

Angled type crashes represent a large percentage of the crashes at stop controlled, uncontrolled and signalized intersections in the City. The rate of angled crashes is prevalent on routes that are local alternatives to Washington Street and other arterials. Angled crashes are also a risk at midblock locations at driveway access points and uncontrolled cross streets.

Countermeasures for angled crashes include modification of intersection control, and access control on higher volume roadways.



Rear End Crashes on Signalized Corridors

Washington Street has the highest concentration of rear-end crashes associated with drivers following one another too closely, and congestion on the road. Additional concentrations of rear end crashes have occurred near signals on 5th Avenue.

Countermeasures would be upgrading traffic signal equipment, and improving timing and phasing along Washington Street to help reduce congestion and allow for additional safety measures to address angle crashes and pedestrian crossings.



Speed Related Crashes

A lower priority risk factor based on the data, but a compounding factor for all crash types, especially those involving vulnerable active mode users, is the speed of vehicles. The crash data did not highlight speed as a significant factor in crashes except on Brownfield Road.

A countermeasure would be to perform a citywide assessment of posted speed limits by indemnifying areas with speeding issues, while accounting for multimodal activity levels and the adjoining land uses.

10 Transportation System Improvements

Countermeasures

Countermeasures are the actions, including engineering, enforcement, and education, that Sequim can proactively take to address the risk factors identified through the crash data analysis. To identify programs that could address the risk factors for future crashes, a full range of potential countermeasures was evaluated. Some countermeasures are unfeasible due to constraints on maintenance resources. For example, projects involving significant amounts of thermoplastic roadway paint that would need to be maintained long-term were removed from consideration. Projects that would introduce a large number of additional signage were removed from consideration for both the aesthetic concerns of stakeholders and worries of creating “sign fatigue” considering the short block lengths in most of the City.

The effectiveness of countermeasures was evaluated using several sources including the National Highway Traffic Safety Administration’s Countermeasures that Work publication, Washington’s Target Zero plan, and FHWA’s Crash Modification Factor (CMF) Clearinghouse website. The cited resources help to identify not only potential projects but provide research-backed documentation of the anticipated effectiveness of treatments on reducing crash rates.

For the City’s projects addressing intersection control, the CMF Clearinghouse research indicates that converting two-way stop-controlled intersections to mini-roundabouts can reduce crashes by up to 61 percent.



10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 1:
Citywide Crosswalk Enhancement Program
Improvement of crosswalks throughout the City would improve the safety and comfort for pedestrians, but can also improve the predictability and therefore the safety for drivers navigating crosswalk locations. Improvements would include, at a minimum, renewal and/or replacement of high visibility markings, a review of appropriate signage including any need for advanced warning signage, and use of solar powered rectangular rapid flashing beacons (RRFBs) at crossings. Other treatments including RRFBs on advanced warning signs, direct-powered RRFBs for locations with high use or vegetation coverage, or consideration of a pedestrian signal, would be on a case-by-case basis during the design phase of the program. At locations with good visibility and low vehicle volumes and speeds, high reflective markings and prominent crossing signage may be used in lieu of RRFBs, to be evaluated during project design.

Locations identified for the program include over two dozen potential locations, including;

- 7th Avenue at Spruce Street, Fir Street and Hendrickson Road, and a new midblock between Fir and Hendrickson Road - ***Currently Funded***
- 3rd Avenue at Bell Street, Maple Street, Cedar Street, Spruce Street and Alder Street - ***Currently Funded***
- 4th Avenue at Spruce Street and Alder Street
- Sequim Avenue at all intersections between Prairie and Hendrickson
- Hendrickson Road midblocks at Sequim Middle School and between 5th and 7th Avenues - ***Currently Funded***
- Fir Street at Knapman Avenue, Dunlap Avenue and Brown Road
- Washington Street at 4th Avenue, 2nd Avenue, existing midblocks between 2nd and Sequim Avenues, Sunnyside, Govan and Brown

While each of the above-listed locations would be strong candidate for improvements, the highest priority locations for the second phase of improvements would be the E Washington Street, Brown Road, 4th Avenue, and Hendrickson Road locations. The second phase would include up to 15 crossings. The scope and cost of the project includes an alternatives and site analysis to determine the warrants and locations of new midblock crossings and the feasibility of the range of potential options for crossing improvements.



Example mid-block crossing with RRFB

Estimated Project Cost:
$751,000

Anticipated Schedule
Project obligated for construction by April 2029
(dependent on grant funding awards)

10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 1:
Citywide Crosswalk Enhancement Program

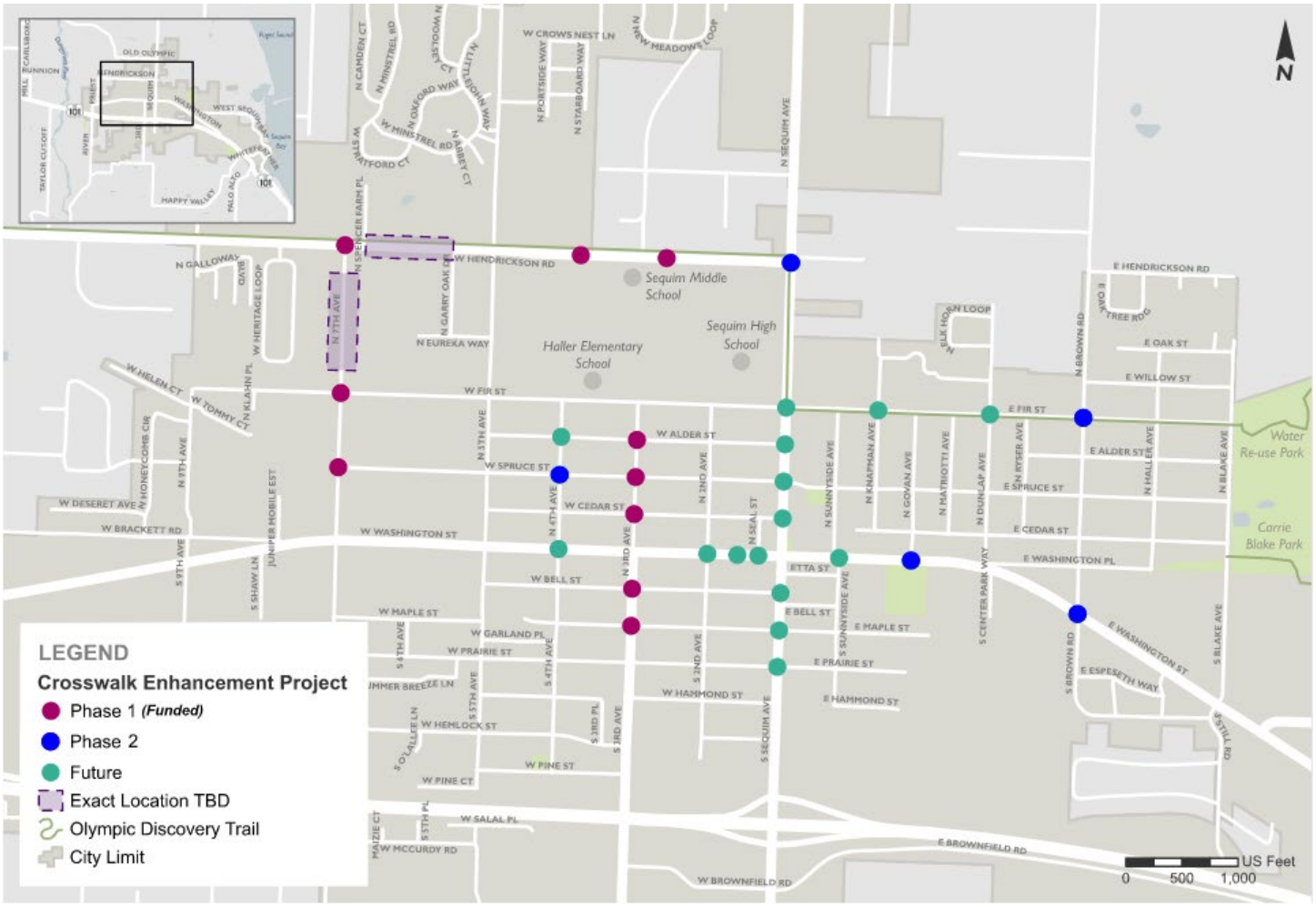


Figure 1: Location of Crossing Enhancement Projects

10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 2:
Citywide Speed Limit Study and Speed Mitigation
A citywide speed limit study would evaluate potential speed limit changes across the City's transportation network in one comprehensive effort with a single defined approach to defining speed limits. The advantage of this approach is to ensure consistency in setting of speed limits and promote safe speeds across the city.

Modern best practices from organizations like NACTO would be used in identifying a range of criteria that should be consistent in setting of speed limits, which is different than historical ways that speed limits are set, which was based on prevailing speeds. The goal of the program would be consistent speed limits to avoid driver confusion and account for other criteria beyond prevailing speeds.

While not a high priority in the City's crash data, vehicle speed is directly linked to crash severity. For those walking and biking, even a small increase in speed significantly increases the risk of serious injury and death. At higher speeds, drivers are less able to react in time and avoid crashes. Their field of vision narrows, reducing their ability to see other vehicles, people walking, or bicyclists preparing to enter or cross the road.

In addition to a citywide evaluation of speed limits, the project/program would include funding for implementation of 5 permanent, solar powered speed feedback signs to help mitigate any identified higher speed areas of concern. The specific locations for the signs would be identified during the study based on the field data on vehicle operating speeds that would be gathered as part of the Citywide study.



Estimated Project Cost:
$390,000

Anticipated Schedule
Project obligated for construction by April 2029
(dependent on grant funding awards)

10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 3:
Washington Street Access Management
Washington Street has an existing two way left turn lane that would be modified for access management of the driveways and unsignalized crossing streets in two segments. The west segment of access control would run from the roundabout at River Road to 5th Avenue. The east segment of access control would run from Brown Road to just south of Sequim Bay Road.

The form of the raised median would be a surface-mounted hardscape consisting of concrete curbing and a stamped and colored asphalt fill. Additional visibility and reflective treatments including raised pavement markers and vertical delineator posts could be used to reinforce the presence of the medians. The medians would be designed to include left turn pockets at higher volume driveways and cross streets where it is determined that access needs to remain. The determination of the specific locations of left turn pockets would be identified during the design and public outreach phase of the project.

The east segment is the higher priority for the first phase of the project due to the shorter length and skewed intersections that present visibility challenges for drivers entering and exiting Washington Street.



