whatcom council of governments

The Whatcom Region Safety Action Plan

Prepared by the Whatcom Council of Governments

Adopted by the Whatcom Transportation Policy Board on June 11, 2025

Table of Contents

List of Tables

List of Figures

The Whatcom Region Safety Action Plan

1 Introduction

Thank you for your interest in improving the safety of our transportation system. This is the Whatcom region's Safety Action Plan (SAP). This work has been completed with the goal of greatly reducing fatal and serious-injury (F&SI) crashes on all public roads in the Whatcom region.

Funded by a grant from the U.S. Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) Program, this SAP provides:

- A data-based description of our region's roadway crash history and trends
- A public-engagement and data-based assessment of community perspectives and preferences for countermeasures to reduce F&SI crashes
- A discussion of how historically underserved and underrepresented people are prioritized in subsequent road safety investments
- A regionally prioritized set of strategies for reducing F&SI crashes with an emphasis on vulnerable road users
- A performance measurement framework for tracking effectiveness and informing future safety improvement decisions

This SAP has been developed by the Whatcom Council of Governments (WCOG), the metropolitan planning organization (MPO) for the Whatcom region.

1.1 The Safe Systems Approach

The SS4A Program is grounded in the **2022 National Roadway Safety Strategy** and the advancement of a **Safe Systems Approach**. Thus, WCOG's Safety Action Plan effort incorporates perspectives and expertise covering a broader array of strategies than most previous safety improvement efforts.

The guiding principles of the Safe Systems Approach are:

1. Death and serious injuries are unacceptable
2. Humans make mistakes
3. Humans are vulnerable
4. Responsibility is shared
5. Safety is proactive
6. Redundancy is crucial

The objectives of the Safe Systems Approach are:

- Safer people
- Safer roads
- Safer vehicles
- Safer speeds
- Post-crash care
- Safer land use (this objective has been added by Washington State)

1.2 Initial Focus on Proven Countermeasures

In preparing this SAP, WCOG has decided to focus its selection of strategies to reduce F&SI crashes to those actions currently listed on the U.S. Federal Highway Administration's (FHWA) list of Proven Safety Countermeasures and the National Highway Traffic Safety Administration's (NHTSA) list of Countermeasures That Work. A condensed list of these countermeasures and the crash factors they aimed at countering is in Appendix A.

2 Leadership, Commitment, and Goal Setting

Successfully implementing the Safe Systems Approach, and doing so at the regional level, will require consistent, aligned leadership towards shared goals. The Whatcom region's elected officials understand the gravity of the problem and are committed to finding the most effective and equitable ways to reduce F&SI crashes.

2.1 Commitment to Target Zero

SAPs must document that the planning entity's leadership has committed to the National Roadway Safety Strategy goal of Target Zero – eventually eliminating roadway fatalities all together. WCOG, as the Whatcom region's metropolitan planning organization (MPO), is required by federal law to adopt a safety performance target in response to five federally prescribed metrics – number and rate of fatal crashes, number and rate of serious injury crashes, and the number of fatalities of non-motorists (e.g. bicyclists and pedestrians). MPOs may set their own targets or agree to align with their state's adopted metrics and targets. WCOG, like all of Washington's MPOs, has agreed each year to align with Washington's Vision Zero goal. (Until recently, Washington's safety goal was titled "Target Zero" – aspiring to reach zero roadway deaths by the year 2030. After several years of resetting targets as F&SI crashes did not decline, the commitment to eliminating roadway fatalities remains but a specific target year (2030 or otherwise) is being removed.

Below (Figure 1) is WCOG's most recent (February 2024) resolution adopting Washington's Target Zero safety targets.

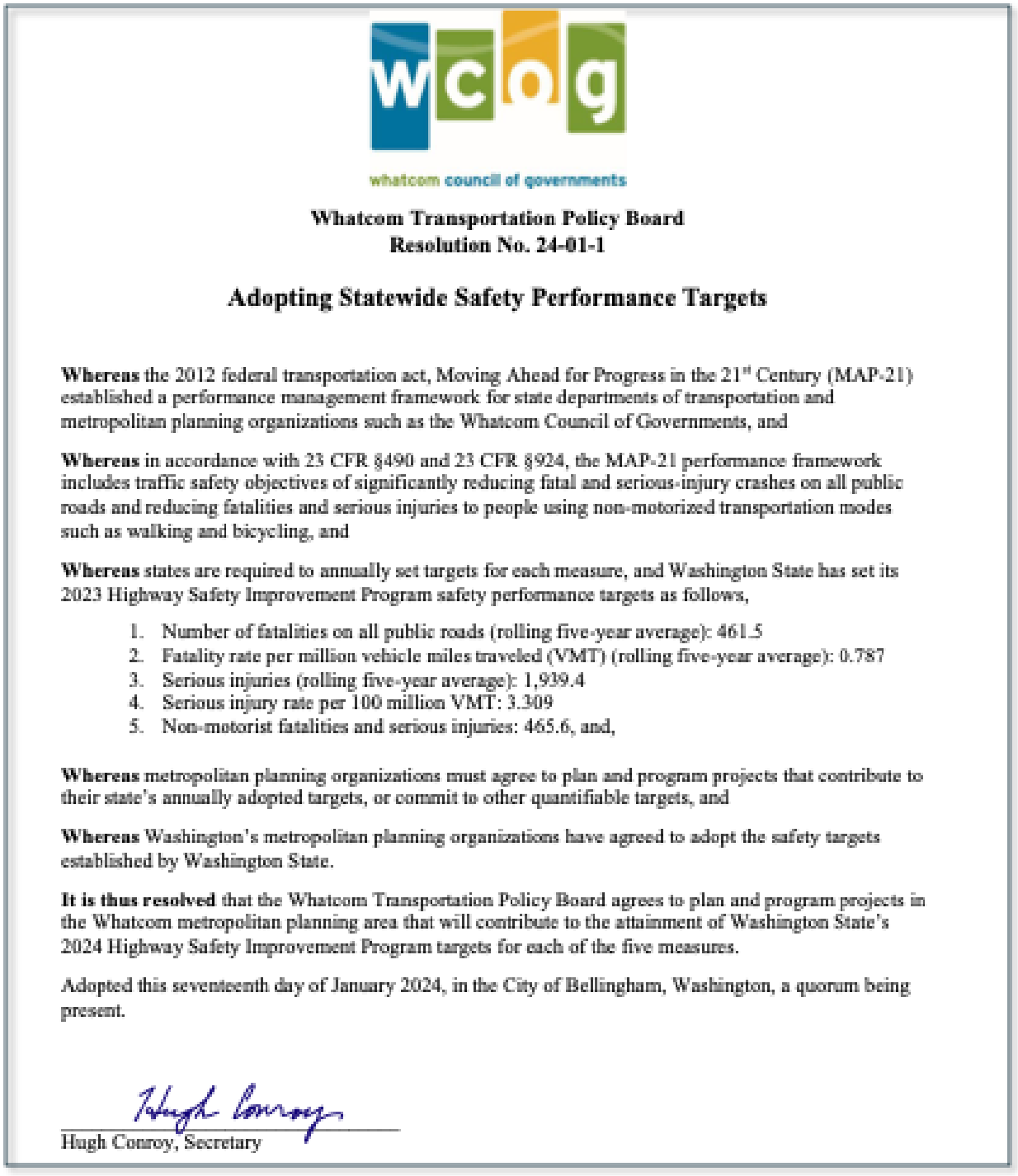
2.2 Commitment to Development of the Safety Action Plan

For at least the last decade, WCOG's number one regional transportation goal has been safety. While requesting support for and developing this action plan certainly aligns with WCOG's longstanding policy priority of safety, the National Roadway Safety Strategy and Safe Systems Approach are applying planning strategies and perspectives. These include:

- A primary focus on F&SI crashes rather than all crashes
- The perspective that all crashes are preventable and that no number of F&SI crashes is acceptable
- Involvement of non-transportation partners (e.g. law enforcement, first responders, education, public health, private sector, etc.)
- An emphasis on equity

Because of these new dimensions and because there is great value to having regional leaders demonstrate their commitment to the community, a first step of WCOG's SAP development was to request all elected executives (mayors, county executive, commission presidents, heads of tribal governments) to sign a resolution (Figure 2) supporting the SAP effort.

Figure 1: WCOG's annual adoption of WA's Vision Zero safety targets



whatcom council of governments

Whatcom Transportation Policy Board
Resolution No. 24-01-1

Adopting Statewide Safety Performance Targets

Whereas the 2012 federal transportation act, Moving Ahead for Progress in the 21st Century (MAP-21) established a performance management framework for state departments of transportation and metropolitan planning organizations such as the Whatcom Council of Governments, and

Whereas in accordance with 23 CFR §490 and 23 CFR §924, the MAP-21 performance framework includes traffic safety objectives of significantly reducing fatal and serious-injury crashes on all public roads and reducing fatalities and serious injuries to people using non-motorized transportation modes such as walking and bicycling, and

Whereas states are required to annually set targets for each measure, and Washington State has set its 2023 Highway Safety Improvement Program safety performance targets as follows,

1. Number of fatalities on all public roads (rolling five-year average): 461.5
2. Fatality rate per million vehicle miles traveled (VMT) (rolling five-year average): 0.787
3. Serious injuries (rolling five-year average): 1,939.4
4. Serious injury rate per 100 million VMT: 3.309
5. Non-motorist fatalities and serious injuries: 465.6, and,

Whereas metropolitan planning organizations must agree to plan and program projects that contribute to their state's annually adopted targets, or commit to other quantifiable targets, and

Whereas Washington's metropolitan planning organizations have agreed to adopt the safety targets established by Washington State.

It is thus resolved that the Whatcom Transportation Policy Board agrees to plan and program projects in the Whatcom metropolitan planning area that will contribute to the attainment of Washington State's 2024 Highway Safety Improvement Program targets for each of the five measures.

Adopted this seventeenth day of January 2024, in the City of Bellingham, Washington, a quorum being present.

Hugh Conroy, Secretary

Figure 2: Resolution of Whatcom Region Elected Executives for the SAP

Resolution of Whatcom Region Elected Executives

Supporting a Regional Safety Action Plan towards Achieving Zero Roadway Fatalities & Serious Injuries

Whereas the Whatcom County region, like the State of Washington and the United States as a whole, continues to experience high and growing numbers of fatalities and serious injuries on its roads, and

745 people died in 2022 on Washington's roads, the most since 1990. 17 of these fatalities occurred in Whatcom County – exceeding the current 10-year annual average of 15.

Whereas we will not accept traffic deaths as inevitable. They are unacceptable and preventable, and

Whereas the Whatcom Council of Governments has already affirmed the alignment of our region's transportation investment policies with the State of Washington's Highway Safety Improvement Program goal – Target Zero (zero traffic fatalities by 2030),

Therefore, it is resolved that the undersigned Whatcom-region elected executives endorse the development of a Safety Action Plan, supported by the United States Department of Transportation's Safe Streets and Roads for All (SS4A) program.

The Whatcom Safety Action Plan will identify prioritized strategies to significantly reduce fatal and serious-injury crashes on our roads. Development of the action plan will be guided by the USDOT's National Roadway Safety Strategy; be informed by regional, state, and national crash data; and select safety improvement strategies (interventions and countermeasures) informed by robust public engagement that emphasizes involvement of historically underrepresented and underserved members of our community.

Seth Fleetwood
Mayor, City of Bellingham

Mary Lou Steward
Mayor, City of Blaine

Greg Hansen
Mayor, City of Ferndale

Scott Korthuis,
Mayor, City of Lynden

Satpal Sidhu
Executive, Whatcom County

RoseMary LaClair
Chair, Nooksack Tribal Council

John Perry
Mayor, City of Everson

Michael Shepard
President, Bellingham Port Commission

Kevin Hester
Mayor, City of Nooksack

Bruce Bosch
Mayor, City of Sumas

3 Planning Structure

3.1 WCOG MPO Policy Board

WCOG (the MPO Policy Board) applied for SS4A Program planning funds to develop a regional SAP that would enable individual member governments to subsequently apply for SS4A implementation funds.

WCOG staff carried out the SAP development with direction from the MPO Policy Board. The MPO Policy Board reviewed and approved the SAP and its prioritized list of strategies for the Whatcom region.

3.2 Safety Action Plan Committee (APC)

An initial planning activity was the formation of an APC. As discussed above, WCOG enlisted non-traditional partners in its formation. WCOG's APC member entities include:

- WCOG Policy Board
- WCOG staff
- City of Ferndale staff
- Ferndale School District
- Washington State Department of Transportation (WSDOT)
- Washington Traffic Safety Commission (WTSC)
- Washington State Patrol (WSP)
- City of Bellingham staff
- Bellingham Public Schools
- Whatcom County Health and Community Services (WCHCS)
- Whatcom Transportation Authority (regional transit agency)
- Bellingham Police Department (BPD)

The APC met four times over the course SAP development. The APC's contributions included:

- Objective and approach: Collectively analyzed the SS4A SAP requirements; acknowledged the Safe Systems Approach; recognized the relationship between a complete, regional SAP and resulting eligibility to apply for SS4A implementation funds.
- Data and analysis: Reviewed and advised on data acquisition and improving data and information sharing partnerships including initial discussions with potential sources of supplementary crash data including BPD, WCHCS and the regional hospital, and WSP (crash analysis dashboards).
- Public engagement: Advised on the overall public outreach strategy, tested the survey instruments, and reviewed published media.
- Analytical frameworks and prioritization methods: Assessed the compilation and visualization of ten years of crash data and used this information to develop a social-vulnerability index, maps of crash data, and develop of a high-injury network (HIN) and a prioritized list of HIN corridors. This effort also included matching proven-countermeasures with HIN corridors and/or region-wide strategies.
- Review of draft plan: Reviewed draft plan materials and other pre-adoption products (maps, strategy lists, public feedback summaries, etc.).
- Compiled results: The array of organizations that made up the APC allowed the SAP to be delivered to the community by a coalition. This also supported the expectation that these partners will continue working together on effective strategies and reduction of F&SI crashes.

3.3 Transportation Technical Advisory Group (TTAG)

WCOG's TTAG is composed of local government planning and public works staff who are appointed by each government's elected representatives to WCOG. The TTAG was regularly updated on SAP activities at its periodic meetings. TTAG participants will likely be the ones to work on future selection of specific projects and implementations that align with this SAP's identified strategies. There is also some overlap of TTAG members and APC members.

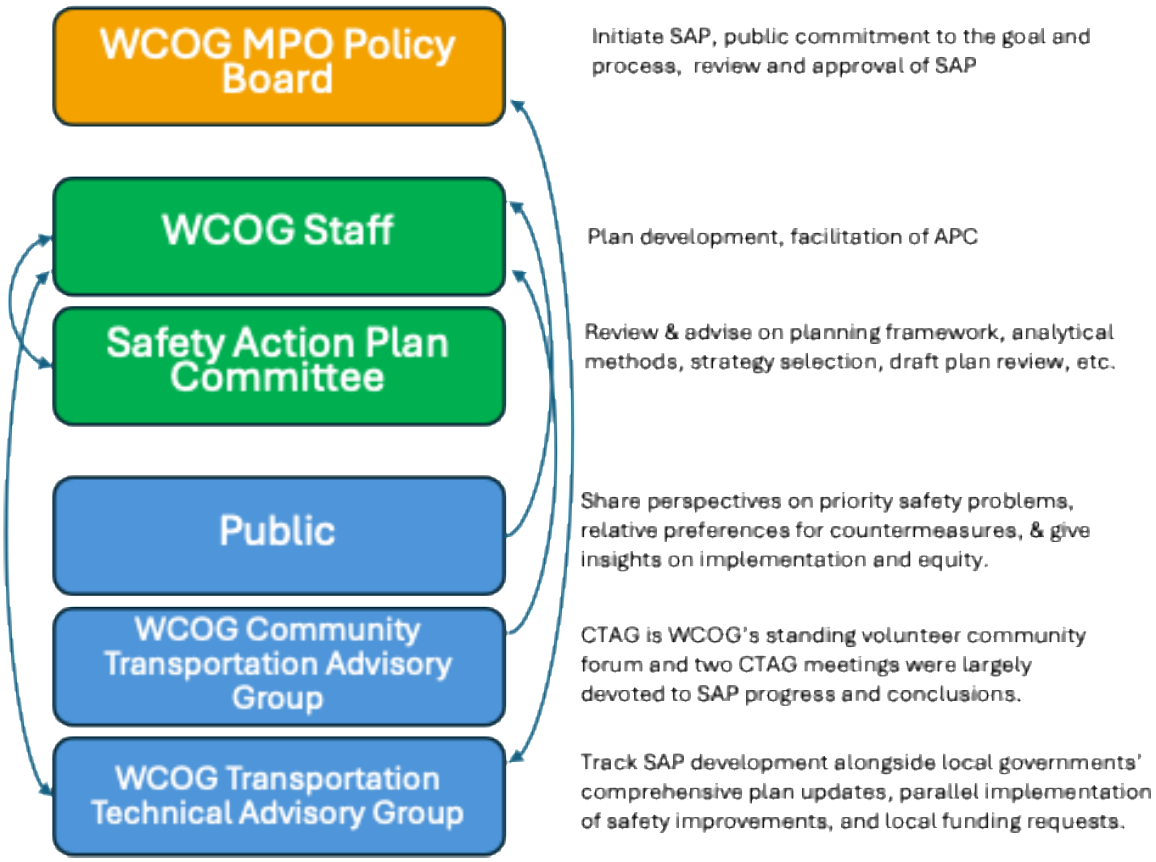
3.4 Public Participation

Discussed in detail in Section 5, as with all of WCOG's planning activities, public input is part of the safety action planning structure.