Figure 2: W Washington St Access Management Median Concept

Estimated Project Cost:
$1,596,000 (East segment)
$1,332,000 (West segment)

Anticipated Schedule
Project obligated for construction by April 2029
(dependent on grant funding awards)

10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 3:
Washington Street Access Management

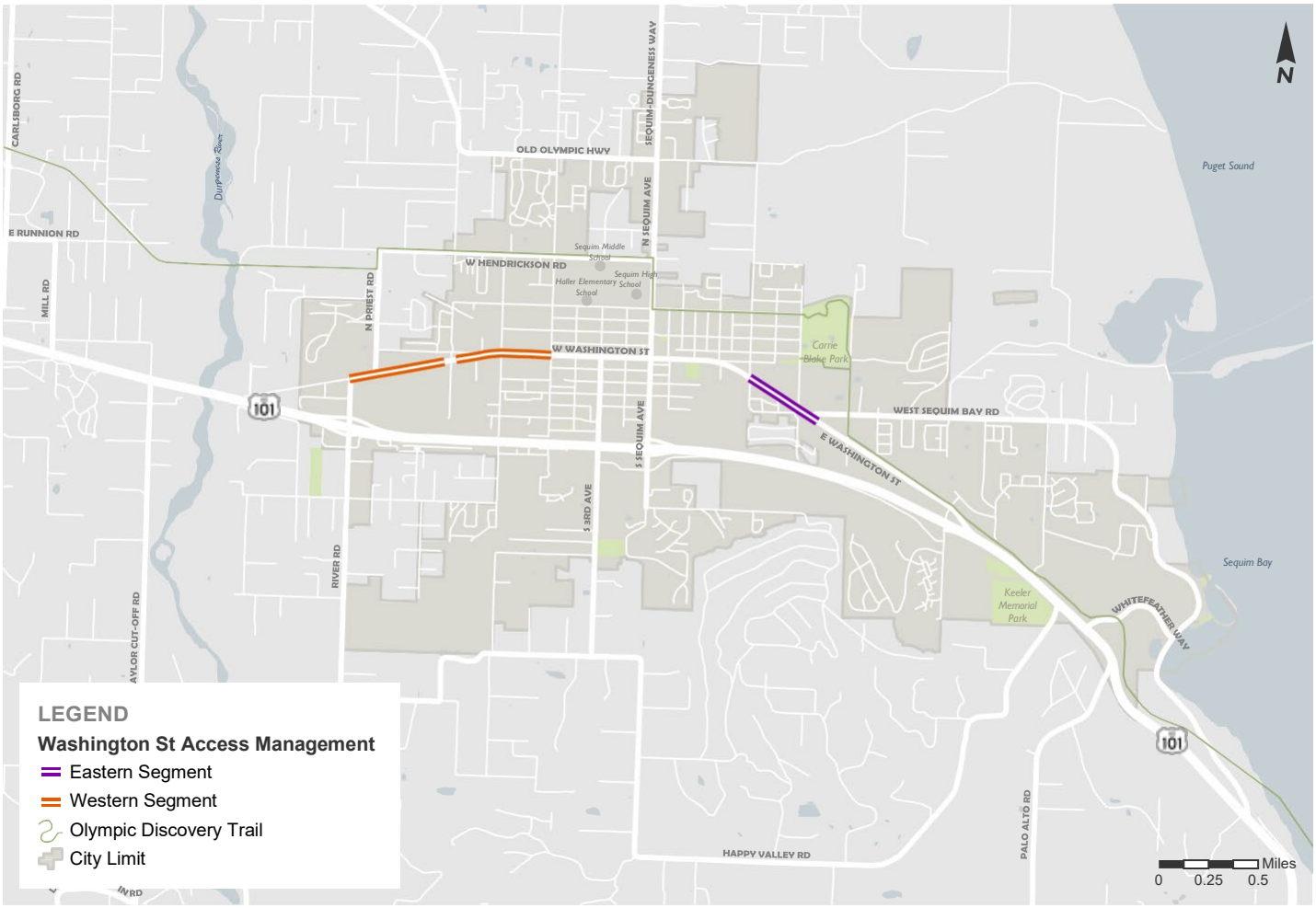


Figure 3: Location of Access Management Treatments

10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 4:
Citywide Mini Roundabout Program
To address angled crashes regardless of direction and mitigate severity of crashes that do occur at unsignalized intersections, a citywide program of mini roundabouts, replacing stop-controlled or uncontrolled intersections is proposed.

The following corridors were identified as candidates based on a combination of crash history, proactive identification of intersections with similar characteristics to those where crashes have occurred, and an equity analysis of investments and increased vulnerabilities across the City.

The corridors are presented in priority order for the program:

- Spruce Street between 5th Avenue and Blake Street—11 total roundabouts. There is a potential, based on resources, to split
- Spruce Street into two phases, east and west of N Sequim Avenue
- Prairie Street between Sequim Avenue and 5th Avenue—3 total roundabouts. The Prairie Street corridor improvements could be
- combined with other programmed City transportation improvements and are not included in the current priority focus for the project.
- 2nd Avenue between Hammond and Washington Street—4 total roundabouts with an overlap at Prairie Street
- Maple Street between Sunnyside and 4th Avenue—4 total roundabouts

In the priority corridors, a program of mini roundabouts will be implemented at 4-way intersections. Roundabouts will be installed within existing limits of pavement by constructing a center circle of doweled rolled curb with a concrete fill, and painted splitter islands. Mini roundabouts provide for circular intersection movement which has been demonstrated to improve yielding at intersections and reduce the severity of crashes that do occur. Corridor- length roundabouts can also be a traffic calming measure for both speed and volume, which is frequently a concern on residential streets near arterial roads. At each improved intersection, all existing curb ramps will be replaced to meet current ADA standards. Roundabouts will not be installed at the existing signalized intersections.

Concepts for a mini roundabout that would be feasible within a typically sized intersection in the identified corridors is included in the Appendix. The specific design of each mini roundabout would be completed as part of the design of the project, if funded.

Mini roundabouts could also be constructed at other 4-way intersections across the City where a combination of traffic speed and volume calming and intersection control are a risk factor.
The specific locations for future phases of mini roundabout implementation would be identified in future editions of the LRSP.

Estimated Project Cost:
$1,773,000

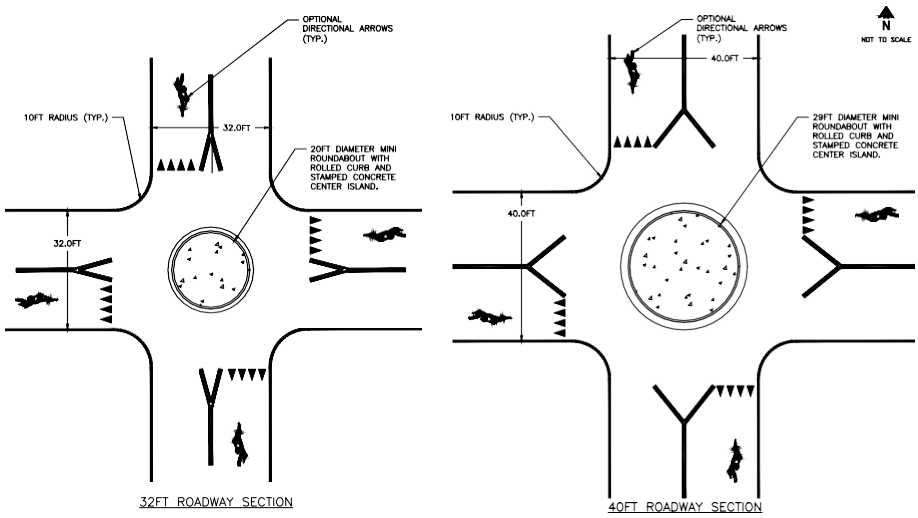
Anticipated Schedule
Project obligated for construction by April 2029
(dependent on grant funding awards)



10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 4:
Citywide Mini Roundabout Program



Mini Roundabout Conceptual Layouts

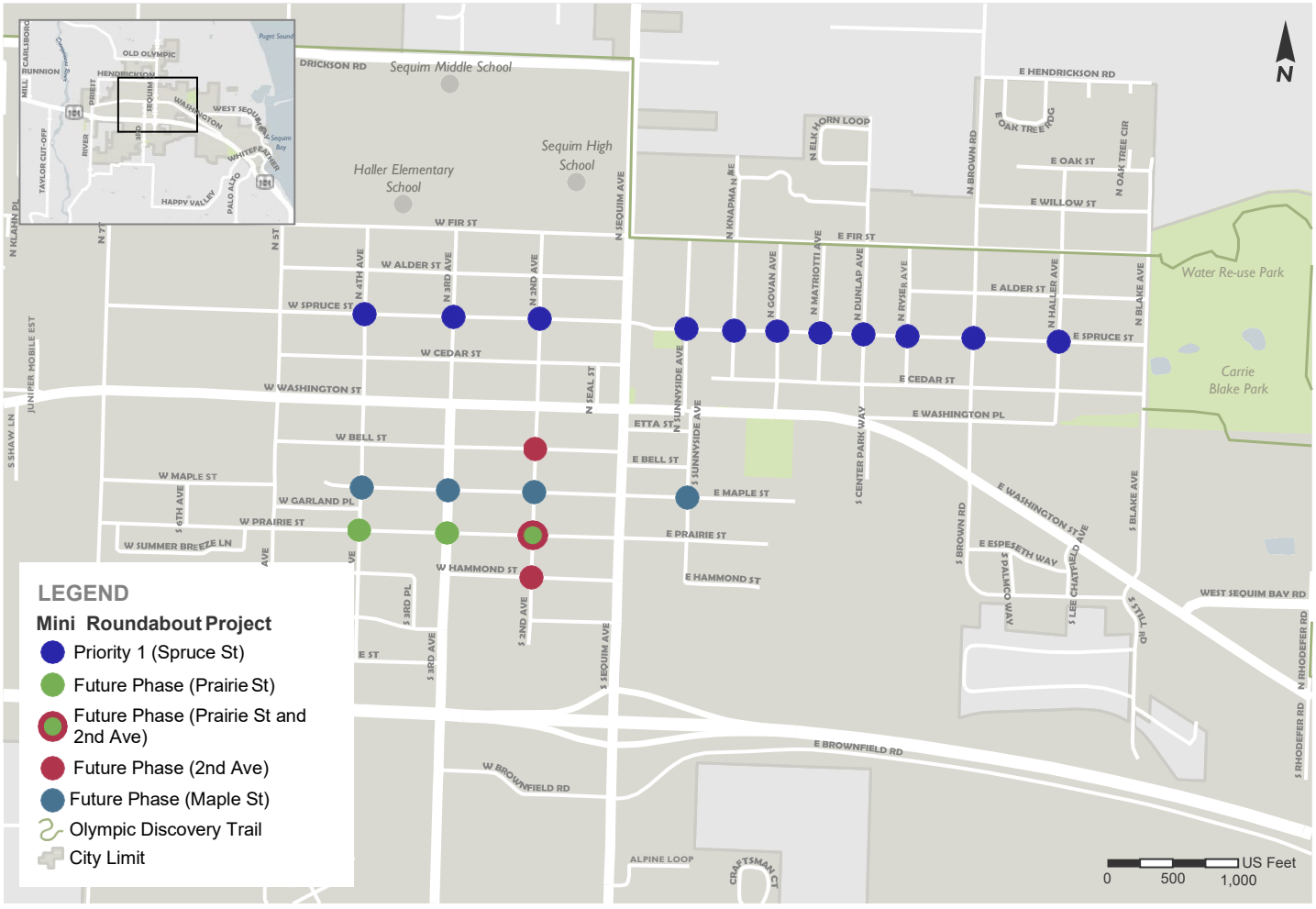


Figure 4: Proposed Mini Roundabout Locations

10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 5:
Citywide Signal Equipment Upgrades
The City of Sequim owns and operates eight signals across the City. At seven of the signals, replacement of the existing signal cabinets would address maintenance concerns, improve outdated equipment, and allow for implementation of several signalization operational improvements that have limited additional cost or physical modification requirements, but can address the City's risk factors for future crashes.

The replacement of signal cabinets and equipment would occur at the intersections of:

- Washington Street with N Priest Road, 7th Avenue, 5th Avenue, 3rd Avenue, Sequim Avenue, and Chatfield Lee Avenue
- 5th Avenue with Hendrickson Road and Fir Street

The intersections of Washington Street with Sequim Avenue, 3rd Avenue and 5th Avenue are the highest priority for replacement based on City maintenance records and have been prioritized and are currently funded under the Highway Safety Improvement Program. Phase Two will include the signal cabinets replacement at Washington Street/ 7th Avenue, Washington Street/Lee Chatfield Road, and 5th Avenue/Hendrickson Road intersection. Following completion of the signal equipment upgrades, the following operational improvements could be implemented that would address risk factors for pedestrian crossings, angled crashes, and rear end crashes;

- Lead pedestrian interval at all signalized intersections would give pedestrians an additional 5-7 seconds of crossing time, increasing visibility and aiding in completing crossings during a signal phase. Pedestrian crossing speeds for timing of signal phases would also be adjusted for a slower walking speed of 3.5 ft/sec in consideration of Sequim's demographics and social vulnerability indexes.
- Flashing yellow arrow at left turns could help to improve traffic flow, reducing congestion and frustration among drivers that can lead to rear end crashes and riskier, less expected turning maneuvers that can be a risk for angle type crashes.
- Blank-out no right turn on red signage tied to pedestrian push buttons at the intersections of Washington Street with Sequim Avenue and 5th Avenue can help to mitigate conflicts between turning traffic and pedestrians in crosswalks when present.



Estimated Project Cost:
$585,000

Anticipated Schedule
Project obligated for construction by April 2029
(dependent on grant funding awards)

10 Transportation System Improvements

Engineering Safety Countermeasure Projects

Project 5:
Citywide Signal Equipment Upgrades

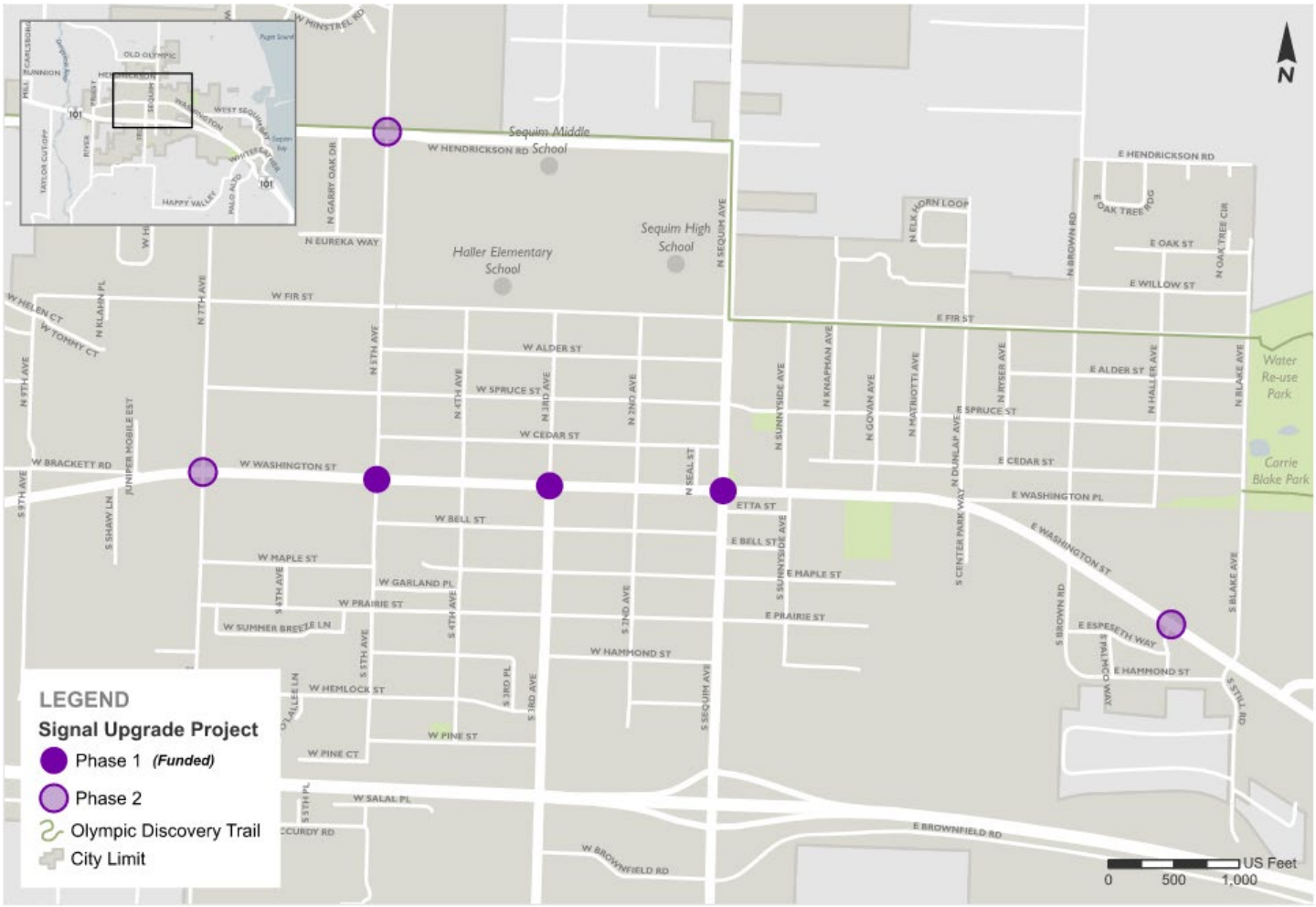


Figure 1: Location of Signal Equipment Upgrades

11 Future Updates

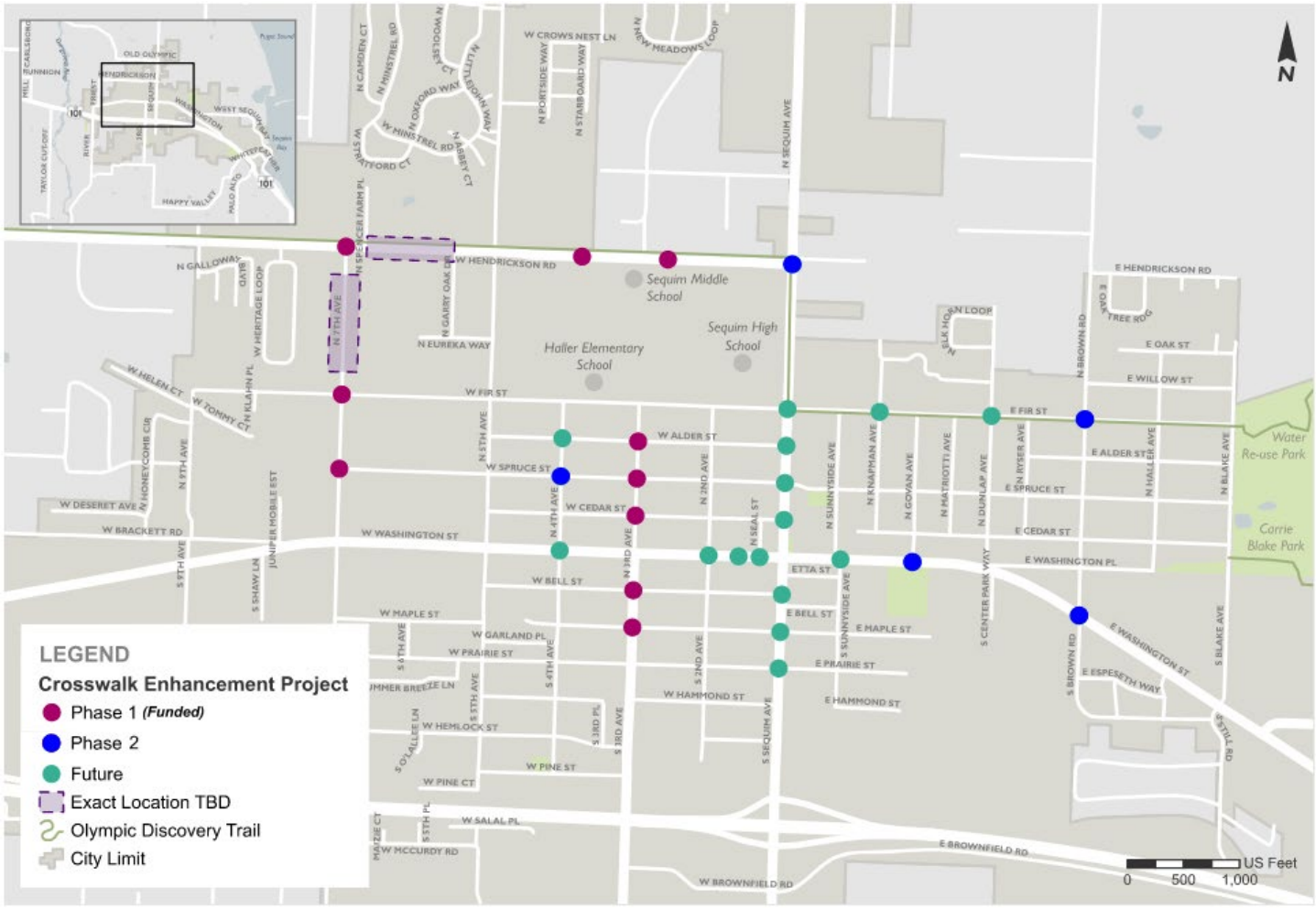
The Local Road Safety Plan is planned for future updates on a biennial basis, aligned with the WSDOT funding cycle for HSIP funding. Future updates will document projects completed and repeat the analysis of the data to identify any changes from the current analysis and risk factors.