3.5 Planning Structure Overview

The graphic below provides a summary of WCOG's SAP structure and roles.

Figure 3: Planning Structure Overview



4 Safety Analysis

4.1 Data Needs and Development

To complete a robust safety analysis capable of informing selections of the most effective safety countermeasures, WCOG first improved its regional crash data resources. The WTSC maintains excellent historical crash data on the state's *fatal crashes*. WSDOT's Crash Data and Reporting Branch maintains and shares very detailed crash data records on *all reported crashes*. Neither agency's online dashboards or reporting products provided the details or timeframes that WCOG was looking for. By combining ten years of data from WTSC and WSDOT, WCOG was able to produce summary statistics and mapping in better alignment with SS4A objectives enabling identification of important gaps and data needs. Of note:

- While the much greater number of crash records available at the state-wide scale enables observation of trends over three or four years, Whatcom County's population (approx. 225,000) is too small to generate F&SI crash trends unless more years of data are included. WCOG therefore compiled ten years of crash data for both fatal and serious-injury crashes.
- Similar to the improved insights on trends that using ten years of data provides, WCOG also decided to include serious-injury crashes along with fatalities and base most analyses on this combined set of crash records.
- In developing its equity strategy, WCOG observed that the race and ethnicity of people involved in crashes is only recorded for those who die. While WCOG is still looking for ways to improve on this, blending the two databases allowed the location-based summaries of all F&SI crashes to relate, partially, to the information on race and ethnicity for the subset of fatal crashes.

4.2 Compiled Whatcom Region Crash Data

The WSDOT and WTSC databases are natively organized in two file types: data per-crash or per-individual involved in crashes. Each agency's corresponding file types were combined into master spreadsheets for ease of querying. WCOG staff used the program Tableau Prep to join the databases using the standardized Police Traffic Collision Report numbers that each database uses to uniquely identify each crash record. Both file types are used for data analysis where appropriate. For analyzing crash characteristics on the road network, per-crash data is used. For looking at characteristics of individuals involved in crashes (such as age, gender, and race/ethnicity), per-individual data is used.

For much of the analysis, Target Zero categories outlined in WSDOT crash data are used.

Table 1: Individuals Involved in Fatal & Serious Injury Crashes in Whatcom County, 2014-2023

Individuals involved in Fatal & Serious Injury Crashes in Whatcom County, 2014-2023							
	Target Zero Categories	Fatality	F %	Serious Injury	SI %	F&SI	F&SI %
Crash Type	Lane Departure	86	54.8%	250	43.2%	336	45.7%
	Run off the Road	70	44.6%	190	32.8%	260	35.3%
	Intersection Related	25	15.9%	190	32.8%	215	29.2%
	Wrong Way Vehicle	2	1.3%	5	0.9%	7	1.0%
High Risk Behaviors	Impaired Involved Person	43	27.4%	153	26.4%	196	26.6%
	Speeding Driver	55	35.0%	135	23.3%	190	25.8%
	Distracted Involved Person	44	28.0%	127	21.9%	171	23.2%
	Drinking Involved Person	28	17.8%	139	24.0%	167	22.7%
	Alcohol Impaired Involved Person	28	17.8%	128	22.1%	156	21.2%
	Unrestrained Occupant	37	23.6%	112	19.3%	149	20.2%
	Drug Impaired Involved Person	18	11.5%	38	6.6%	56	7.6%
	Drowsey Driver	3	1.9%	21	3.6%	24	3.3%
Road Users	MV Driver 16 to 25 Years Involved Person	57	36.3%	194	33.5%	251	34.1%
	Pedestrian Involved	37	23.6%	97	16.8%	134	18.2%
	Motorcycle Collision	26	16.6%	104	18.0%	130	17.7%
	MV Driver 65+ Years Involved Person	33	21.0%	89	15.4%	122	16.6%
	MV Driver 70+ Years Involved Person	24	15.3%	53	9.2%	77	10.5%
	Pedal Cyclist Involved	9	5.7%	51	8.8%	60	8.2%
	Heavy Vehicle Involved	15	9.6%	35	6.0%	50	6.8%
Other Monitered Areas	Work Zone Related Collision	3	1.9%	9	1.6%	12	1.6%
	Wildlife Involved	0	0.0%	5	0.9%	5	0.7%
	School Bus Involved	0	0.0%	1	0.2%	1	0.1%
	Vehicle Train Crash	0	0.0%	0	0.0%	0	0.0%
	Catostrophic Event	0	0.0%	0	0.0%	0	0.0%
	Totals:	**157**	21.3%	**579**	78.7%	**736**	100%

Data from the Washington State Department of Transportation (WSDOT) and the Washington Traffic Safety Commission (WTSC), compilation by the Whatcom Council of Governments (WCOG)

The Target Zero categories labeled as High Risk Behaviors are some of the most prevalent factors involved in the Whatcom region's fatal and serious injury crashes. These behaviors are considered preventable and comprise many of the main themes of this project's outreach efforts, detailed later in this plan.

The database products described here, in addition to enabling a robust regional road-safety analysis for the completion of this Safety Action Plan, will be maintained and updated as a resource for WCOG and its member governments and agency partners.

4.2.1 Note on Distracted Driving

As part of this plan's stakeholder outreach, WCOG staff met with Washington State Patrol (WSP) to discuss in-field crash reporting and other general safety topics relevant to the plan. Of particular note was a discussion of how distracted driving is reported in the official crash reports. According to WSP, individuals involved in crashes must self-report that they were distracted for the officer documenting the crash to record their behavior as such.

Because of this self-reporting requirement, the Target Zero crash category Distracted Driving – shown in Table 1 as being a factor in about 23% of fatal and serious injury crashes – is likely underreported compared to the more easily verifiable crash factors like speeding and impairment, which are shown in the table to have a higher involvement in crashes at 26% and 27%, respectively.

For reference, in the open-ended outreach survey question asked in the Whatcom Crash Test (detailed in Section 5), 30% of respondents described distracted driving as their biggest roadway safety concern, compared to 21% for speeding and 12% for impaired driving.

4.3 Social Vulnerability Index (SVI)

To improve the formation and application of an equity strategy for the SAP, WCOG developed a Social Vulnerability Index (SVI) to identify and quantify socially vulnerable communities in the Whatcom region. WCOG used its geographic information systems (GIS) mapping tools to evaluate how alternative actions may intersect with vulnerable populations. The SVI is intended to help WCOG and our partners better serve marginalized communities.

WCOG's SVI uses American Community Survey (ACS) Census data related to three variables: limited English proficiency (LEP), people of color (POC), and low-income populations.

The SVI uses these three variables to produce an overall vulnerability score. Census block groups across Whatcom County are scored from 0 - 1 based on a percent rank value. Values closer to 1 indicate a higher percentage of vulnerable populations relative to the rest of Whatcom County block groups.

WCOG's SVI is modeled closely after the CDC's Social Vulnerability Index (SVI) and the City of Bellingham's adaptation of that tool at the block group level. WCOG's SVI differs in two primary ways: 1) it uses only three variables as opposed to many variables and themes that go into the CDC's full model, and 2) some of the variables are defined slightly differently to better identify vulnerable populations in Whatcom County.

The full definition for each variable used in WCOG's SVI is below:

- **Low Income**: Those in households where household income is below 200% of the federal poverty level.
- **People of Color**: Those who list their racial status as a race other than white alone and/or list their ethnicity as Hispanic or Latino. That is, all people other than non-Hispanic white alone individuals.
- **Limited English Proficiency (LEP)**: Those over the age of 5 who speak a non-English language and also speak English less than "very well".

4.4 High-Injury-Network (HIN)

F&SI crashes were also analyzed by location to determine geographic areas and roads that experienced the highest occurrences of crashes. The Whatcom Region High Injury Network (HIN) consists of the 21 roadway corridors with the highest amounts of F&SI crashes. These corridors were identified and ranked based on the number of combined fatal and serious injury crashes over a 10-year period from 2014-2023.

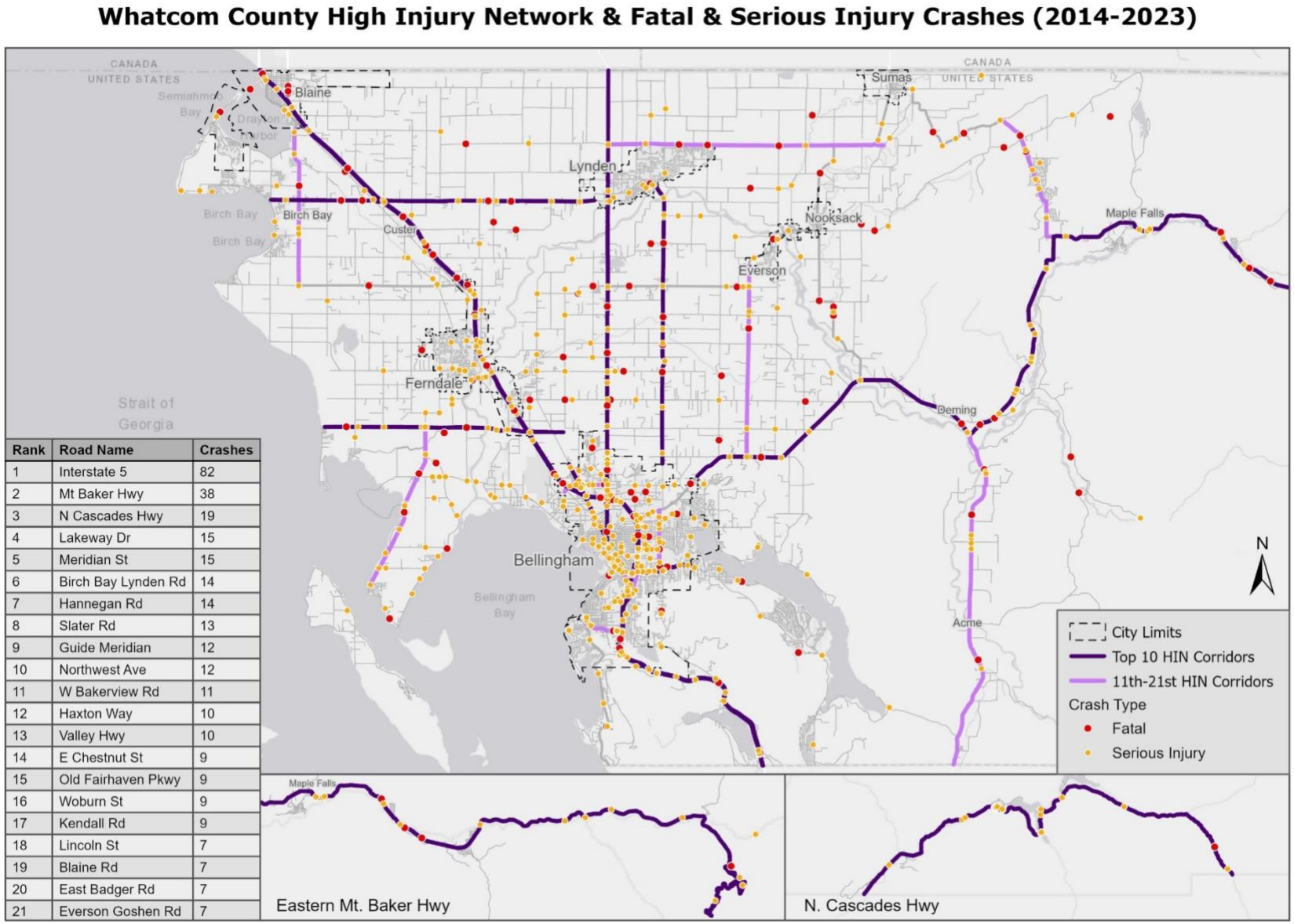
In keeping with the goal of reducing F&SI crashes on *all public roads* in the region, state routes are included in WCOG's HIN.

Table 2 below includes additional detail about each corridor, including the geographic endpoints and cumulative F&SI crashes. Additionally, Figures 4 and 5 provide summary maps of the HIN.

Table 2: Whatcom County Top 21 HIN Corridors

	Road Name	SR No.	From	To	F&SI Crashes	Fatal	Serious Injury	Jurisdiction
1	Interstate 5		Skagit County	Canadian Border	82	26	56	WSDOT
2	Mt Baker Hwy	542	Bellingham City Limits	Eastern Terminus	38	7	31	WSDOT
3	N Cascades Hwy	20	Skagit County	Skagit County	19	3	16	WSDOT
4	Lakeway Dr		Ellis	Bellingham City Limits	15	4	11	Bellingham
5	Meridian St		Broadway St	Bellingham City Limits	15	3	12	Bellingham
6	Birch Bay Lynden Rd		Harborview Rd	Tromp Rd	14	5	9	Whatcom County
7	Hannegan Rd		Queen Mountain Dr	Riverview Rd	14	4	10	Whatcom County
8	Slater Rd		Beach Way	Eastern Terminus	13	5	8	Lummi Nation / Whatcom County
9	Guide Meridian	539	Bellingham City Limits	Canadian Border	12	4	8	WSDOT
10	Northwest Ave		Elm St	Bellingham City Limits	12	0	12	Bellingham
11	W Bakerview Rd		Bennet Dr	Meridian St	11	1	10	Bellingham
12	Haxton Way		MacKenzie Rd	Slater Rd	10	3	7	Lummi Nation
13	Valley Hwy	9	Skagit County	Mt Baker Hwy	10	3	7	WSDOT
14	E Chestnut St		Cornwall Ave	Ellis St	9	1	8	Bellingham
15	Old Fairhaven Pkwy	11	12th St	33rd St	9	2	7	WSDOT
16	Woburn St		Lakeway Dr	E Sunset Dr	9	1	8	Bellingham
17	Kendall Rd	547	Mt Baker Hwy	Reese Hill Rd	9	2	7	WSDOT
18	Lincoln St		Elwood Ave	Meador Ave	7	2	5	Bellingham
19	Blaine Rd	548	Grandview Rd	Blaine City Limits	7	1	6	WSDOT
20	East Badger Rd	546	Guide Meridian	Telegraph Rd	7	3	4	WSDOT
21	Everson Goshen Rd		Mt Baker Hwy	Everson City Limits	7	1	6	Whatcom County

Figure 4: Whatcom County High Injury Network & Fatal & Serious Injury Crashes (2014-2023)