12

Appendix A: Countermeasure Project Maps

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Appendix A



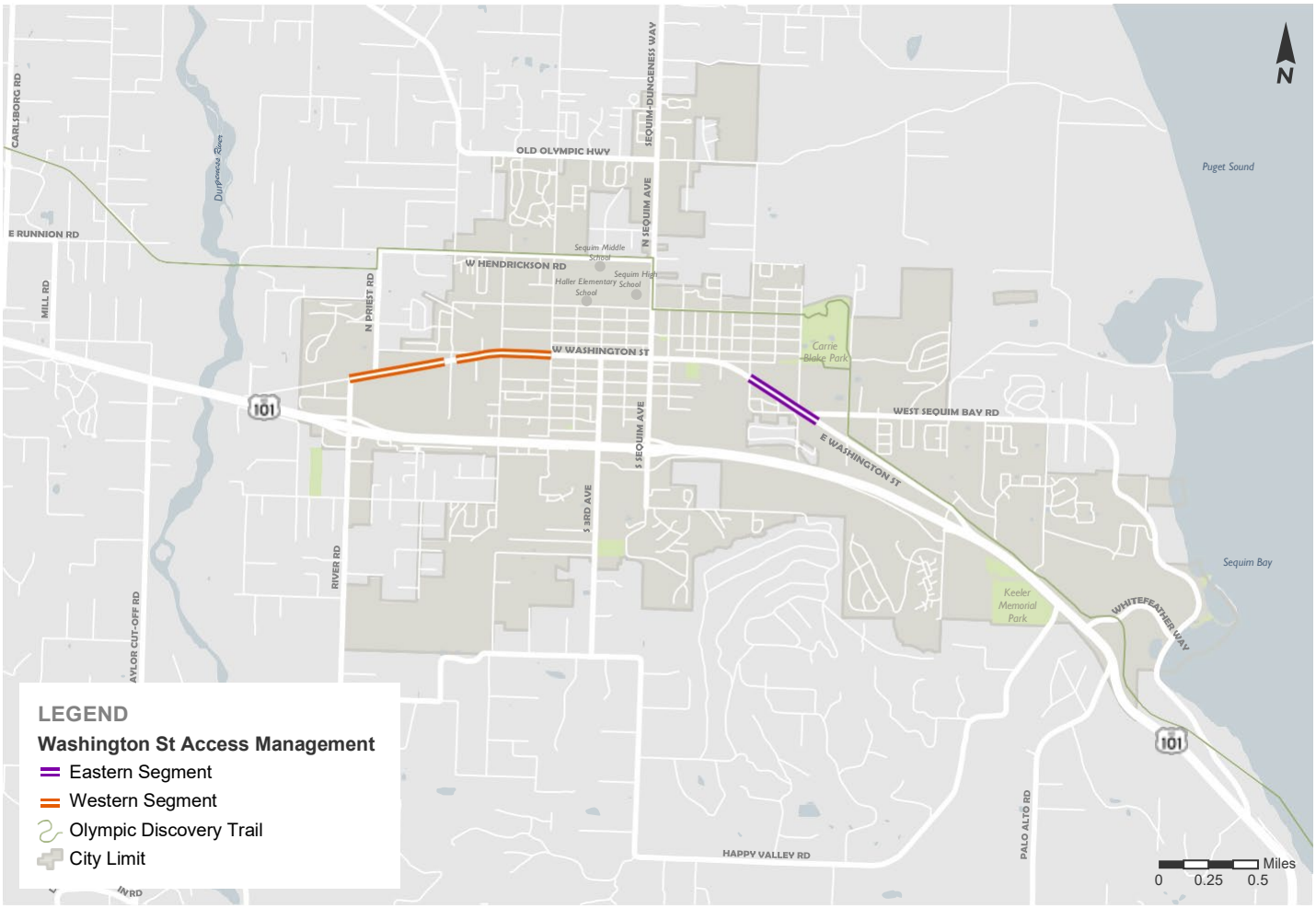
SEQUIM

Location of Crossing Enhancement Projects

City of Sequim Local Road Safety Plan

FIGURE
01

12
Appendix A

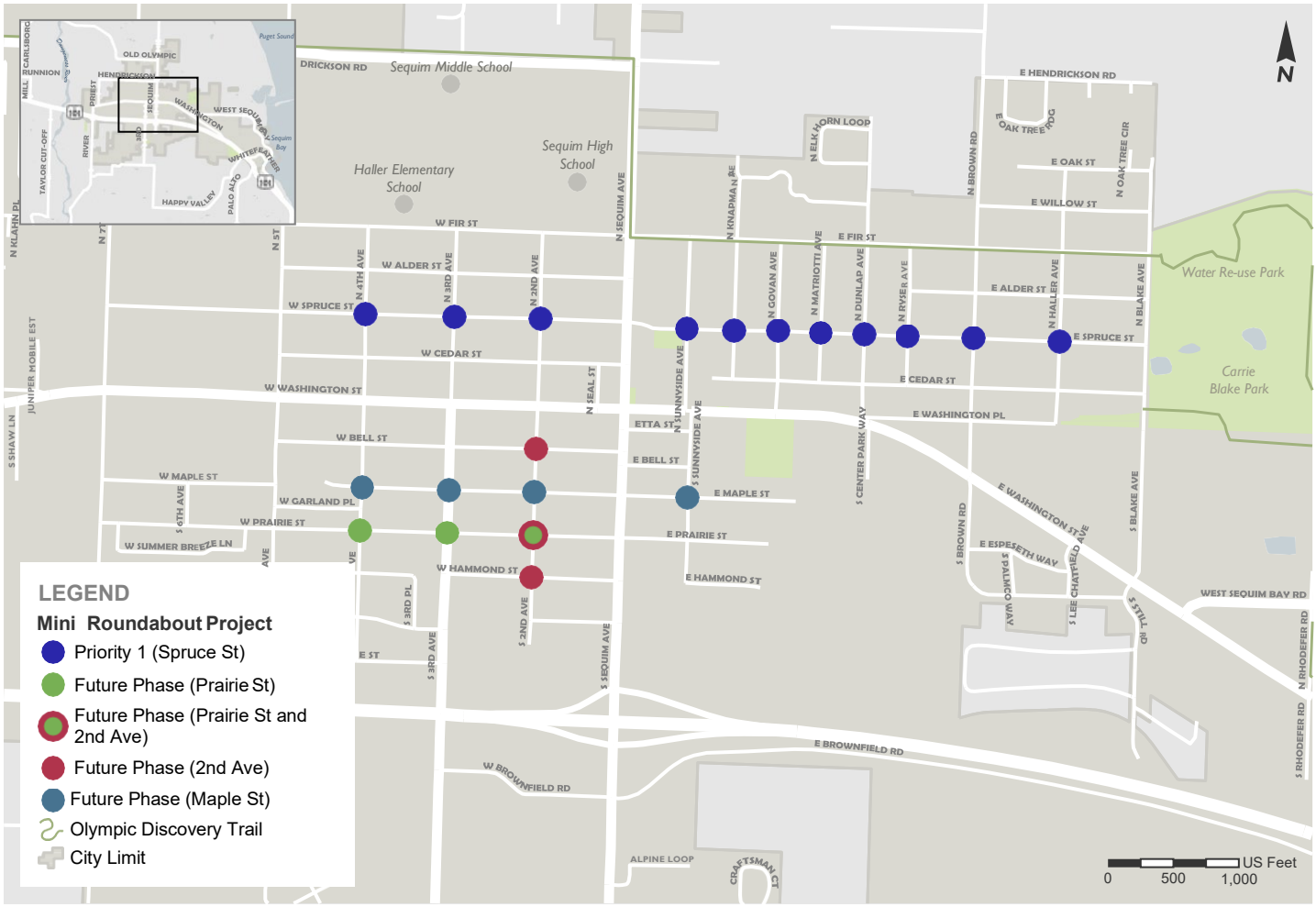


Location of Access Management Treatments

City of Sequim Local Road Safety Plan

FIGURE
03A

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Appendix A

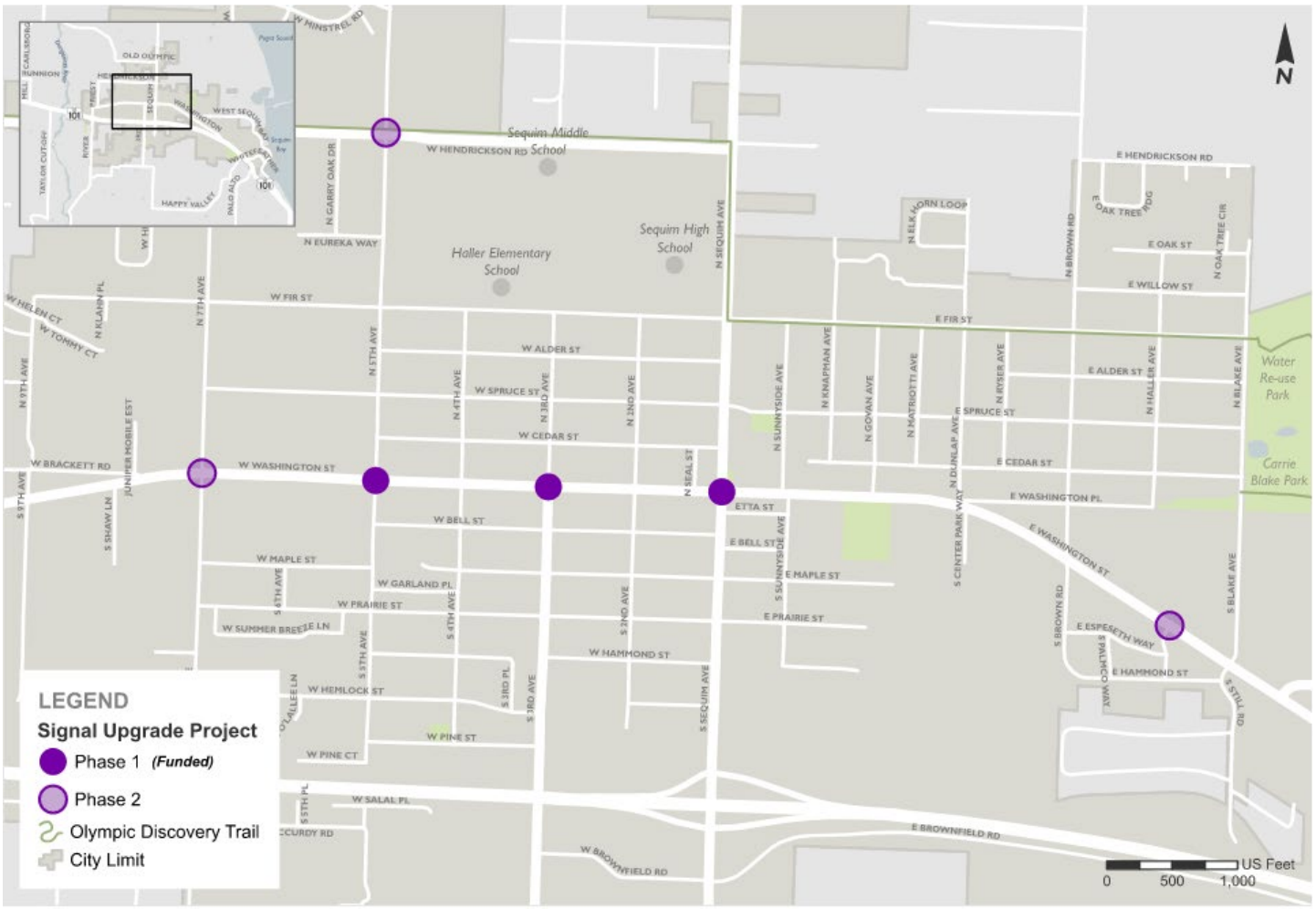


Proposed Mini Roundabout Locations

City of Sequim Local Road Safety Plan

FIGURE
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Appendix A



Location of Signal Equipment Upgrades

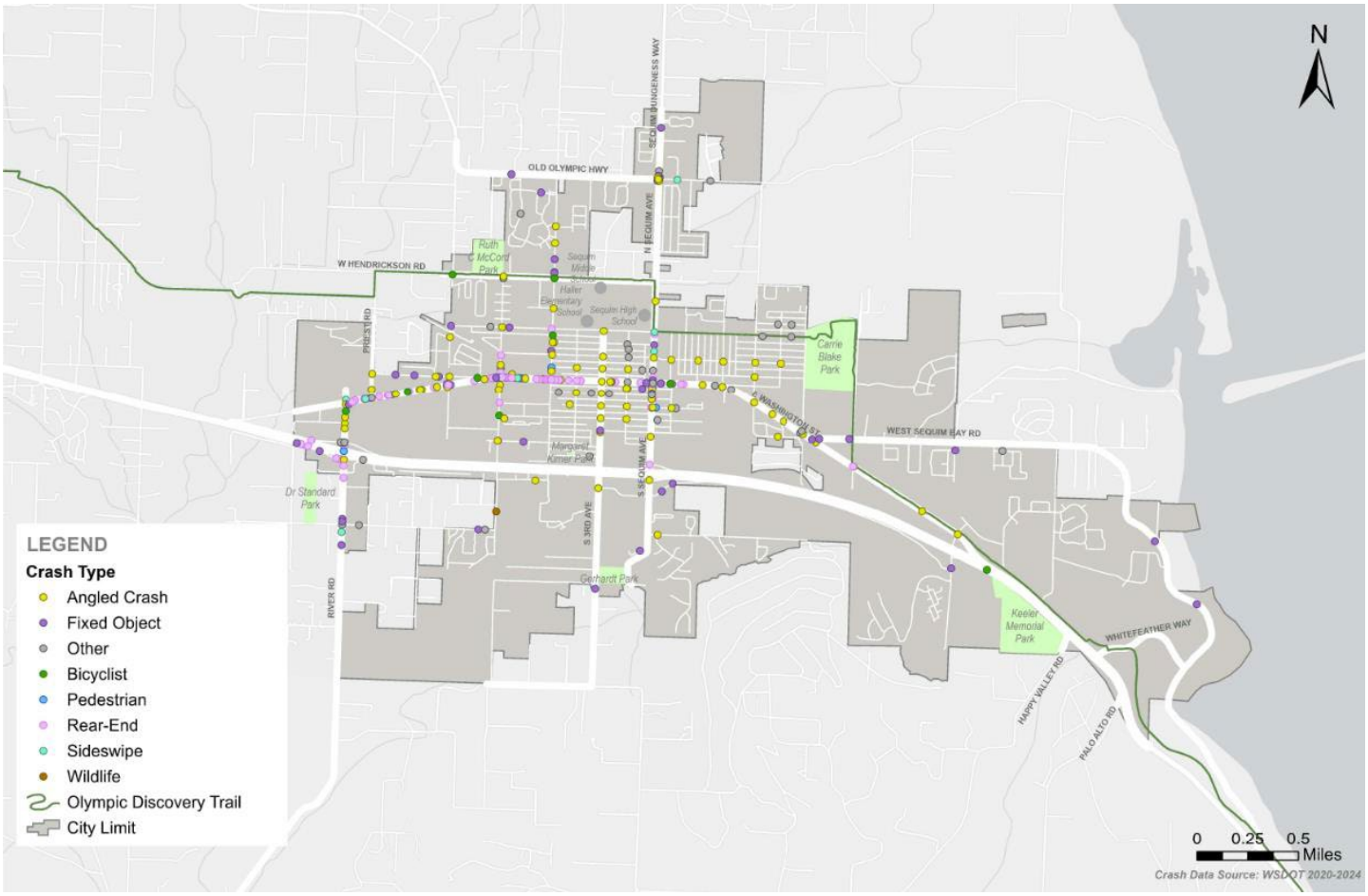
City of Sequim Local Road Safety Plan

FIGURE **05**

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Appendix B: Detailed Crash Maps

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Appendix B



All Crashes (2020 - 2024)

City of Sequim Local Road Safety Plan

FIGURE **06**

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Appendix B



Pedestrian and Bicyclist Crashes

City of Sequim Local Road Safety Plan

FIGURE **07**

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Appendix B



Severe Injury Crashes

City of Sequim Local Road Safety Plan

FIGURE
08

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Appendix B

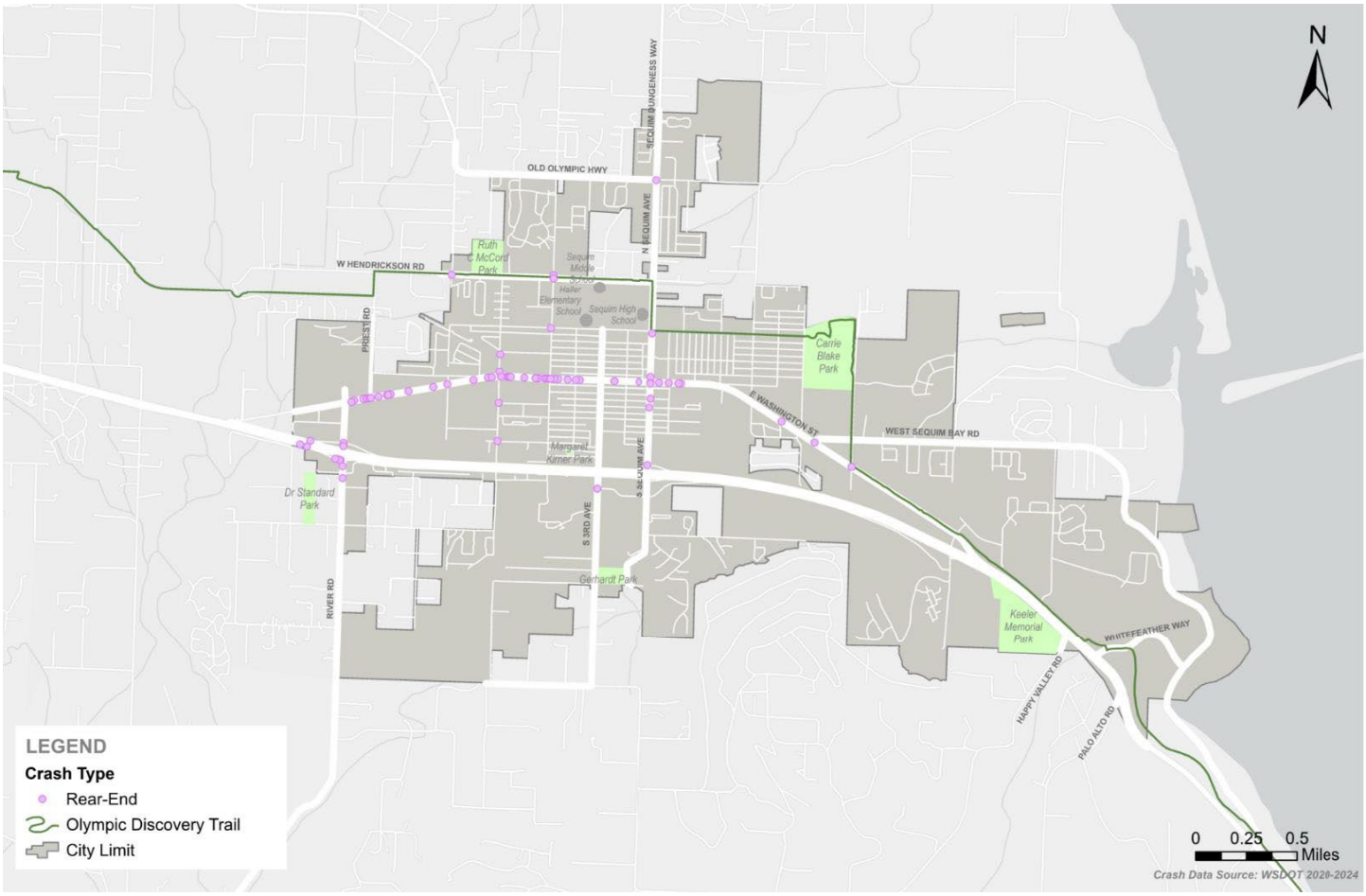


Pedestrian Crashes in Marked Crosswalks

City of Sequim Local Road Safety Plan