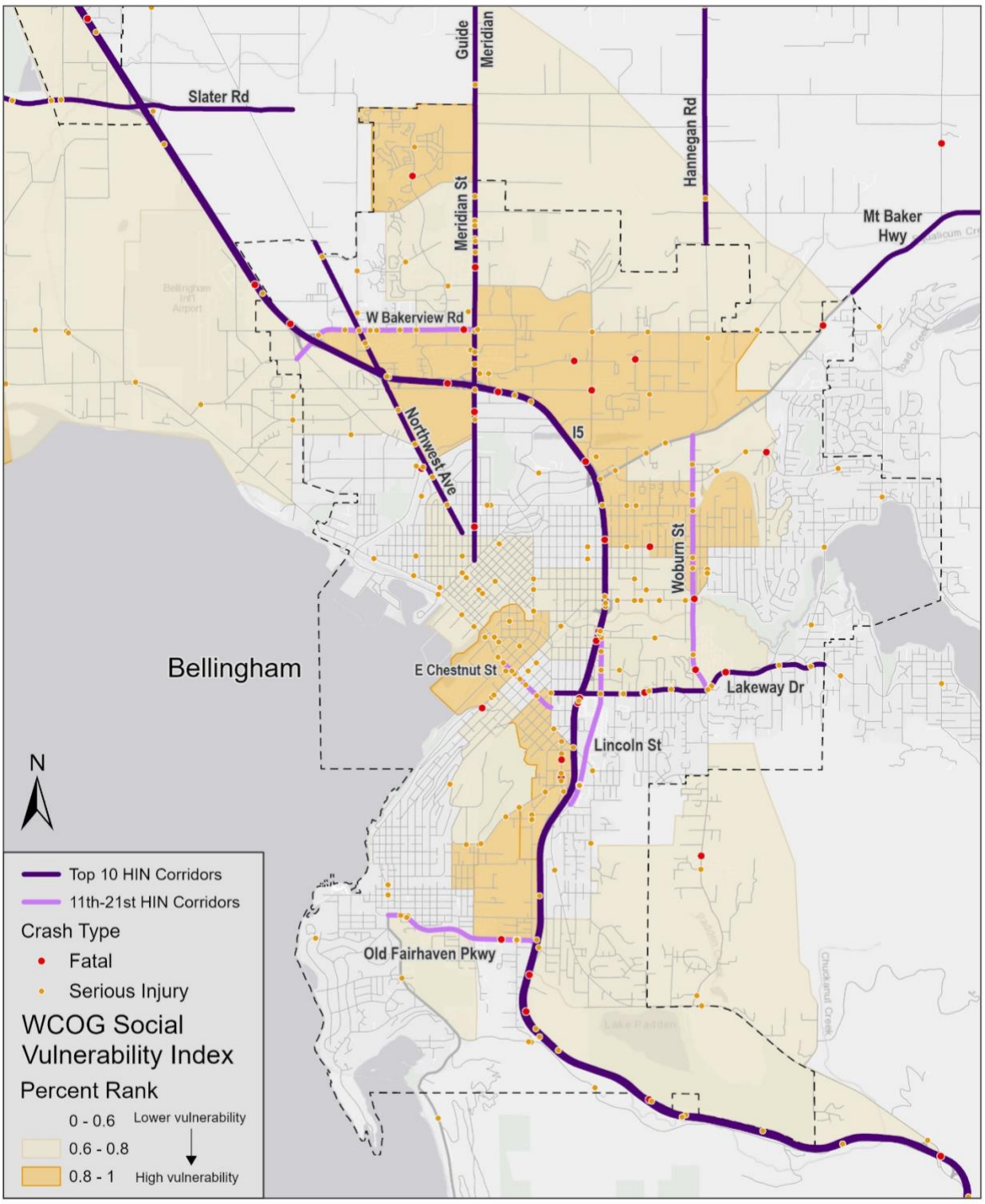


Rank	Road Name	Crashes
1	Interstate 5	82
2	Mt Baker Hwy	38
3	N Cascades Hwy	19
4	Lakeway Dr	15
5	Meridian St	15
6	Birch Bay Lynden Rd	14
7	Hannegan Rd	14
8	Slater Rd	13
9	Guide Meridian	12
10	Northwest Ave	12
11	W Bakerview Rd	11
12	Haxton Way	10
13	Valley Hwy	10
14	E Chestnut St	9
15	Old Fairhaven Pkwy	9
16	Woburn St	9
17	Kendall Rd	9
18	Lincoln St	7
19	Blaine Rd	7
20	East Badger Rd	7
21	Everson Goshen Rd	7

Data: WSDOT, Whatcom Council of Governments (WCOG), City of Bellingham

Map authored by Emily Moran, Feb. 2025

Figure 5: Whatcom Region High Injury Network Corridors: Bellingham Detail Map



Data: WSDOT, Census ACS 2017-2023, WCOG, City of Bellingham
Map authored by Emily Moran, Feb. 2025

4.4.1 Considering Transit along the HIN

The presence of WTA bus stops along each HIN corridor was included as an additional measure of pedestrian and active transportation activity. Using GIS mapping tools, WCOG calculated both the number of nearby stops (within 100 feet of the corridor) and the stops per mile along each corridor.

Table 3 below shows the presence of transit stops along each HIN corridor. Darker shades of red indicate higher counts of nearby WTA stops and stops per mile.

Table 3: WTA Bus Stops along the HIN

HIN Rank	Name	F&SI Crashes	Mile Length	WTA Bus Stops	Stops per Mile
1	I5	82	34.0	0	0
2	Mt. Baker Hwy	38	54.1	7	0.13
3	N. Cascades Hwy	19	29.3	0	0
4	Lakeway Dr	15	2.4	25	10.27
5	Meridian St	15	3.9	20	5.16
6	Birch Bay Lynden Rd	14	11.5	2	0.17
7	Hannegan Rd	14	9.9	0	0
8	Slater Rd	13	8.5	1	0.12
9	Guide Meridian	12	12.8	17	1.32
10	Northwest Ave	12	2.8	20	7.11
11	W. Bakerview Rd	11	1.6	6	3.7
12	Haxton Way	10	6.0	15	2.5
13	Valley Hwy	10	12.5	2	0.16
14	E. Chestnut St	9	0.6	2	3.59
15	Old Fairhaven Pkwy	9	1.4	12	8.73
16	Woburn St	9	2.2	16	7.28
17	Kendall Rd	9	4.9	5	1.02
18	Lincoln St	7	1.5	10	6.59
19	Blaine Rd	7	5.6	0	0
20	E Badger Rd	7	9.8	1	0.1
21	Everson Goshen Rd	7	6.7	2	0.3

4.4.2 Considering Vehicle Miles Traveled (VMT) along the HIN

As an additional way to view and understand F&SI crashes in the Whatcom Region, WCOG compiled data related to traffic volumes and vehicle miles traveled (VMT) for each of the HIN corridors. This allowed the calculation of a F&SI crash rate per 100 million VMT for all 21 HIN corridors. A F&SI crash rate per VMT normalizes the existing crash data by both traffic volumes and corridor length in order to view crash trends through a different lens.

Annual VMT was determined based on Average Daily Traffic (ADT) and the mile length of each corridor. Table 4 below lists HIN corridors in descending order of crash rate per VMT.

Table 4: Whatcom HIN by F&SI Crash Rate per VMT

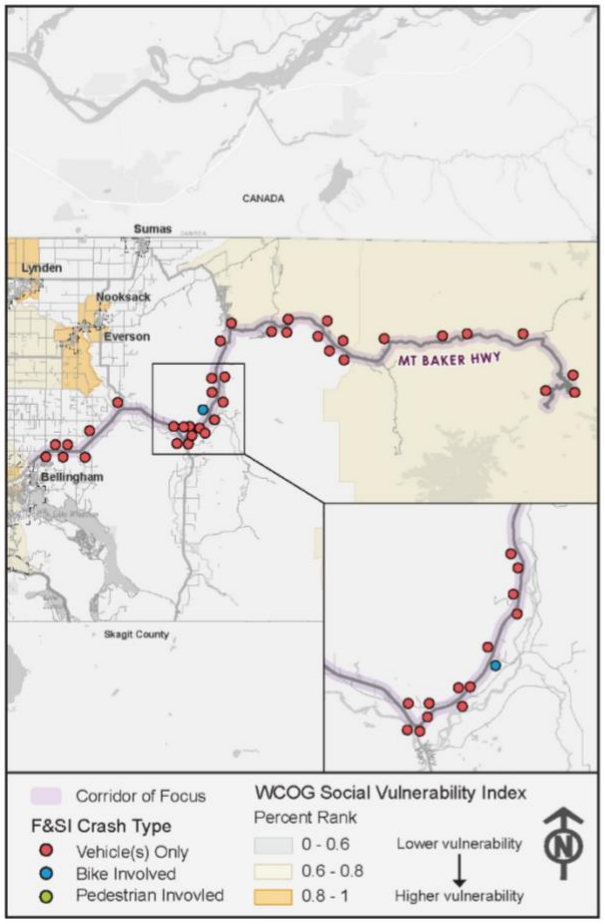
HIN Rank	Road Name	F&SI Crashes (2014-2023)	Corridor Length (Miles)	ADT (2023)	Crash rate per 100 million VMT	Crashes by VMT Rank
14	E. Chestnut St	9	0.6	7,424	59.55	**1**
18	Lincoln St	7	1.5	6,700	18.85	**2**
15	Old Fairhaven Pkwy (SR 11)	9	1.4	13,565	13.22	**3**
3	N. Cascades Hwy (SR 20)	19	29.3	1,446	12.29	**4**
12	Haxton Way	10	6.0	3,802	11.99	**5**
11	W. Bakerview Rd	11	1.6	15,646	11.87	**6**
17	Kendall Rd (SR 547)	9	4.9	4,737	10.58	**7**
10	Northwest Ave	12	2.8	11,258	10.38	**8**
13	Valley Hwy (SR 9)	10	12.5	2,113	10.37	**9**
16	Woburn St	9	2.2	12,180	9.21	**10**
4	Lakeway Dr	15	2.4	22,006	7.67	**11**
19	Blaine Rd (SR 548)	7	5.6	4,497	7.59	**12**
8	Slater Rd	13	8.5	6,616	6.32	**13**
21	Everson Goshen Rd	7	6.7	5,277	5.38	**14**
7	Hannegan Rd	14	9.9	7,473	5.20	**15**
5	Meridian St	15	3.9	20,760	5.11	**16**
6	Birch Bay Lynden Rd	14	11.5	8,140	4.09	**17**
2	Mt Baker Hwy (SR 542)	38	54.1	6,337	3.03	**18**
20	E. Badger Rd (SR 546)	7	9.8	8,196	2.39	**19**
9	Guide Meridian (SR 539)	12	12.8	14,066	1.82	**20**
1	Interstate 5	82	34.0	41,061	1.61	**21**

Notes: Average Daily Traffic (ADT) is based on WCOG's 2023 travel demand model – except for N. Cascades Hwy which, due to geography is not included in the model – for which ADT is based on averaged 2023 WSDOT traffic counts. Corridor length for Interstate 5 is the median of northbound and sound bound milage across Whatcom County, excluding exit/entrance ramps. Crash rate per 100 million VMT is based on an average annual count of F&SI crashes on each corridor and annual vehicle miles traveled (VMT) on that corridor.

4.5 HIN Corridor Profiles

Following the selection of 21 HIN Corridors, WCOG developed individual corridor profiles (maps and summary statistics) for each. Each of these 21 one-page summaries, along with a more detailed description of the HIN development, are presented in Appendix B. An example profile (Mt. Baker Hwy – SR542) is in Figure 6 below:

Figure 6: Example HIN Corridor Profile Sheet



2. Mt. Baker Hwy (SR 542)

	Corridor		Countywide
Summary Stats	**Count**	**Percent**	**Percent**
Total F&SI Crashes	38	100%	--
Fatal Crashes	7	18%	22%
Serious Injury Crashes	31	82%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	1	3%	9%
Motorcycle Involved	5	13%	19%
Motor Vehicle(s) Only	32	84%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 SVI Area	15	39%	32%
Most Common Crash Factors			
Lane Departure	29	76%	44%
Run Off The Road	18	47%	35%
Impaired Involved Person	15	39%	25%
Unrestrained Occupant	13	34%	17%
Driver 16 To 25 Years Involved	13	34%	32%
Speeding Driver	12	32%	25%
Non Junction Opposite Direction Crash	11	29%	9%
Other Relevant TZ Factors			
Distracted Driver	7	18%	24%
Driver 65 Plus Years Involved	7	18%	17%
Motorcycle Collision	5	13%	19%
Lighting Conditions			
Dawn	1	3%	1%
Daylight	20	53%	56%
Dark-No Street Lights	16	42%	24%
Dark-Street Lights On	1	3%	15%

Nearby Transit: There are 7 WTA bus stops within 100 feet of Mt. Baker Hwy and approximately 0.13 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Mt. Baker Hwy is 3.03 – which ranks 18th out of 21 when compared to other HIN Corridors (18/21).

4.6 Remaining Interests in Additional Data

To inform its SAP equity strategy and apply that strategy to the prioritization and location of countermeasures, WCOG has census-based demographics, race/ethnicity for fatal crashes, the SVI index (applied to residential locations), and voluntarily provided demographic information from the 3,500 respondents to its SAP survey effort (described in Section 5 below). As WCOG's work on improving safety continues, we are interested in new data sources that will provide the following information:

- Data that provides insight on where socially vulnerable people live as well as what parts of the transportation system (roads, modes, etc.) they use.
- Race and ethnicity information for serious-injury crashes as well as fatalities.

5 Engagement and Collaboration

With SS4A funding to develop this SAP, WCOG was able to conduct more robust public engagement activities that it's typically able to. As a starting point, all of WCOG's public engagement is done in accordance with its Public Participation Plan (PPP). As detailed in the

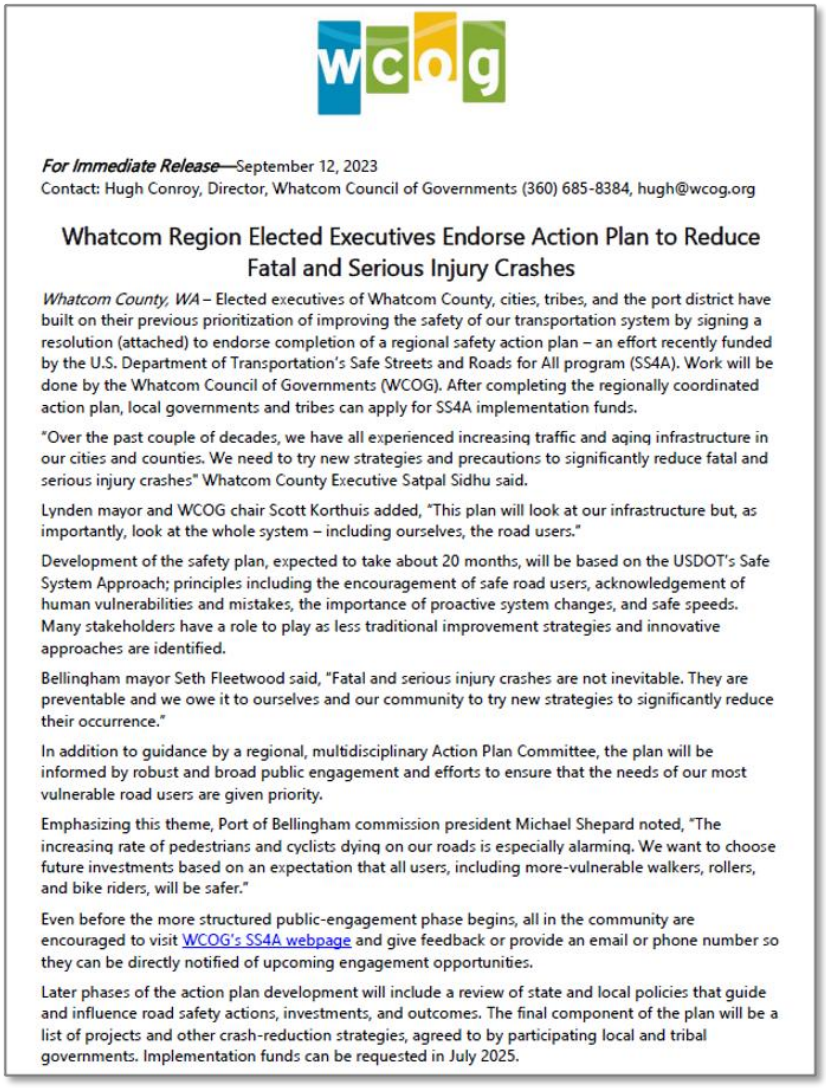
PPP, two ongoing public engagement activities of WCOG are development and maintenance of its website, www.wcog.org and the formation and facilitation of the Whatcom region Community Transportation Advisory Group (CTAG).

At the outset of WCOG's SAP development, an SAP webpage was established and updated as work progressed.

5.1 Early Media

Some early media was generated simply by the public notices that WCOG had received USDOT funding to complete the action plan. After work on the action plan commenced, and early actions were taken to solicit and document the collective support of regional elected executives of local governments, WCOG put out a press release. This generated interviews with *The Bellingham Herald*, *The Cascadia Daily*, and the *Northern Light* newspapers.

Figure 7: SAP Project Press Release



For Immediate Release—September 12, 2023
Contact: Hugh Conroy, Director, Whatcom Council of Governments (360) 685-8384, hugh@wcog.org

Whatcom Region Elected Executives Endorse Action Plan to Reduce Fatal and Serious Injury Crashes

Whatcom County, WA – Elected executives of Whatcom County, cities, tribes, and the port district have built on their previous prioritization of improving the safety of our transportation system by signing a resolution (attached) to endorse completion of a regional safety action plan – an effort recently funded by the U.S. Department of Transportation's Safe Streets and Roads for All program (SS4A). Work will be done by the Whatcom Council of Governments (WCOG). After completing the regionally coordinated action plan, local governments and tribes can apply for SS4A implementation funds.

"Over the past couple of decades, we have all experienced increasing traffic and aging infrastructure in our cities and counties. We need to try new strategies and precautions to significantly reduce fatal and serious injury crashes" Whatcom County Executive Satpal Sidhu said.

Lynden mayor and WCOG chair Scott Korthuis added, "This plan will look at our infrastructure but, as importantly, look at the whole system – including ourselves, the road users."

Development of the safety plan, expected to take about 20 months, will be based on the USDOT's Safe System Approach; principles including the encouragement of safe road users, acknowledgement of human vulnerabilities and mistakes, the importance of proactive system changes, and safe speeds. Many stakeholders have a role to play as less traditional improvement strategies and innovative approaches are identified.

Bellingham mayor Seth Fleetwood said, "Fatal and serious injury crashes are not inevitable. They are preventable and we owe it to ourselves and our community to try new strategies to significantly reduce their occurrence."

In addition to guidance by a regional, multidisciplinary Action Plan Committee, the plan will be informed by robust and broad public engagement and efforts to ensure that the needs of our most vulnerable road users are given priority.

Emphasizing this theme, Port of Bellingham commission president Michael Shepard noted, "The increasing rate of pedestrians and cyclists dying on our roads is especially alarming. We want to choose future investments based on an expectation that all users, including more-vulnerable walkers, rollers, and bike riders, will be safer."

Even before the more structured public-engagement phase begins, all in the community are encouraged to visit WCOG's SS4A webpage and give feedback or provide an email or phone number so they can be directly notified of upcoming engagement opportunities.

Later phases of the action plan development will include a review of state and local policies that guide and influence road safety actions, investments, and outcomes. The final component of the plan will be a list of projects and other crash-reduction strategies, agreed to by participating local and tribal governments. Implementation funds can be requested in July 2025.

5.2 The Whatcom Crash Test: Phase 1 Public Engagement Questionnaire

In the summer of 2024, WCOG launched its Safety Action Plan community engagement: The Whatcom Crash Test.

5.2.1 Saturation Mailing

All households (103,000) in Whatcom County received an invitation postcard to participate in a survey of feedback on: 1) primary transportation network safety concerns; 2) demographics including primary modes of travel, age, income level, and ethnicity/race, and contact information (phone numbers & email addresses); 3) level of support or rejection of various proven interventions aimed at target-zero, human-behavior crash factors.

To improve response rate, WCOG offered a chance to win one of fifty $50 virtual cash Visa debit cards.

5.2.2 Online survey instrument

After review of several online survey platforms, WCOG developed its questionnaire in Typeform.

5.2.3 Activities to increase community awareness and survey responses

WCOG undertook several activities to call attention to the postcard campaign and increase the number of responses to the online survey. These included:

- Survey-branded promotional material (stickers, pins, key chains)
- Attendance at community events including the Port of Bellingham's 4th of July Celebration, Ferndale Car Show, and the week-long Northwest Washington Fair in Lynden, WA. Students were hired to engage with community members at events and were outfitted in Crash Test branded shirts and hats.
- Bus boards on Whatcom Transportation Authority Buses
- Advertising in local newspapers

5.2.4 Crash Test

Over 3,500 Whatcom region residents responded to the survey. With the added incentive of the $50 prizes and the corresponding requirement to provide demographic and contact information, WCOG

obtained a large amount of feedback on safety issues and interventions as well as contact information for thousands of community members agreeable to continue a dialogue about reducing serious crashes.

Table 5: Crash Test Responses Summary

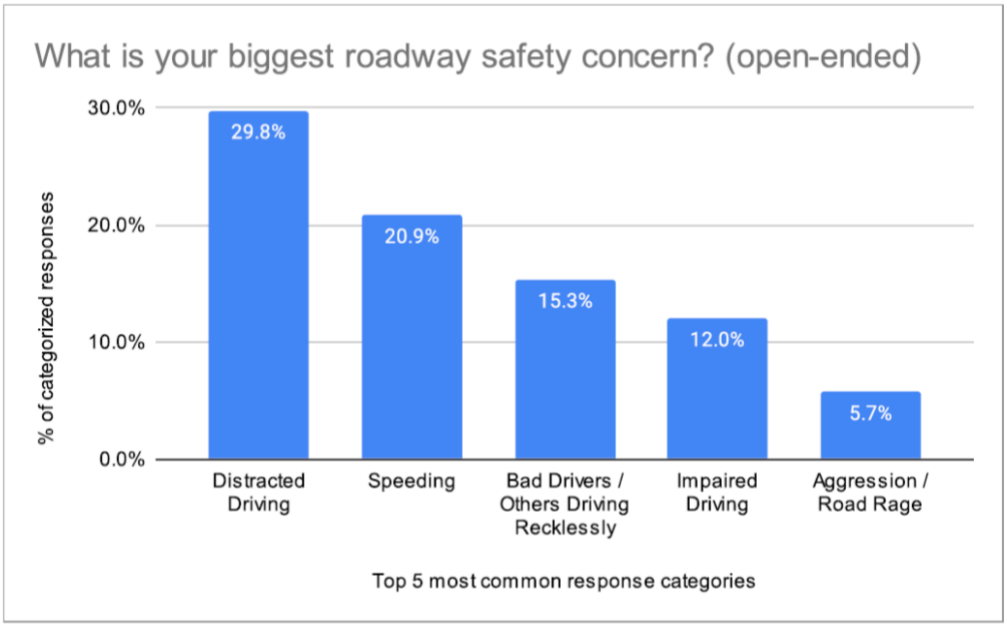
Post cards to all households	**103,000**		
Questionnaires completed	3,542	3.4%	of households
Email addresses	2,728	77%	of respondents
Phone numbers	2,605	74%	
Race/ethnicity	3,075	87%	
Income	3,119	88%	
Age	3,255	92%	

5.2.5 Crash Test Overview and Findings

The first six questions of the Whatcom Crash Test were aimed at gathering respondents' opinions about the most common crash factors and strategies to mitigate them.

The first question of the survey asked, "What is your biggest roadway safety concern?" and provided a response box where survey-takers could type anything they wanted. WCOG staff categorized over 3,000 of these free-response answers and found that the public is overwhelmingly concerned with unsafe driver behaviors.

Figure 8: Roadway Safety Concerns – Top Categories



Distracted driving was the top concern of respondents, mentioned in 30% of categorized responses. The second biggest concern was speeding, followed by a category called 'Bad Drivers / Others Driving Recklessly' which is comprised of various responses that used words like 'bad drivers', 'stupid drivers', 'other drivers', 'reckless', 'impatient', 'careless', 'unpredictable', 'erratic', and 'unsafe'. Categories relating to driver behavior were the dominant response to this

question. The top six most mentioned categories were all related to driver behavior, whereas traffic and infrastructure-related concerns were mentioned much less.

Table 6: Roadway Safety Concerns – All Categories

What is your biggest roadway safety concern?			
Rank	**Response Category**	**Count**	**Percent**
1	Distracted Driving	908	29.8%
2	Speeding	636	20.9%
3	Bad Drivers / Others Driving Recklessly	468	15.3%
4	Impaired Driving	367	12.0%
5	Aggression / Road Rage	175	5.7%
6	Tailgating / Following Distance	122	4.0%
7	Traffic / Congestion	99	3.2%
8	Visibility	93	3.0%
9	Road Conditions	85	2.8%
10	Crashes / Getting Hit	81	2.7%
11	Bike Safety	78	2.6%
12	Pedestrian Safety	76	2.5%
13	I5	75	2.5%
14	Specific Location	71	2.3%
15	Enforcement / Police	56	1.8%

*Percent is calculated based on total categorized responses (3,050 out of 3,560 total responses).
*Response categories are determined by WCOG staff based on open-ended responses from the public. The same response may be counted in more than one category at the same time.

The following figures summarize the results of the remaining five Crash Test survey questions which were aimed at gathering feedback about proven strategies for reducing crashes involving impairment, young drivers, speeding, bicycles and pedestrians, and distraction.