FIGURE **09**

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Appendix B

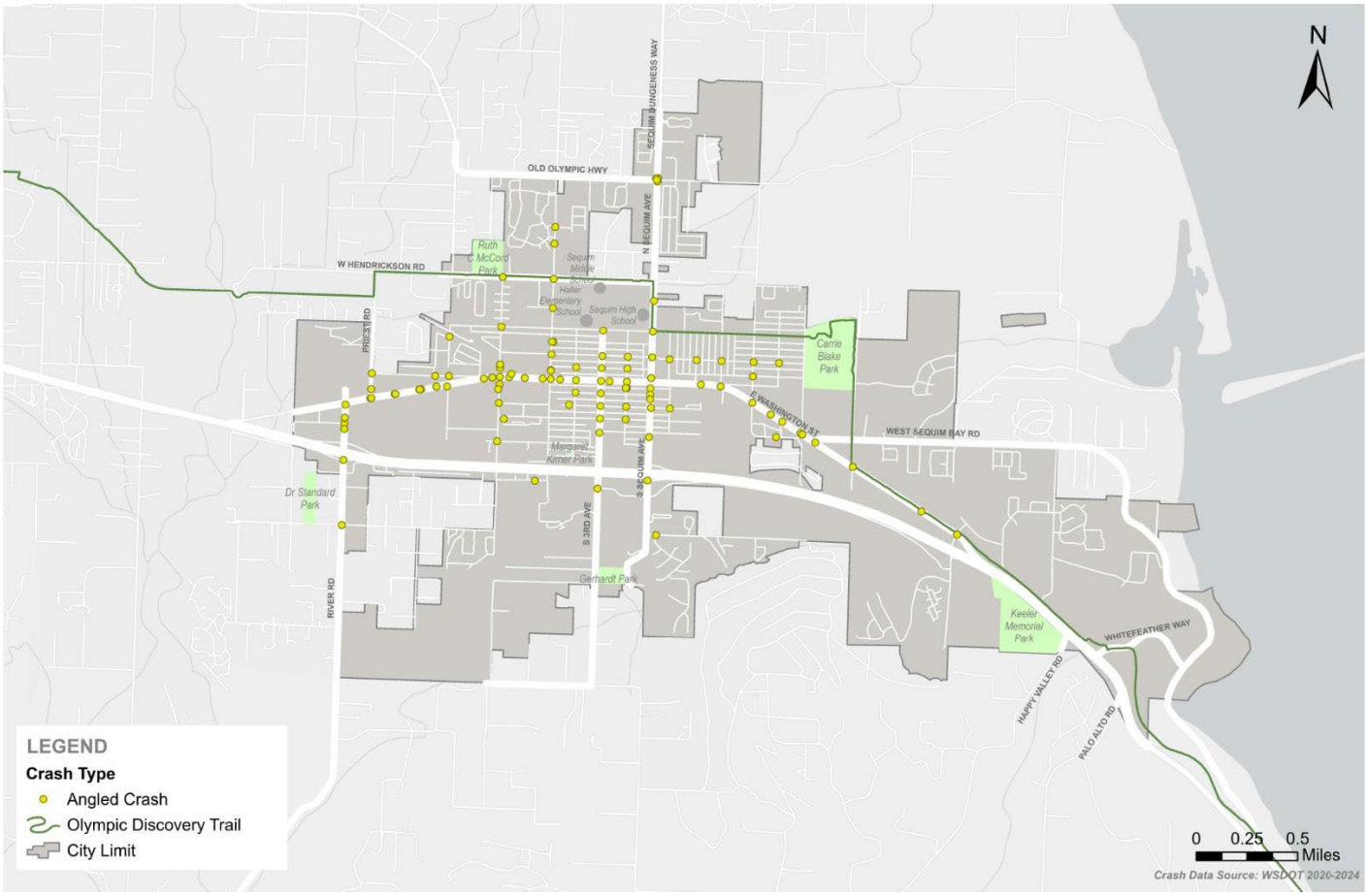


Rear End Crashes

City of Sequim Local Road Safety Plan

FIGURE **10**

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Appendix B

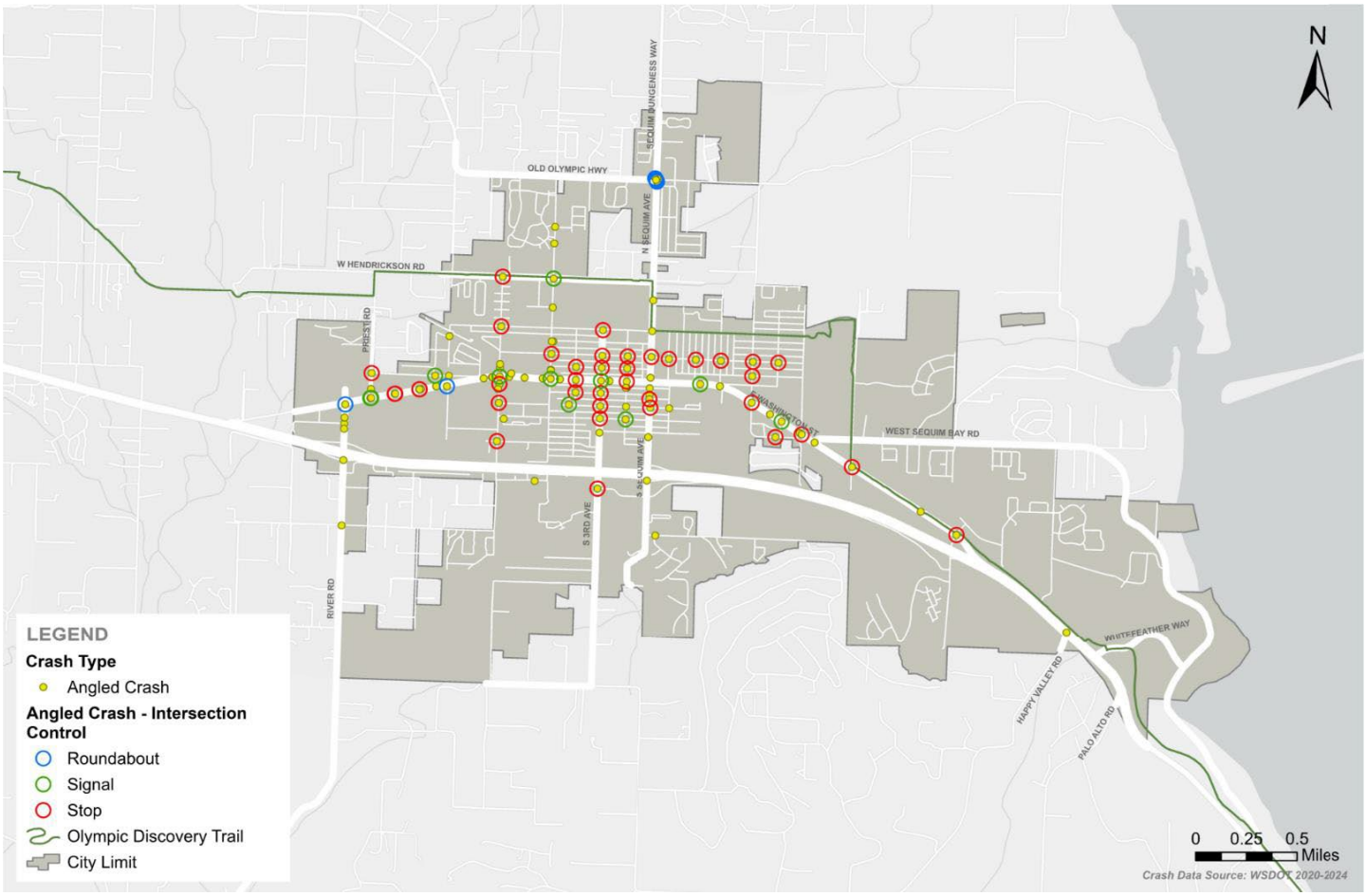


Angled Crashes

City of Sequim Local Road Safety Plan

FIGURE
11

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Appendix B



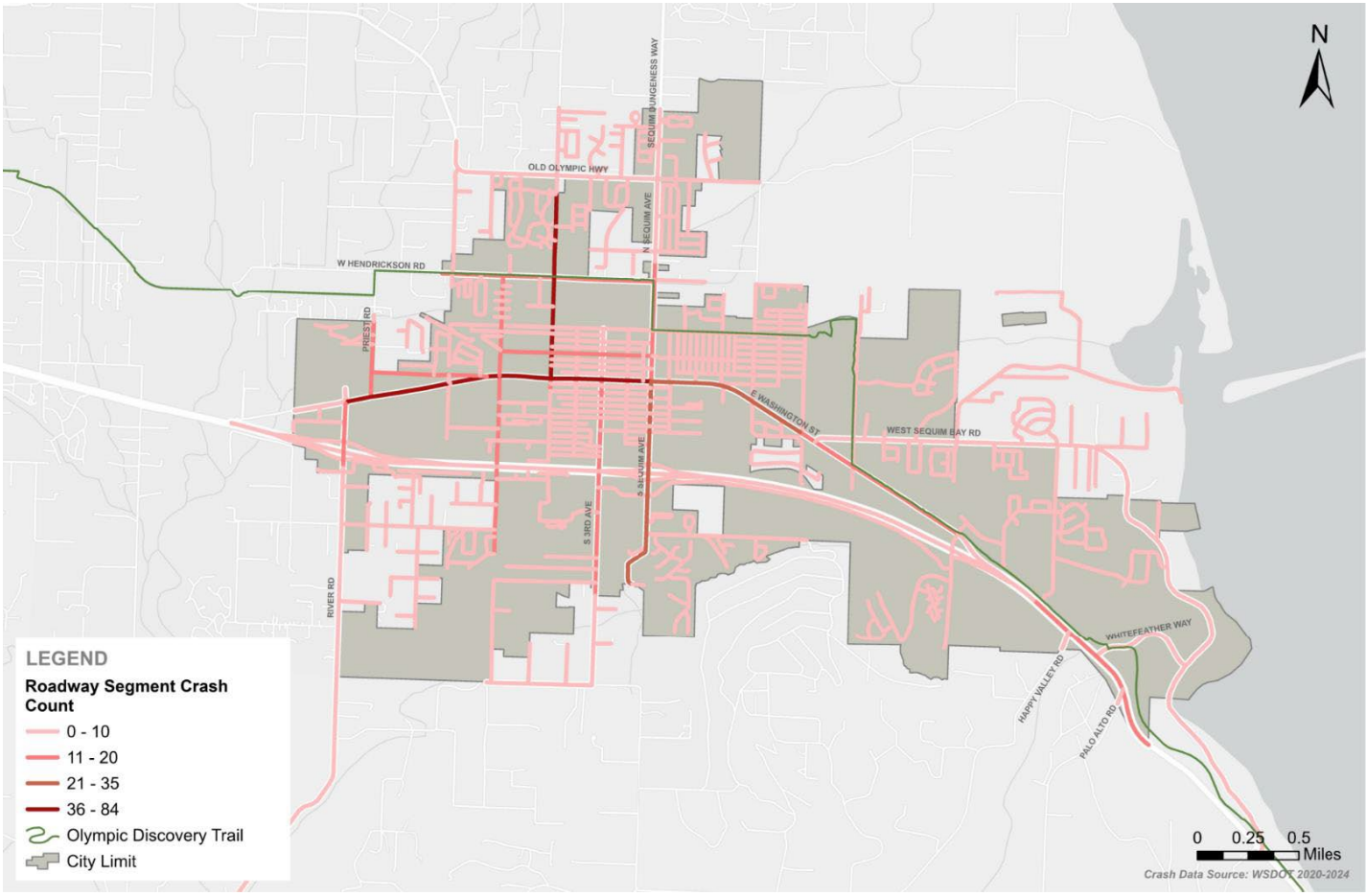
Angled Crashes with Intersection Control