Figure 9: Strategies to Reduce Crashes Involving Impaired Driving

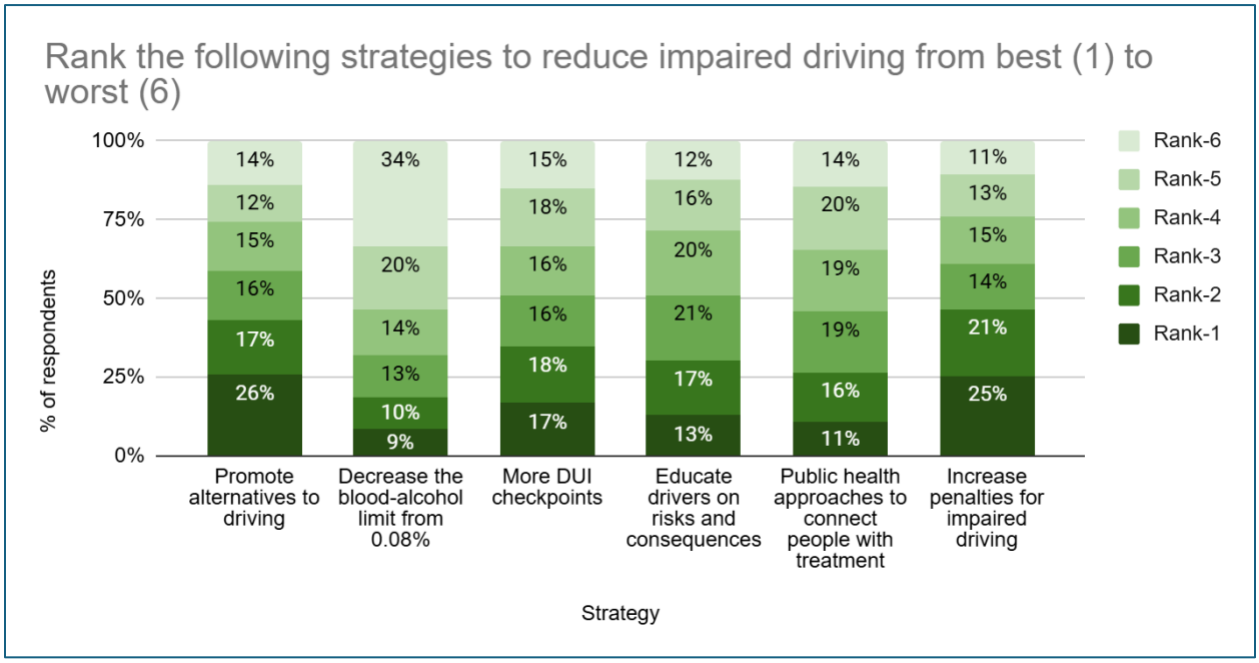


Figure 10: Young Drivers and Licensing Requirements

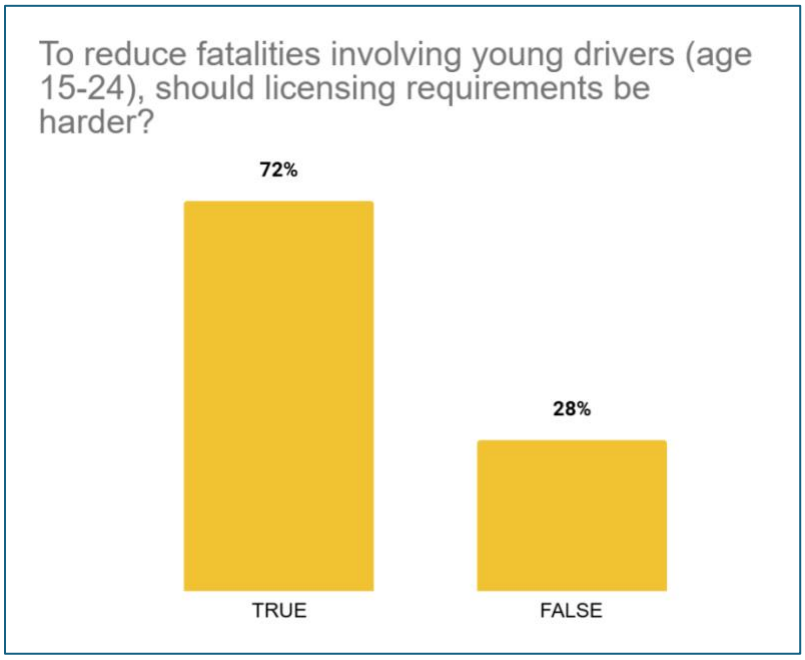


Figure 11: Strategies to Reduce Crashes Involving Speeding

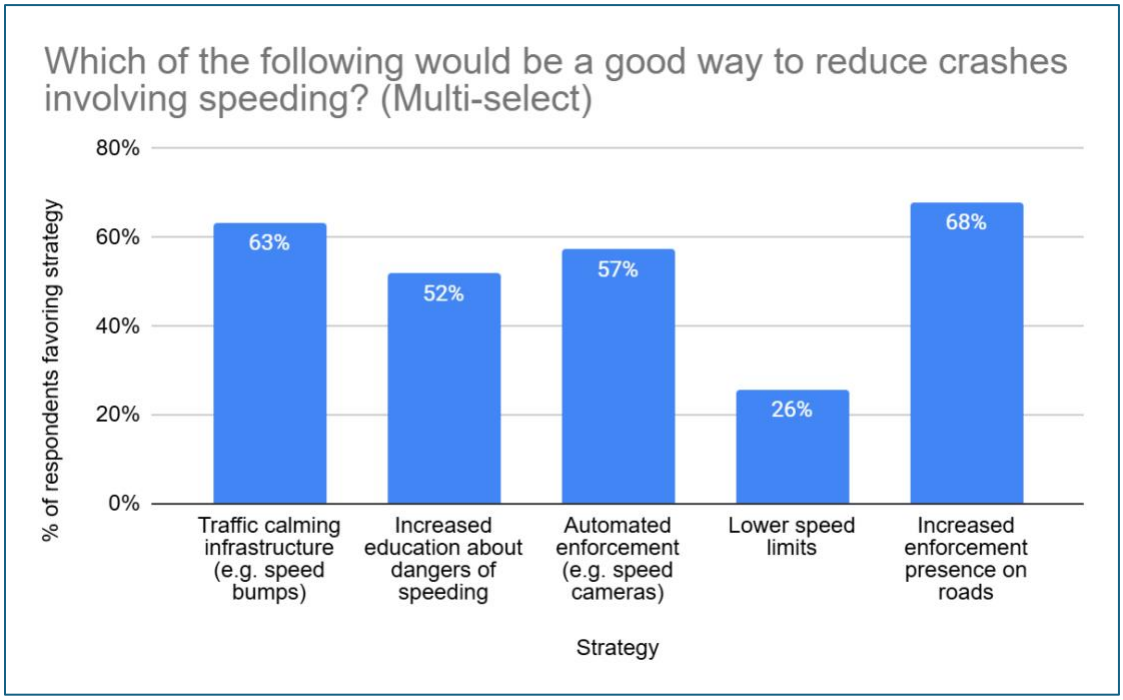


Figure 12: Strategies to Reduce Crashes Involving Bicycles and Pedestrians

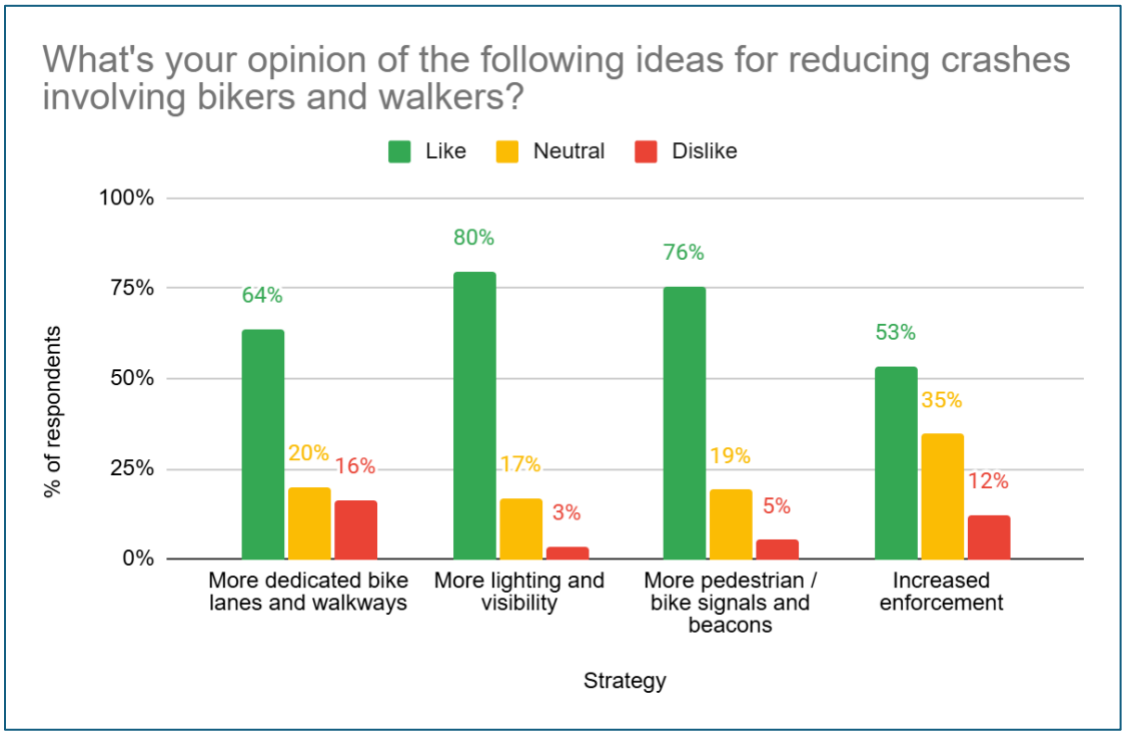
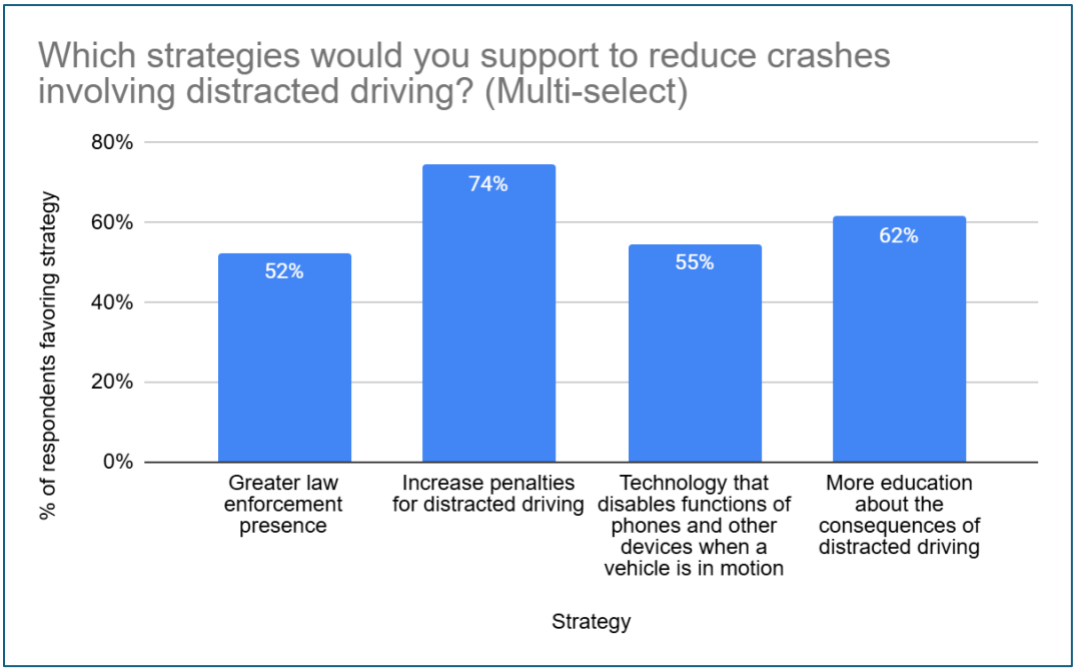


Figure 13: Strategies to Reduce Crashes Involving Distracted Driving



5.3 Phase II Public Engagement: Key Informant Interviews (KIIs)

Phase I public engagement, the Whatcom Crash Test, was very effective in generating feedback from a large number (3,500) of Whatcom region residents and producing statistically significant information on perceived safety problems and needs, and relative preferences for different types of interventions in response to the most common involved factors in F&SI crashes. As noted above, while every residence in the Whatcom region received a postcard invitation, a disproportionately low response rate from racial and ethnic minorities was determined based on respondents' voluntarily-provided demographic information. In addition to wanting to address this discrepancy, WCOG also wanted to reengage with interested community members to learn more about their perspectives on the future *implementation* of crash reduction efforts.

WCOG elected to conduct key-informant interviews with respondents to the Crash Test survey whose demographic profile also aligned with WCOG's Socially Vulnerability Index (SVI) – low-income individuals and/or people of color.

To recruit a sufficiently large group of key informants, WCOG sent an invitation to approximately 300 Crash Test respondents who had also identified themselves as non-white or low-income. WCOG offered invitees $75 (a virtual visa cash card) for 30 minutes of their time to complete a one-on-one interview with a member of WCOG staff. 35 key-informant interviews were completed over three weeks' time.

5.3.1 KIIs – Demographics

26 of the 35 informants (64%) identified as a person of color. 48% of key informants identified as male, 40% as female, and 9% as binary. Over half (51%) of key informants reported a household income of less than $50,000 a year.

Table 7: Race/Ethnicity of Key Informants

Race / Ethnicity	Count	Percent
White	9	26%
Asian, White	4	11%
Hispanic/Latino	4	11%
Hispanic/Latino, White	4	11%
American Indian/Alaska Native, Hispanic/Latino, White	2	6%
Asian	2	6%
American Indian/Alaska Native	1	3%
American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Middle Eastern/North African, Native Hawaiian/Pacific Islander, White	1	3%
American Indian/Alaska Native, Asian, White	1	3%
American Indian/Alaska Native, White	1	3%
Black/African American, White	1	3%
mixed western, eastern and Balkan European	1	3%
N/A	1	3%
Native Hawaiian/Pacific Islander	1	3%
White, mixed	1	3%
White, Romani	1	3%

Figure 14: Gender of Key Informants

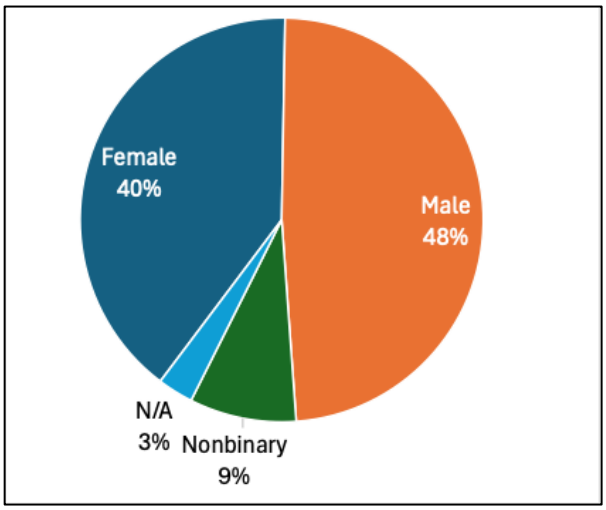


Table 8: Income of Key Informants

Household Income	Count	Percent
Less than $25,000	7	20%
$25,000 - $49,999	11	31%
$50,000 - $74,999	5	14%
$75,000 - $99,999	7	20%
$100,000 - $199,999	2	6%
$200,000 +	2	6%
N/A	1	3%

5.3.2 Notable Comments & Themes

The 35 key-informant interviews lasted between 30 and 50 minutes each. A set list of questions was provided ahead of time and used as a common starting point for each interview. WCOG interviewers used this framework to solicit informants' perspectives on how our region could implement crash-reduction strategies and ways to better connect and effectively communicate with everyone in our community to advance the safe-systems approach and engage all of us in effective action.

The following table presents notable quotes from key informants alongside the more common themes the quotes illustrate.

Table 9: Themes and Quotes from Key Informant Interviews

Countermeasures & Quoted Feedback	Extracted Themes
Alternatives to Driving as a Countermeasure to Impairment	• Acknowledgement that, while alternatives (e.g., transit, ride-hailing services) are important, Whatcom County's relatively low population density limits the financial feasibility of such services – especially at night. A lack of affordable alternatives is a problem. • Informants liked the idea of publicly supported ride-share options.
• "Having more affordable alternative transportation options would be the better solution, so that folks don't feel like, "Well, I have to drive myself because Uber's $50 for me." • "I think deciding to call for a ride has to do with cost. Nobody wants to pay the Uber driver, you know, you keep that 10 bucks myself." • "Getting a bunch of the local clubs, bars, pubs, whatever, all those places, I don't know if they have any kind of an association, but approaching them to maybe be active in promoting safe, safe ride home programs. I think that that would be well worth it because that's often when people really run into trouble when they're drinking excessively and then there isn't really good public transit or anything." • "I think it would be helpful to expand rideshare options and make them more accessible, and not only that, but trying to like make those resources more well known." • "Maybe a strategy could be running like public transportation a bit later in areas, like Fairhaven and downtown Bellingham where there's just a lot of bar activity. Like just giving people that opportunity."	
Enforcement – Greater Presence & Visibility	• Informants for the most part indicated support for greater enforcement presence and visibility noting the effectiveness as a deterrent. At the same time, this did not translate into support for increased punishment (raising of fines, etc.)
• "Automated enforcement such as speed cameras, I think that's a terrible idea. It's just a revenue maker. I would much rather see more traffic enforcement, see more state patrol out there. They're the ones that are gonna see people who are speeding unsafely weaving in and out of traffic or the impaired driver. The traffic camera is not gonna see that. Increased enforcement presence on the roads. Yeah, I would definitely like to see that."	
Enforcement – Increased Penalties	• Informants had concerns about inequitable outcomes of increased penalties – much more impactful on low-income people while providing little deterrence for higher-income people.
• "Penalties or fines based on a percentage of income rather than a set fee. I think that that could have different consequences in a certain way here because if it's a $200 fee, that's very different for different people. That could be all of the monthly rent compared to someone else who could just do that, throw out the $200 and then keep going cause it's just so insignificant to them."	

Countermeasures & Quoted Feedback	Extracted Themes
Driver Education & Training • "I took a few defensive driving classes when I was a teenager and that really opened my eyes to things like space management, the dangers of driving angry, and other defensive driving tactics. I think if everyone had classes like this it would be really important. Everyone needs to realize that they can improve their driving" • "It's really important for new drivers to know the consequences of their actions and how they can be held accountable." • "I'm thinking back when I took my driver's test, but I don't think we ever had any topic about navigating bike lanes and bikes…the education definitely needs to be there in the beginning when young drivers are learning how to drive." • "[The message] should be that people do need to use the bike lanes and the sidewalks for the same reasons you're using the center of the road in your car. These people need to get to work, need to go to the grocery store, and these are people that you know and care about that are using the sidewalk and the bike lane." • "Anybody who has been convicted really should go through some kind of a mandatory education program as well as considered for public-health approaches with treatment -- offered or given information -- encouraged to go through a treatment program because you know, if, if their drinking has gotten to the point of impaired driving, they're probably pretty far down that road of addiction and probably having a lot of other health issues or upcoming health issues." • "Defensive driving classes should be a public service – the sort of thing that is just funded with taxpayer money 'cause, honestly, we all need a car. We are all in this society that is built around cars. So obviously we need a car if we're able to get one. So we should really make it as accessible as possible while also, you know, putting lots of time and attention towards accident prevention and defensive driving, even though it's costly."	• Everyone can improve the safety of their driving (*shared responsibility)* • Defensive driving tactics • Drivers need to be aware of consequences: laws and penalties, crashes and liability, financial, etc. • Education should not be car-centered but, from the outset, be related to all types of transportation on and intersecting with roads. • Mentions that mandatory education training should be considered as a policy (differentiated along a spectrum of intervention from moving violations to impairment, e.g.) • Publicly funded driver training would be an appropriate policy given our society's chosen reliance on personal vehicles.
Infrastructure • "I think traffic calming infrastructure to reduce speeds is more effective than a speed limit, which asks you nicely to slow down. So, I feel like lowering speed limit in conjunction with signage might be an option. But other things, like increased enforcement, are more effective than speed limit reduction on its own." • "There are places that are heavily used by cyclists that could be improved -- paving the shoulder in certain locations would be really great and safer." • "More pedestrian focused areas of downtown would be nice… a car can't collide with a pedestrian if the car is not allowed to be there."	• Built context seems more effective at slowing vehicle speeds than simply posting lower speed limits. • Respondents see value in location-specific investments in greater comfort for walking and biking.

Countermeasures & Quoted Feedback	Extracted Themes
Messaging – Education & Encouragement • "[Produce messaging on] the right platform and base it on local data and anecdotes from Whatcom County people. The more personal you can make it, the stronger the messaging will be." • "Use local influencers and famous people to deliver messages that are applicable to the local community via short videos on Instagram and Facebook." • "Humor - I think when you get something that's attention grabbing, and just enough of a non-sequitur or violates a social norm in a safe way that is funny, you're going to get a lot more attention." • "Most people react more viscerally when you see the consequences of these things. It might sound like a scaring-people-straight type thing, but if somebody saw a family that was missing a family member because a drunk driver hit and killed them -- hearing and seeing those things and effects on the world and the people and the communities around them - I think that that would be the most effective way of going about it" • "Advertisement PSAs, but having influential people, talk about it [crashes]. The biggest thing is talking about their personal experiences of being in a crash, or their family" • "Newspapers report on accidents, but maybe they could include more information like the medical costs of that person going to the hospital, the cost of repairs." • "I remember seeing Justin Bieber or someone do a promo with Uber for New Year's and it was 50% off your Uber when you use Justin Bieber's code. I used it and I was like, oh that's so cool." • Western Washington University pushes their programs very effectively, like, they're very good at advertising the fact that they have night shuttles." • "I think, doing the education more in a blitz fashion, you know, a couple of times a year, where you engage all the various media all all at once – and emphasizing trying to prevent serious injury and death. And it's not about giving out tickets or putting people in jail or taking away their license. It's all about how we wanna reduce injury and death. I think trying to hit television, radio, whatever newspapers are still left, social media – all that at the same time in a sort of coordinated blitz rather than trying to do it continuously at a low level. I think you'd probably get more attention if you do it in that kind of blitz fashion." • "I've seen AAA's memes about driving under the influence and they're pretty funny, and it still contains an important message." • "I feel like people spend a lot of time on social media. In terms of like social media outreach, Washington Department of Transportation, their Instagram page is hilarious. They do a killer job and it's like … they make it pretty funny"	• Social media (among other media) should be used. • Recognizable, local figures should be used to deliver messages. • Important and impactful to show the devastating impact on people's lives – lost loved ones, lasting impact of injury, financial, etc. • Humor and unexpected formats can increase reach of messaging. • Messaging would be more impactful if the scale is large and surged across a lot of media rather than incremental and limited to lower-cost platforms. (The relationship between cost and impact is likely not linear).

5.3.3 Perspectives on Equity

As confirmed in the above demographic summary, WCOG's group of key informants aligned very well with its SVI definitions. And while there is certainly value in knowing that the most detailed public feedback included in-depth discussions with socially vulnerable populations, there was notably little commentary given based on the individual informants' themselves being an ethnic minority or low-income. The informants offered thoughtful opinions about how certain safety-improvement strategies could reinforce or exacerbate existing social inequities but, despite fitting into WCOG's socially vulnerable cohort, rarely gave answers that implied that social-vulnerability or marginalization was part of their personal experience in this context.

6 Equity

WCOG's equity strategy for the development of this SAP is aimed at the overarching goal of improving racial equity and reducing barriers to opportunity. More directly related to road safety, WCOG seeks to support transportation system treatments and interventions that address disproportionate crash fatalities of ethnic minorities in our region as well as recognize the higher levels of exposure to serious crashes that exist in and near socially vulnerable members of our community. The development of the SAP included elements listed below.

6.1 Equity and Data Analysis

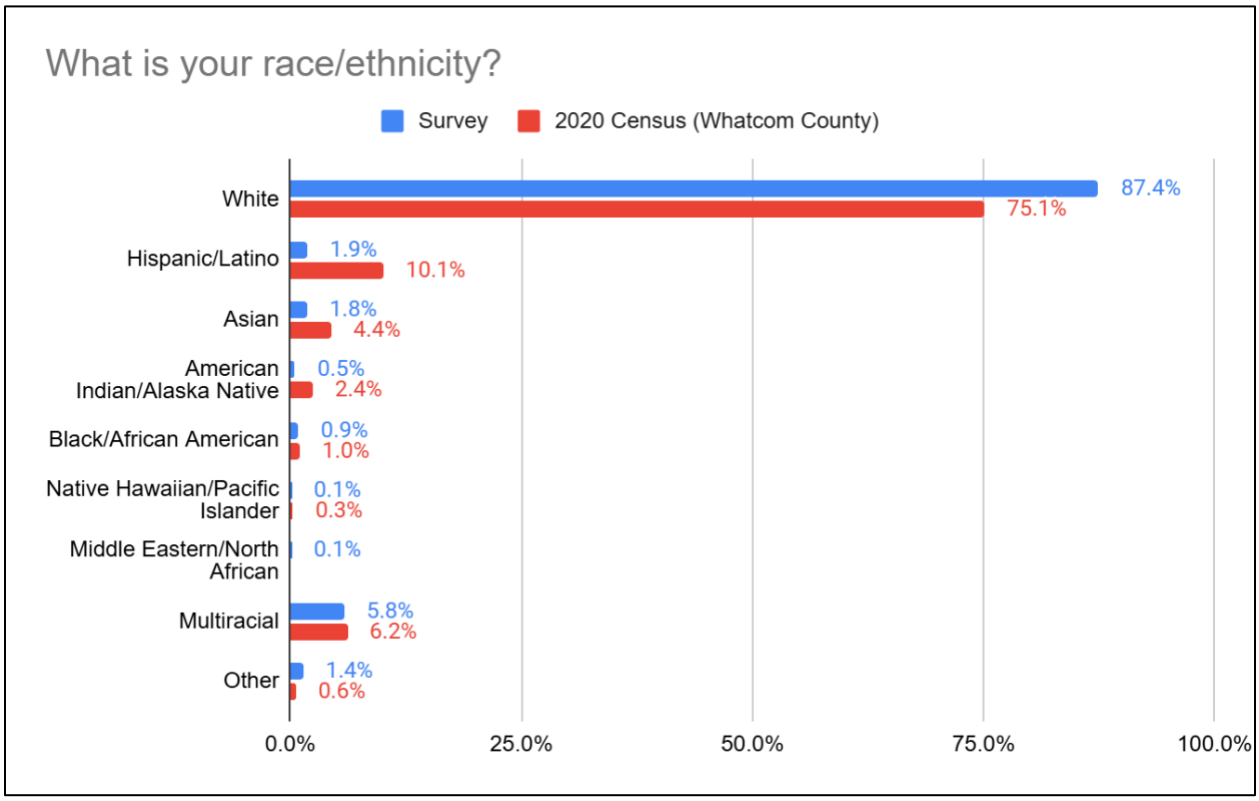
Because crash reports on fatalities, unlike non-fatal crashes, include ethnicity of the deceased, we can observe significantly disproportionate fatality rates for ethnic minorities. This is an added reason to apply WCOG's social vulnerability index to corridor prioritization and the subsequent implementation of future funded strategies.

WCOG is hopeful that over time it can develop data-sharing arrangements with other entities so that better demographic information is part of reporting on serious-injury crashes as well.

6.2 Equity and Public Engagement

The Whatcom Crash Test survey postcard campaign was the most robust public engagement that WCOG as ever conducted – ensuring contact was initiated with every household in the region. This being the case, the 3,500-respondent sample population did not proportionately represent the census-reported populations of some ethnicities. This is portrayed in Figure 15.

Figure 15: Respondents by Reported Ethnicity vs. 2020 Census Percentages



6.3 Equity and Policy Review

This SAP emphasizes the avoidance of inequitable outcomes, seek instruction from feedback gathered in all stages of WCOG's public involvement, and commits to involving all members of our community in planning future efforts to reduce serious crashes. WCOG applied its Social Vulnerability Index (SVI) in the prioritization and selection methodology of the SAP.

7 Strategy Selections

7.1 Methodology

7.1.1 Prioritization of HIN corridors

The first step in prioritizing future countermeasures was to develop a scoring system to rank the 21 HIN corridors to focus investments on five attributes. This system, calculations, and results are detailed in Appendix B.

- **Historical F&SI crashes**: Where the most fatal and serious-injury crashes occur
- **Equity**: In or adjacent to census tracts where larger percentages of socially vulnerable community members live (as measured by WCOG's SVI)
- **Active transportation exposure**: Where the historical percentage of F&SI crashes involving pedestrians and cyclists is high

- **Transit**: The presence of transit on the HIN corridor additionally quantified by the number of fixed-route transit stops per mile
- **Lack of recent investments**: Giving added priority to HIN corridors that have not received safety improvements for five of more years

Applying the scoring described above results in a cumulative point total assigned to each of the 21 corridors. Total points are subsequently used to reorder the corridors (as shown in Table 10 below).

With the corridors re-ranked using all five criteria, primary involved crash-factors are also considered for each corridor (Table 11). This combination of corridor priority and corridor-specific crash-factors is used to inform the identification of proven countermeasures (strategies) that would be the most responsive to reduction F&SI crashes on each HIN corridor. Selection of *Regional strategies* that aren't delivered to specific corridors (such as education and encouragement, availing of public health resources, etc.), will be less influenced by HIN corridor rankings.

Table 10: HIN Corridors in Order of Total 10-year F&SI Crashes with Scoring for Next-step Reranking

Corridor No.	Priority Rank	Corridor	F&SI Crashes (last 10 years)	Crashes Points	SVI Points	Active Trans-portation Points	Transit Points	Lack of Recent Investment Points	TOTAL POINTS
1	1	Interstate 5	82	50	0.0	3.1	0.0	5	58.1
2	7	Mt Baker Hwy - 542	38	25.3	9.5	0.9	0.1	5	40.9
3	10	N. Cascades Hwy - 20	19	12.7	17.1	0.0	0.0	5	34.8
4	6	Lakeway Dr	15	10.0	11.4	6.7	10.0	5	43.2
5	4	Meridian St	15	10.0	20.0	10.1	5.1	0	45.2
6	9	Birch Bay - Lynden Rd	14	9.3	17.1	6.0	0.2	5	37.7
7	17	Hannegan Rd	14	9.3	9.5	0.0	0.0	5	23.9
8	14	Slater Rd	13	8.7	12.4	2.6	0.1	5	28.8
9	11	Guide Meridian - Hwy 539	12	8.0	12.4	5.6	1.3	5	32.3
10	2	Northwest Ave	12	8.0	18.1	12.6	7.0	5	50.7
11	5	W. Bakerview Rd.	11	7.3	20.0	9.2	3.6	5	45.2
12	13	Haxton Way	10	6.7	15.2	1.7	2.5	5	31.0
13	21	Valley Hwy 9	10	6.7	0.0	1.7	0.2	5	13.5
14	12	E Chestnut St	9	6.0	7.6	9.4	3.5	5	31.5
15	3	Old Fairhaven Pkwy - Hwy 11	9	6.0	13.3	15.0	8.6	5	47.9
16	8	Woburn St	9	6.0	12.4	7.5	7.2	5	38.0
17	15	Kendall Rd - Hwy 547	9	6.0	8.6	5.6	1.0	5	26.2
18	16	Lincoln St	7	4.7	1.0	12.0	6.5	0	24.1
19	19	Blaine Rd - Hwy 548	7	4.7	9.5	0.0	0.0	5	19.2
20	20	E Badger Rd - Hwy 546	7	4.7	5.7	0.0	0.1	5	15.5
21	18	Everson Goshen Rd	7	4.7	9.5	0.0	0.3	5	19.5

Table 11: HIN Corridors, in Scored Priority Order, with Prevalence of Select Crash Factors

F&SI Crashes Rank	Priority Rank	Corridor	TOTAL POINTS	Most frequent factor (MFF)	MFF%	Next most freuent factor (NMFF)	NMFF%	Bike & Ped (Active)	B&P %	Young Drivers
1	1	Interstate 5	58.1	Speeding	38%	Impaired	20%	15	18.3%	38%
10	2	Northwest Ave	50.7	Distracted	33%	Impaired	17%	9	**75.0%**	17%
15	3	Old Fairhaven Pkwy - Hwy 11	47.9	Distracted	22%			8	**88.9%**	33%
5	4	Meridian St	45.2	Impaired	33%	Distracted	27%	9	**60.0%**	33%
11	5	W. Bakerview Rd.	45.2	Impaired	27%	Distracted	18%	6	54.5%	36%
4	6	Lakeway Dr	43.2	Speeding	40%	Impaired	13%	6	40.0%	40%
2	7	Mt Baker Hwy - 542	40.9	Impaired	39%	Speeding	32%	2	5.3%	34%
16	8	Woburn St	38.0	Distracted	44%	Impaired	33%	4	44.4%	
6	9	Birch Bay - Lynden Rd	37.7	Distracted	29%	Impaired	14%	5	35.7%	14%
3	10	N. Cascades Hwy - 20	34.8	Speeding	**63%**	Distracted	11%	0	0.0%	26%
9	11	Guide Meridian - Hwy 539	32.3	Distracted	40%	Impaired	40%	4	33.3%	30%
14	12	E Chestnut St	31.5	Impaired	33%	Speeding	22%	5	55.6%	44%
12	13	Haxton Way	31.0	Speeding	30%	Distracted	20%	1	10.0%	**60%**
8	14	Slater Rd	28.8	Distracted	46%	Impaired	15%	2	15.4%	31%
17	15	Kendall Rd - Hwy 547	26.2	Distracted	22%	Speeding	22%	3	33.3%	
18	16	Lincoln St	24.1	Distracted	29%			5	**71.4%**	
7	17	Hannegan Rd	23.9	Distracted	36%	Speeding	14%	0	0.0%	**57%**
21	18	Everson Goshen Rd	19.5	Speeding	43%	Distracted	14%	0	0.0%	14%
19	19	Blaine Rd - Hwy 548	19.2	Impaired	57%	Speeding	14%	0	0.0%	29%
20	20	E Badger Rd - Hwy 546	15.5	Distracted	14%	Impaired	14%	0	0.0%	43%
13	21	Valley Hwy 9	13.5	Impaired	40%	Speeding	30%	1	10.0%	30%

When evaluating the most prevalent involved factors for F&SI crashes on the 21 HIN corridors, and how and considering when to apply location-specific interventions or region-wide interventions, it is instructive to compare findings with the same crash factors summarized for *all* F&SI crashes for the Whatcom region (same cumulative ten-year period). Regional summary statistics for crash factors are in Table 12.

Table 12: F&SI Crashes Across Whatcom County (2014-2023)

Summary Stats	Count	Percent
Total F&SI Crashes	645	100%
Fatal Crashes	145	22%
Serious Injury Crashes	500	78%
F&SI Crashes by Mode *		
Pedestrian Involved	117	18%
Bicycle Involved	59	9%
Motorcycle Involved	121	19%
Motor Vehicle(s) Only	347	54%
Socially Vulnerable Areas		
Crashes Near 0.8-1 SVI Area	197	31%
Crashes Near 0.6-0.8 SVI Area	206	32%
Most Common Crash Factors		
Lane Departure	281	44%
Run Off The Road	226	35%
Driver 16 To 25 Years Involved	205	32%
Intersection Related Collision	194	30%
Speeding Driver	164	25%
Impaired Involved Person	159	25%
Distracted Driver	153	24%
Other Relevant Crash Factors		
Motorcycle Collision	122	19%
Pedestrian Involved	118	18%
Unrestrained Occupant	111	17%
Driver 65 Plus Years Involved	111	17%
Bicyclist Involved	59	9%
Non Junction Opposite Direction Crash	55	9%
Heavy Vehicle Crash	43	7%
Drowsy Driver	17	3%
Lighting Conditions		
Daylight	359	56%
Dark-No Street Lights	152	24%
Dark-Street Lights On	97	15%
Dusk	21	3%

Data: Washington State Department of Transportation 2014-2023, American Community Survey 5-Year Estimates (2017-2021), compiled by Whatcom Council of Governments

7.2 Strategy Selection: Matching Countermeasures with HIN Corridor Profiles & Trends

With each of the 21 HIN Corridors profiled and ranked, strategies (from the FHWA and NHTSA lists of proven countermeasures) were selected for each HIN corridor based on 1) the most historically preponderant involved factors (e.g. distraction, impairment, speeding, etc.) and 2) public feedback. Selected corridor strategies are shown in Table 13 below:

Table 13: Selected, Proven Strategies by Corridor

Corridor	Selected, Proven Strategies
Interstate 5	• High Visibility Saturation Patrols (focused on speeding & impairment) • Speed safety cameras • Engineering based countermeasures for run-off-the-road crashes. • *Regional* communications & outreach campaign (addressing speeding, impairment, and distraction)
Northwest Avenue	• Pedestrian / Bicycle strategies (as determined by the City of Bellingham). E.g.: • Intersection strategies (As determined by the City of Bellingham) • *Regional* communications & outreach addressing distraction, speeding, and impairment.
W. Bakerview Rd.	• Pedestrian / Bicycle strategies (as determined by the City of Bellingham), E.g.: • High Visibility Saturation Patrols (focused on impairment) • *Regional* communications & outreach addressing impairment, distraction, and speeding.
Meridian St. (State Route 539)	• Pedestrian / Bicycle strategies (as determined by the City of Bellingham & WSDOT), E.g.: • *Regional* communications & outreach addressing impairment, distraction, and speeding.

Corridor	Selected, Proven Strategies
Old Fairhaven Pkwy. (State Route 11)	• High-Visibility Enforcement at Pedestrian Crossings • Intersection strategies (As determined by WSDOT and the City of Bellingham) • *Regional* communications & outreach addressing distraction, impairment, and speeding.
Birch Bay – Lynden Rd.	• *Regional* communications & outreach addressing distraction, impairment, and speeding. • Pedestrian / Bicycle strategies (as determined by Whatcom County), E.g.: • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions. • Address the higher rates of crashes involving heavy vehicles • Lane Departure countermeasures (as determined by Whatcom County)
Mt. Baker Highway (State Route 542)	• High Visibility Saturation Patrols (focused on impairment & speeding) • Roadway departure / lane departure countermeasures (as determined by WSDOT) • Speed safety cameras • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions. • *Regional* communications & outreach addressing impairment, speeding, and distraction.