City of Sequim Local Road Safety Plan

FIGURE
12

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Appendix B

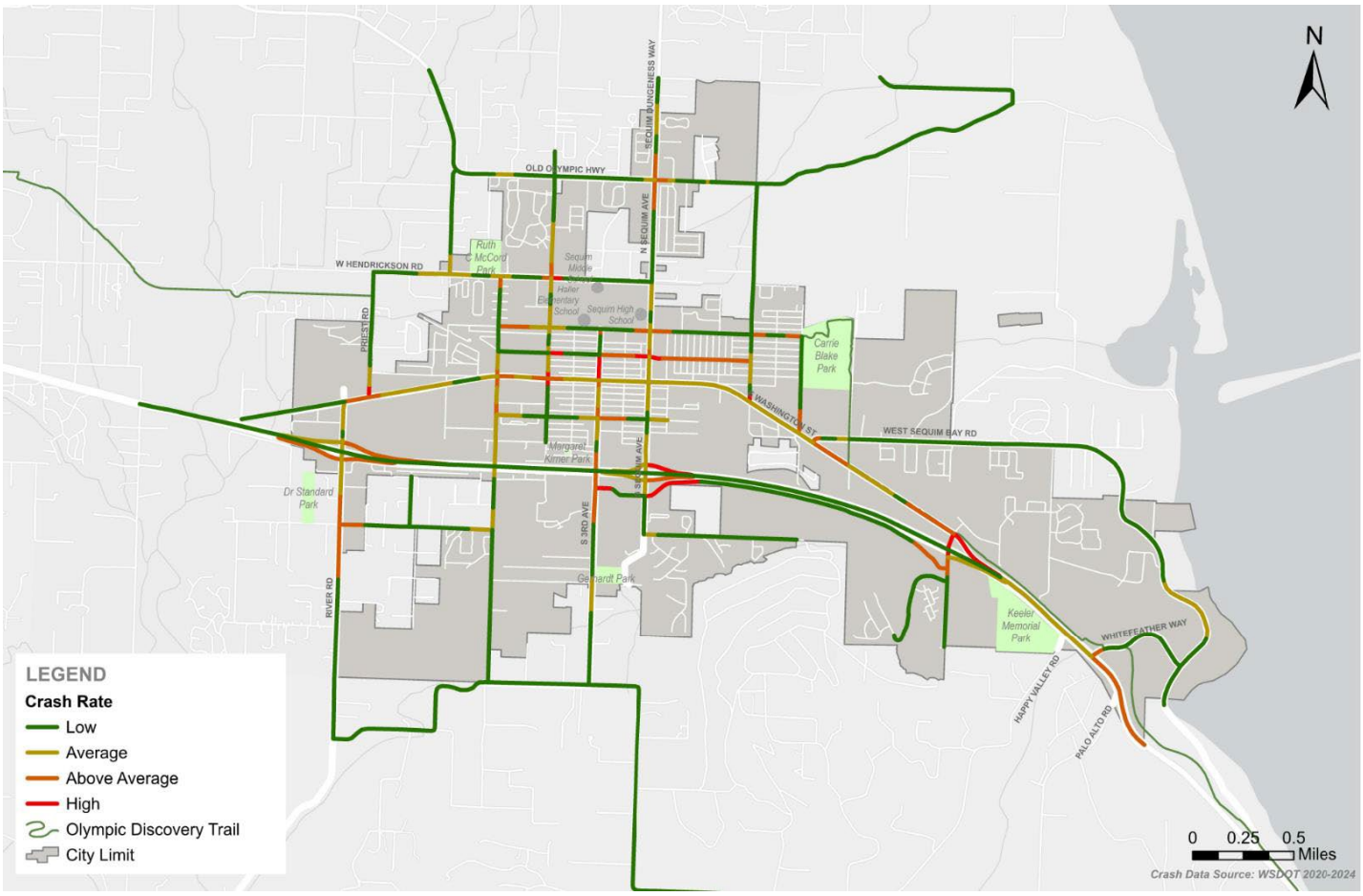


Crash Count by Roadway Segment

City of Sequim Local Road Safety Plan

FIGURE
13

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Appendix B

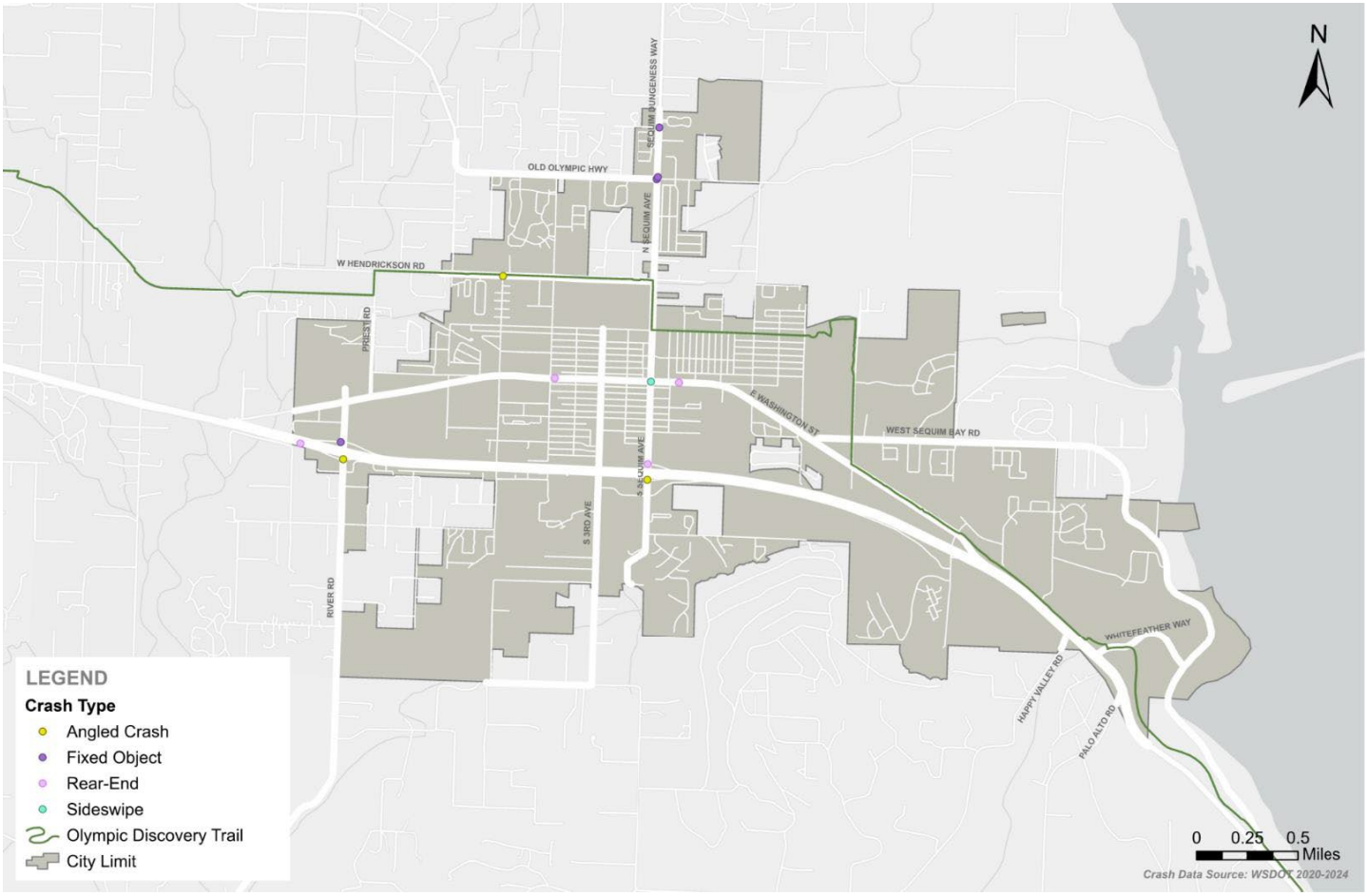


Crash Rate (Crash Count by 2023 Daily Roadway Volume)