Corridor	Selected, Proven Strategies
North Cascades Highway (State Route 20)	• High Visibility Saturation Patrols (focused on impairment & speeding) • Speed safety cameras • Roadway departure / lane departure countermeasures (as determined by WSDOT) • Road Safety Audit (This corridor and its crash history show some distinct attributes that merit a wholistic review. Attributes include: a winding, mountainous roadway; preponderance of speeding as an F&SI crash factor, a notably high percentage of motorcycle involvement; numerous intersections with smaller roads and forest service roads; and roadside parking areas for trail heads and viewpoints.
Lakeway Drive	• High Visibility Saturation Patrols (focused on speeding) • Speed Safety Cameras • Pedestrian / Bicycle strategies (as determined by the City of Bellingham, WSDOT), E.g.: • Intersection strategies (As determined by the City of Bellingham, WSDOT) • *Regional* communications & outreach addressing speeding, impairment, and distraction.
Guide Meridian (State Route 539)	• High Visibility Saturation Patrols (focused on impairment and distraction). • Speed Safety Cameras • Intersection strategies as determined by WSDOT. • Countermeasures that address the high rate of motorcycle-involved crashes. • *Regional* communications & outreach addressing impairment, distraction, and speeding.
Woburn St	• High Visibility Saturation Patrols (focused on impairment and distraction). • Speed Safety Cameras • Intersection strategies as determined by City of Bellingham. • *Regional* communications & outreach addressing distraction, and speeding.

Corridor	Selected, Proven Strategies

Haxton Way	• Address the higher rates of crashes involving
	  ○ Young drivers
	  ○ Lane departures

Slater Road	• High Visibility Saturation Patrols (focused on distraction). • Speed Safety Cameras • Intersection strategies as determined by Whatcom County. • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions. • Address the higher rates of crashes involving heavy vehicles • *Regional* communications & outreach addressing distraction, and speeding.
East Chestnut Street	• High Visibility Saturation Patrols (focused on impairment). • Intersection strategies as determined by the City of Bellingham. • Pedestrian safety improvements as determined by the City of Bellingham.
Kendall Road (SR 547)	• Engineering based countermeasures for crashes involving run-off-the-road and lane-departure (as determined by WSDOT) • Pedestrian safety improvements • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions.

Kendall Road (SR 547)	• Engineering based countermeasures for crashes involving run-off-the-road and lane-departure (as determined by WSDOT) • Pedestrian safety improvements • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions.
Hannegan Road	• Intersection strategies as determined by Whatcom County. • High Visibility Saturation Patrols (focused on distraction and seatbelt use). • Engineering based countermeasures for lane-departure and non-junction opposite direction crashes (as determined by Whatcom County) • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions. • Address the higher rate of crashes involving young drivers
Blaine Road (SR 548)	• High Visibility Saturation Patrols (focused on impairment and seatbelt use). • Intersection strategies as determined by WSDOT and Whatcom County. • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions. • *Regional* communications & outreach addressing impairment and seatbelt use.

Corridor	Selected, Proven Strategies
Everson Goshen Road	• High Visibility Saturation Patrols focused on speeding. • Intersection strategies as determined by Whatcom County. • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions. • Engineering based countermeasures for lane-departure and non-junction opposite direction crashes as determined by Whatcom County • Address the higher rates of crashes involving heavy vehicles. • *Regional* communications & outreach addressing impairment.
Lincoln Street	• Intersection strategies as determined by the City of Bellingham. • Pedestrian and bicycle safety improvements as determined by the City of Bellingham. • Address the higher rates of crashes involving heavy vehicles.

East Badger Rd (SR 546)	• Intersection strategies as determined by WSDOT and the City of Lynden.
	• Address the higher rates of crashes involving
	  ○ Young drivers
	  ○ Older drivers
	  ○ Unrestrained drivers
	  ○ Heavy vehicles

Valley Highway (SR 9)	• Engineering based countermeasures for run-off-the-road, lane-departure, and non-junction opposite direction crashes as determined by WSDOT. • High Visibility Saturation Patrols focused on impairment and seatbelt use. • Lighting improvements responsive to the high rate of crashes occurring at night in unlighted conditions. • *Regional* communications & outreach addressing impairment and seatbelt use.

7.2.1 Summary Matrix of HIN Strategies

Figure 16: Summary of HIN Strategies

	Hi Vis Enforcment / Saturation Patrol:					Speed Safety Cam-eras	Engineering Based Solutions				Regional Comminications Strategy Addressing:				Various Strategies Adressing:				
HIN Corridors	Pedest-rian Safety	Speeding	Impair-ment	Distract-ion	Seatbelt Use		Run-off-the-road	Pedest-rian & Bicycle	Inter-section	Lane Depart-ure	Speeding	Impair-ment	Disract-ion	Seatbelt Use	Lighting	Heavy Vehicle Involved	Road Safety Audit	Motor-cycle Involved	Young Drivers Involved
Interstate 5		x	x			x	x				x	x	x						
Northwest Ave								x			x	x	x						
Old Fairhaven Pkwy. (SR 11)	x							x	x		x	x	x						
Meridian St. (SR 539)								x			x	x	x						
W. Bakerview Rd.			x					x			x	x	x						
Lakeway Drive		x				x		x	x		x	x	x						
Mt. Baker Hwy (SR 542)		x	x			x					x	x	x		x				
Woburn St.			x	x		x			x		x		x						
Birch Bay - Lynden Rd										x	x	x	x		x	x			
N. Cascades Hwy (SR 20)		x				x	x										x	x	
Guide Meridian (SR 539)			x	x		x			x		x	x	x					x	
East Chestnut St			x					x	x										
Haxton Way										x									x
Slater Road				x		x					x		x		x	x			
Kendall Road (SR 547)							x	x		x					x				
Lincoln Street								x	x							x			
Hannegan Road				x	x				x	x				x	x				x
Everson Goshen Road		x							x			x			x	x			
Blaine Rad (SR 548)			x		x									x					
East Badger Road (SR 546)					x				x					x		x			x
Valley Highway (SR 9)			x		x					x		x		x	x				

8 Policy Analysis

Considering the strategies identified in the previous section and the locations and/or facilities where various strategies would be implemented (locally owned roadways, state owned roadways, regional communications strategies, etc.), this section looks more closely at selected strategies that need clarification as to current policy support, legal authorities, institutional cooperation, and funding.

8.1 Traffic Safety Cameras

In Washington State, Traffic Safety Cameras are permitted in Washington State under the Revised Code of Washington Title 46, Chapter 63, Sections 220-260. As legislated in these sections, cities and counties may, with adoption of local ordinances and completion of required analyses, use "automated safety cameras" to issue citations for speed violations, stoplight violations, railroad crossing violations, and bus zone violations (bus zone enforcement is only allowed in higher population areas.)

8.1.1 Detection of speed violations

This plan's previous discussions of historical crash data and strategies points primarily to consideration of cameras for speed enforcement. RCW 46.63.250 narrows the list of locations for camera based "detection of speed violations" to:

- Hospital speed zones
- Public park speed zones
- School speed zones
- School walk zones
- Roadway work zones (when road workers are present)
- State highways within city limits that are classified as city streets under RCW 47.24.

8.1.2 Current Local-Government Ordinances in the Whatcom Region

Of the local governments in the Whatcom Region, only the City of Bellingham has adopted ordinances to support use of automated safety cameras (Bellingham Municipal Code, Chapter 11.16). While these ordinances were passed in 2010, the city has not yet implemented any camera-based detection of traffic violations. Bellingham's ordinance currently supports use of stoplight enforcement at five intersections and school-zone speed enforcement at two school locations. If Bellingham (or other local governments in the Whatcom region) were to use speed safety cameras as discussed in this safety action plan, local ordinances should be 1) updated to be in compliance with applicable state law (which has been revised since 2010) and 2) be broadened to include uses in additional areas allowed under state law (especially state routes that are also city streets).

8.2 Existing Safety Plans

8.2.1 City of Bellingham

The City of Bellingham completed a Local Road Safety Plan (LRSP) in January, 2024. The plan positions the city to apply for funding from the federally funded Highway Safety Improvement Program (HSIP) administered by Washington State. The plan describes the city's transportation network, safety goals, crash data analysis, and then presents a list of strategies and specific projects.

Unlike this RSAP, Bellingham's LRSP does not cover state highways in the city of Bellingham. While the plan does discuss past collaborations with WSDOT in identifying and implementing safety improvements on the Guide Meridian (State Route 539), the crash data analyzed in Bellingham's LRSP is for city roads that Bellingham owns and maintains.

Several Bellingham roads (that are not state routes) are also included in this RSAP's HIN.

Bellingham's focus on its own roads within the city limits produces different summary statistics. E.g., because a large number of F&SI crashes have occurred on state routes (where speeds are higher), the findings regarding city roads brings more attention to pedestrian and bicycle-involved crashes. Thus, the resulting list of priority projects includes a lot of pedestrian improvements at street intersections and road intersections with trails, pedestrian improvements around transit facilities, and speed studies.

Like this RSAP, Bellingham's LRSP has also identified public safety campaigns using education and encouragement and automated speed safety cameras.

8.2.2 Lummi Nation

The Lummi Nation (The Lummi Tribe of the Lummi Reservation) received SS4A funding in the 2023 cycle – a planning grant to develop a safety action plan and a grant for demonstration projects. Lummi Nation's action-plan development started in February 2025 with a committee meeting of Lummi Nation and Whatcom County staff.

8.2.3 City of Ferndale

The City of Ferndale received SS4A funding to complete a safety action plan in the 2024 funding cycle. Ferndale's SAP will focus on specific corridors and subareas in the city, ongoing initiatives, and unique concerns of the city.

8.2.4 Regional Comprehensive Plan Transportation Elements (Select Examples)

Whatcom County

Transportation elements of local-government comprehensive plans discuss safety in broader terms. For example, the Whatcom County comprehensive plan transportation element presents its objective as "to continue to allow for the movement of people and goods throughout the county in a way that is safe, efficient, environmentally responsible, accessible to all users, and cost effective." Subsequent allusions to safety address adherence to intersection design standards; the establishment of "reducing the risk of personal injury and property damage" as "the County's top consideration;" and policies to ensure that new developments (and "reconstruction transportation projects") provide safe pedestrian and bicycle infrastructure, and safe, non-motorized connections to "public transit nodes."

The Whatcom County Comprehensive Plan also cites the County Health Department as a participant in transportation planning explaining that transportation issues affect the health and safety of the community.

City of Bellingham

The overarching goals and policies of the Bellingham comprehensive plan transportation element establish priority for a safe and efficient transportation system for all modes over improvements aimed solely at reducing vehicle congestion.

The comprehensive plan transportation element does not directly discuss safety investments in terms of crash reduction beyond noting crash-reduction benefits of access management and

intersection improvements (e.g. conversion of signalized intersections to roundabouts). Crash reduction strategies are treated in greater detail in Bellingham's Local Road Safety plan described above.

9 Progress and Transparency

This section describes the measures and metrics that WCOG will use to assess the success of this action plan and make those assessments available to our community. WCOG also intends to use future assessments to inform corrective action if they show underperformance or indicate beneficial changes that should be considered.

9.1 Safety Action Plan Metrics

The following subsections will describe selected measures and metrics.

9.1.1 Number of F&SI Crashes

The primary objective of the SS4A Program and this SAP is to greatly reduce F&SI crashes. Four metrics will be used to measure success towards this goal:

- Annual total F&SI crashes
  - On WCOG's HIN corridors
  - County-wide
  - That involve a pedestrian or cyclist
- Annual HIN Corridor F&SI crash rate per 100 million VMT

9.1.2 Implemented Countermeasures

WCOG's SAP has been developed to enable Whatcom region governments and agencies to apply, individually or in partnership, for implementation funding to advance chosen strategies and specific countermeasures. WCOG will thus use two metrics to track the number of implementations stemming from the adoption of this SAP.

- A cumulative record of implemented strategies (countermeasures)
  - County-wide
  - In or adjacent to socially vulnerable areas as determined by WCOG's SV index.

9.1.3 Pedestrian & Bike Trips

In response to the growing number of F&SI crashes involving pedestrians and cyclists, WCOG will recommend prioritizing safety measures for walking and biking trips. WCOG will work with local government partners to use both existing bike and pedestrian data as well as develop new information to measure bike and pedestrian trips on and intersecting with HIN corridors.

9.1.4 Regional Public Information Campaigns

As part of implementing any future information campaigns aimed at regional encouragement of safer behaviors on our roads (primarily related to speeding, impairment, and distraction), WCOG will record individual efforts and their estimated reach (e.g. types of media, target audience, number of households or people reached, any available measures of connection, etc.). WCOG will also continue to work with regional enforcement agencies (local police & sheriff and state patrol) to see how data on citations could be joined with F&SI crash data to better detect statistically significant changes in driver behavior (and reductions in F&SI crashes).

9.2 Publication of Performance

As with WCOG's current SS4A web page, WCOG will continue to maintain and update web content dedicated to regional safety where this SAP will be available along with future, documented assessments of progress (as described above).

10 Next Steps

10.1 2025 USDOT Notice of Funding Opportunity (NOFO)

On March 28, 2025, USDOT announced the next funding opportunity for the SS4A Program.

Applications for implementation funds or additional planning funds are due **June 26, 2025**.

The expected minimum implementation funding award is $2.5 million.

10.2 Future Funding Opportunities

It is unclear at the time of this writing how USDOT will administer the remainder of the currently authorized SS4A program funding. WCOG will work with its partner agencies to advance strategies identified in this plan by connecting to funding opportunities including:

- USDOT SS4A Notice of Funding Opportunities (NOFOs)
- Washington State safety funding programs
- Federal safety programs that may emerge in upcoming reauthorization

10.3 Additional SS4A Planning Activities

As partner agencies identify specific countermeasures that they want to advance, there may be reasons to seek support for additional planning activities such as:

- Intersection video analysis
- Technology evaluations
- Focus groups for education and outreach campaigns

Appendix A:
WCOG's Select List of Proven Countermeasures

Lists of road safety countermeasures that data has shown to reduce fatal and serious-injury crashes are maintained by FHWA and the NHTSA. WCOG has selected a subset of these countermeasures as most applicable for the Whatcom region. These are listed below, grouped by the F&SI crash factors they address.

Table A1: List of Proven Countermeasures for the Whatcom Region

Crash Factor	Countermeasures	Description / Regional notes
Speeding	Appropriate Speed Limits for All Road Users	Consideration of lower speed limits where crashes are frequent, pedestrian and bike trips are significant, and/or land-use context (e.g. urban village) merits consideration.
	Speed Safety Cameras	Shown to be effective but there are concerns related to privacy, equity, and program administration. Public engagement is very important.
	High Visibility Enforcement	"Law enforcement targets selected high-crash locations for enhanced enforcement and publicizes the enforcement widely to maximize general deterrence of speeding beyond those who are stopped."
	Dynamic Speed Display/Feedback Signs	"Feedback signs show drivers that they are speeding and may encourage some drivers to slow down. The signs may also suggest to drivers that speeds are being monitored or enforcement is nearby."
Impairment (Alcohol) *(Continued on next page)*	Lower BAC Limits	"Studies show impairment in driving ability begins at levels below .08 g/dL The NTSB has recommended a BAC of .05 g/dL or lower for all drivers. Consequently, many countries, and some U.S. jurisdictions, impose penalties for drivers who have BACs of .05 g/dL or higher. A recent survey shows, 53% of drivers in the United States supported lowering the BAC limit for all drivers to .05 g/dL." This countermeasure would require state legislation, but local elected officials could choose to advocate for it.
	High-Visibility Saturation Patrols	"A saturation patrol entails many law enforcement officers patrolling a specific area for impaired drivers at times and locations where impaired-driving crashes commonly occur. The primary purpose is to deter drunk driving by increasing the perceived risk of arrest. Saturation patrols should be publicized extensively and conducted as part of an ongoing program."