City of Sequim Local Road Safety Plan

FIGURE **14**

12
Appendix B



Exceeding Reasonable or Posted Speed Crashes

City of Sequim Local Road Safety Plan

FIGURE **15**

12
Appendix B



All Crashes with Dept. of Health Social Vulnerability Index

City of Sequim Local Road Safety Plan

FIGURE **16**

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Appendix B

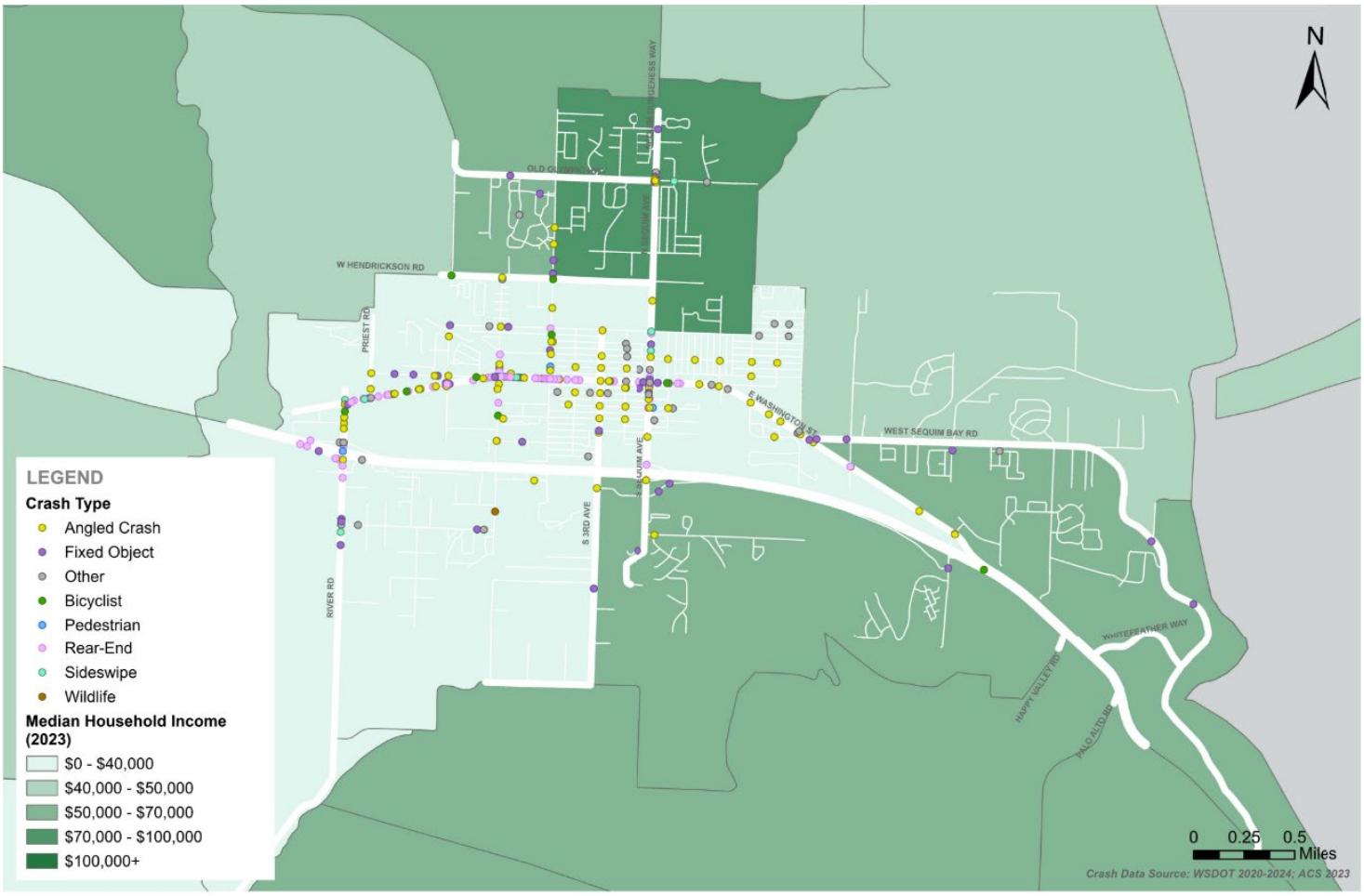


All Crashes with Percent of Population with Disability

City of Sequim Local Road Safety Plan

FIGURE **17**

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Appendix B

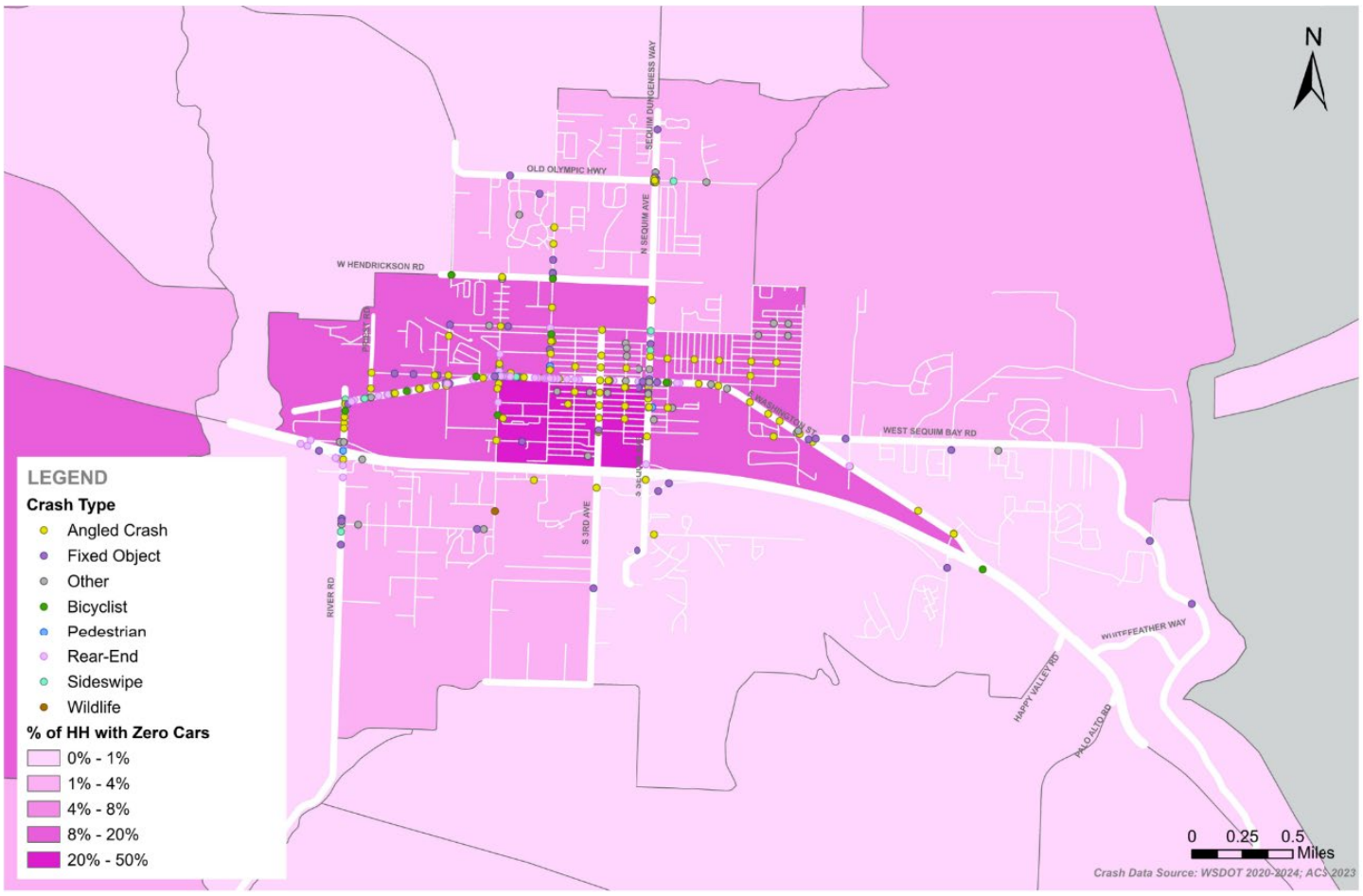


All Crashes with Median Household Income

City of Sequim Local Road Safety Plan

FIGURE **18**

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Appendix B

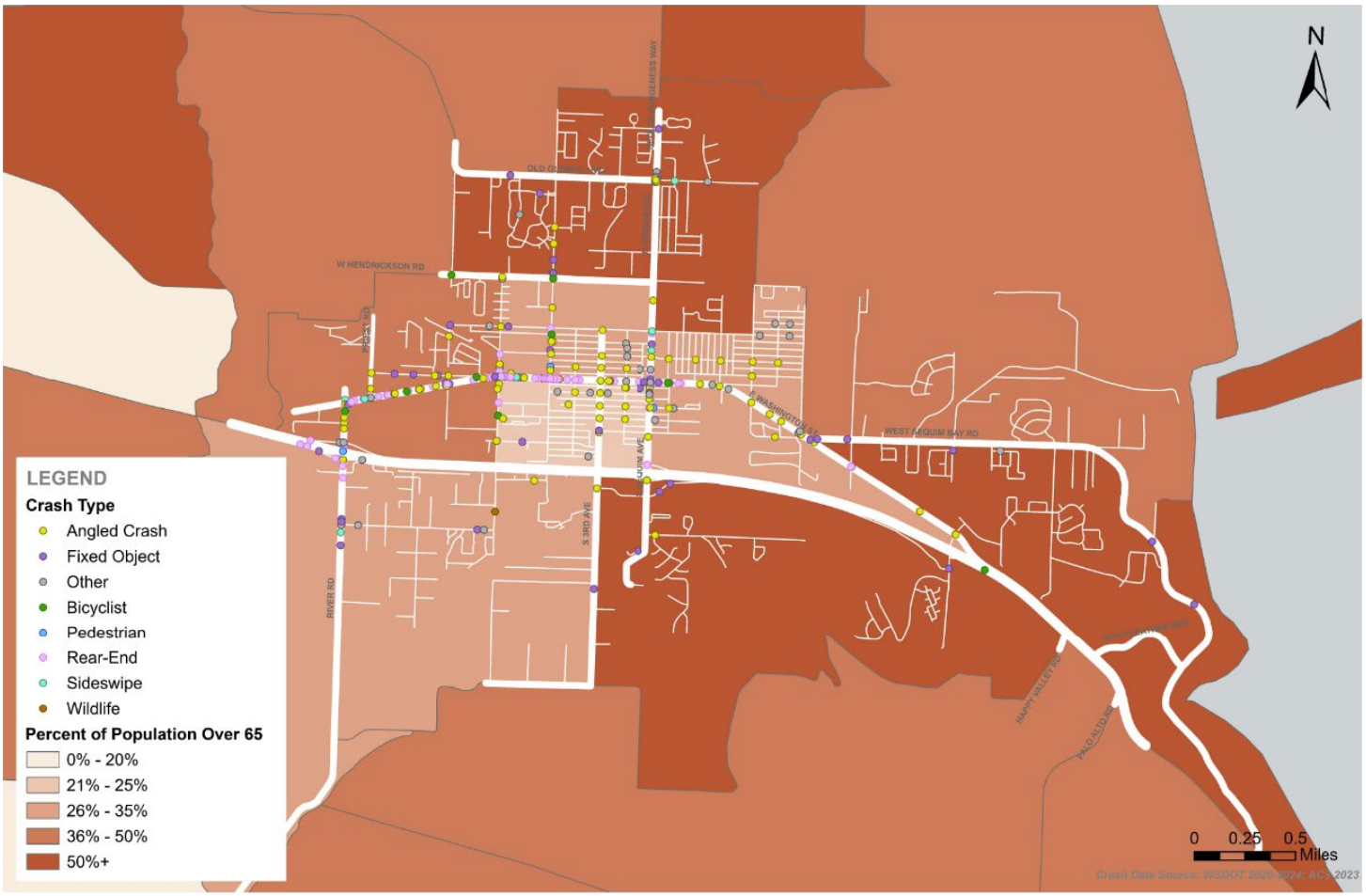


All Crashes with Zero Car Households

City of Sequim Local Road Safety Plan

FIGURE
19

12
Appendix B



All Crashes with Population Over 65

City of Sequim Local Road Safety Plan

FIGURE **20**

CITY OF SEQUIM