Crash Factor	Countermeasures	Description / Regional notes
Impairment (Alcohol) Continued	Alcohol Ignition Interlocks	"An alcohol ignition interlock prevents a vehicle from being operated unless the driver provides a breath sample with a BrAC lower than a pre-set level, usually .02. Interlocks typically are used as a condition of probation for DWI offenders, to prevent them from driving while impaired by alcohol after their driver's licenses have been reinstated."
	Alcohol Problem Assessment and Treatment	"Many DWI first offenders and most repeat offenders are dependent on alcohol or have alcohol misuse problems. They likely will continue to drink and drive unless their alcohol misuse problems are addressed. A DWI arrest provides an opportunity to identify offenders with alcohol misuse problems and to refer them to treatment as appropriate. However, treatment should not be provided in lieu of other sanctions or as part of a plea bargain or diversion program that eliminates the record of a DWI offense".
	Alternative Transportation	"In NHTSA's 2007 Roadside Survey, half (53%) of intoxicated drivers reported coming from a bar, restaurant, or a friend's house, and approximately 70% were driving home. Having alternative transportation is important to reduce the need for intoxicated people to drive after drinking. Alternative transportation can include for-profit rideshare services, nonprofit safe ride programs, and public transportation such as subways or buses."
Distraction *(Continued on next page)*	Mass Media Campaigns	"Intensive communication & outreach regarding impaired driving that use radio, television, print, social, and other mass media, both paid and earned. Mass media is a standard part of every state's effort to reduce alcohol-impaired driving. Campaigns publicize deterrence and prevention measure (e.g. a change in a State's DWI laws or highly visible enforcement program), and promotion of behaviors such as using designated drivers. Effective campaigns identify a specific target audience and communications goal and develop messages and delivery methods that are appropriate and effective."

Crash Factor	Countermeasures	Description / Regional notes
Distraction *continued*	High-Visibility Cell Phone Enforcement	"The objective is to deter cell phone use by increasing the perceived risk of getting caught. The HVE model combines dedicated law enforcement with paid and earned media supporting the enforcement activity. Law enforcement officers actively seek out cell phone users through special roving patrols or through a variety of enforcement techniques such as the spotter technique where a stationary officer will radio ahead to another officer when a driver using a cell phone is detected. Both earned and paid media are critical to ensure the general public is aware of the enforcement activity and to increase the perception that being caught is likely."
	Communications on Outreach and Distracted Driving	"Distracted driving communications and outreach campaigns directed to the general public. Since distracted driving is a particular concern among teenage drivers, distracted driving campaigns may specifically target teen drivers. Some campaigns carry a general "pay attention" message, while others are directed at specific behaviors such as cell phone use."
Young Drivers Involved	Graduated Driver Licensing (GDL)	Washington State has already adopted GDL and related GDL strategies, e.g. • GDL Intermediate License Nighttime Restrictions • GDL Intermediate License Passenger Restrictions
Pedestrians & Cyclists Involved *(Continued on next page)*	Pedestrian Safety Zones	"Seeks large decreases in pedestrian crashes and injuries by targeting education, enforcement, and engineering measures to geographic areas and audiences where significant portions of the pedestrian crash problem exist."
	Safe Routes to School	"Increase the amount of walking and bicycling trips to and from school while simultaneously improving safety for children walking or bicycling to school. SRTS programs are community-based and are intended to be comprehensive in nature. Programs include engineering and enforcement activities to improve traffic safety and to reduce or eliminate risky elements of the traffic environment around primary and secondary schools so children can safely walk or bicycle to school. Programs may also include education of children, school personnel, parents, guardians, community members, and law enforcement officers about safe walking and bicycling behavior and safe driving behavior around pedestrians and bicyclists."

Crash Factor	Countermeasures	Description / Regional notes
Pedestrians & Cyclists Involved *Continued*	Conspicuity Enhancement	"Increase the opportunity for drivers to see and avoid pedestrians, particularly when it is dark, since this is when 77% of pedestrian fatalities occur nationally. A conspicuous object is one that is not only *visible* but that *stands out* from the surrounding environment and commands attention. Conspicuity can be sensory (the ability to detect and distinguish an object in the landscape) or cognitive (whether the object is expected to be in the environment and can be seen and simultaneously understood
	High-Visibility Enforcement at Pedestrian Crossings	"Increase compliance with the traffic laws that are most likely to improve the safety of pedestrians in areas where crashes are happening or most likely to happen due to increased exposure. While this section focuses on enforcement of driver and pedestrian behavior at pedestrian crossings, it is reasonable to assume that enforcement of other risky driving behaviors such as speed, distraction, impairment, red-light running, etc., improve the safety of people walking."
	Lower Speed Limits	"The speed of motor vehicle traffic has a clear impact on bicyclist safety. The goal of reducing motorist travel speeds is to increase reaction time for both drivers and bicyclists to avoid crashes, as well as reduce the severity of bicyclists' injuries when these crashes occur. Reducing and enforcing speed limits is just one tool among many for decreasing travel speeds with the goal of improving bicyclist safety.")
	Bicycle Safety Education for Children	"Teach children bicycle handling skills, traffic signs and signals, how to ride on streets with traffic present, proper helmet use, bicycle safety checks, and bicycle maintenance. As part of a regular school curriculum, education can reach every student. , training outside of school settings may be more feasible in some circumstances. It is critical to emphasize the importance of pairing bicycle skills training with other interventions like built environment changes that can reduce the risk of bicycle-related injuries in children."
	Various Infrastructure Treatments (FHWA)	• Bicycle Lanes • Leading Pedestrian Intervals (at crosswalk signals). • Pedestrian Hybrid Beacons • Road Diets (Roadway Reconfiguration) • Crosswalk Visibility Enhancements • Medians and Pedestrian Refuge Islands in Urban and Suburban Areas • Rectangular Rapid Flashing Beacons (RRFB) • Walkways

Crash Factor	Countermeasures	Description / Regional notes
Intersections	Various Treatments (FHWA)	• Backplates with Retroreflective Borders • Dedicated Left- and Right-Turn Lanes at Intersections • Roundabouts • Yellow Change Intervals • Corridor Access Management • Reduced Left-Turn Conflict Intersections • Systematic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections

Appendix B:
High Injury Network Corridor Profiles

The following pages are profiles for each of WCOG's 21 High Injury Network corridors. Each corridor profile page contains an individual map and summary table.

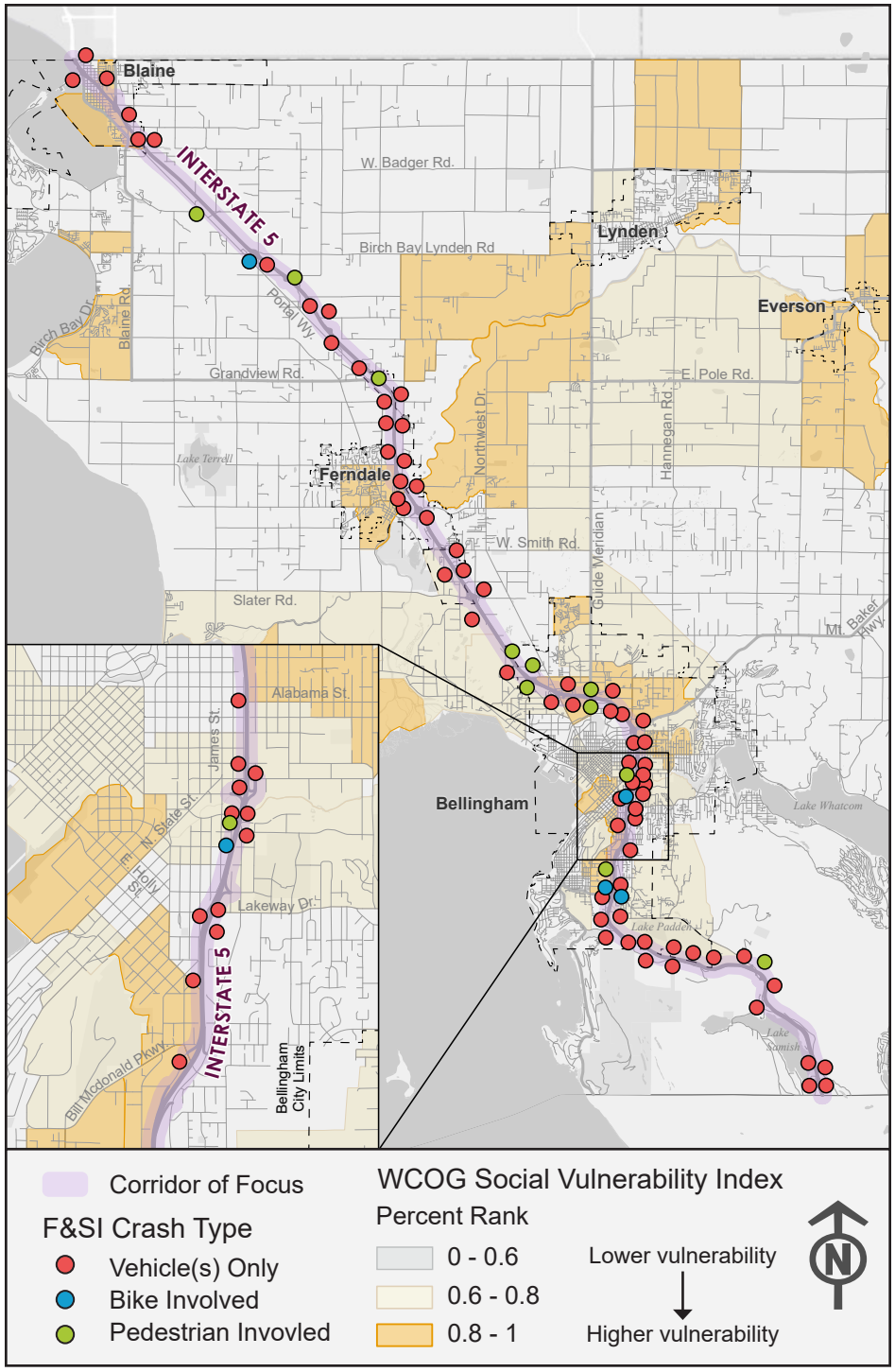
Maps show the crash type and locations of F&SI crashes along the given corridor. The crash type refers to the modes involved in the crash (vehicles only, pedestrian involved, or bicyclist involved). Pedestrian and bicyclist involved crashes are derived from Washington State Target Zero indicators and refer to a crash between a motor vehicle and a pedestrian or a motor vehicle and a bicyclist, respectively. Across the given dataset, there is no overlap between pedestrian involved and bicyclist involved crashes and there is only one instance of a crash that involved both a pedestrian and motorcyclist. For the purposes of the map, F&SI crashes involving motorcycles are included in the 'Vehicle(s) only' category, however they are listed separately in the summary table to provide more details. The map also displays any socially vulnerable areas (as determined by WCOG's SVI) near the corridor of focus.

Each summary table lists the most prevalent crash factors on that corridor. These crash factors are derived from Washington State's Target Zero indicator categories. Crash factors that are involved in less than 10% of F&SI on that corridor are generally not included in the summary table. Please note that more than one crash factor can be involved in a single crash. The summary table also includes the recorded lighting conditions at the time of the crash. Lighting conditions are not included in the summary table if there is less than one crash in each category.

All the data displayed in the following corridor profiles is on a 'per crash' basis. There may be more than one fatality or serious injury resulting from a single crash.

The corridor profiles follow in order of cumulative F&SI crashes per corridor:

1. Interstate 5
2. Mt. Baker Hwy (SR 542)
3. N. Cascades Hwy (SR 20)
4. Lakeway Dr
5. Meridian S
6. Birch Bay Lynden Rd
7. Hannegan Rd
8. Slater Rd
9. Guide Meridian (SR 539)
10. Northwest Ave
11. W. Bakerview Rd
12. Haxton Way
13. Valley Hwy (SR 9)
14. E. Chestnut St
15. Old Fairhaven Pkwy (SR 11)
16. Woburn St
17. Kendall Rd (SR 547)
18. Lincoln St
19. Blaine Rd (SR 548)
20. E Badger Rd (SR 546)
21. Everson Goshen Rd

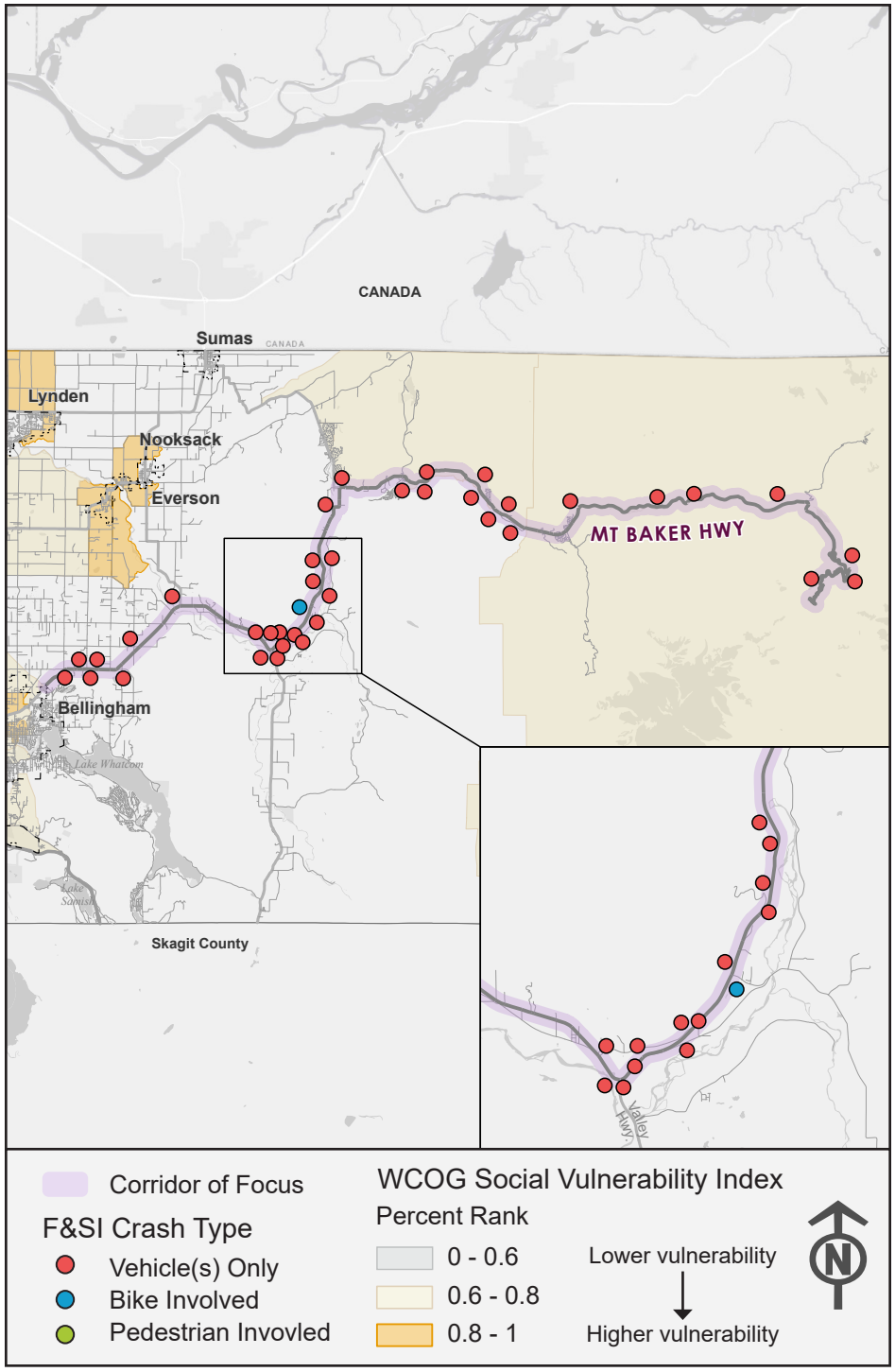


1. Interstate 5

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	82	100%	--
Fatal Crashes	26	32%	22%
Serious Injury Crashes	56	68%	78%
F&SI Crashes by Mode			
Pedestrian Involved	11	13%	18%
Bicycle Involved	4	5%	9%
Motorcycle Involved	13	16%	19%
Motor Vehicle(s) Only	54	66%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	16	20%	31%
Crashes Near 0.6-0.8 SVI Area	26	32%	32%
Most Common Crash Factors			
Lane Departure	37	45%	44%
Run Off The Road	35	43%	35%
Speeding Driver	31	38%	25%
Driver 16 To 25 Years Involved	31	38%	32%
Impaired Involved Person	21	26%	25%
Other Relevant Crash Factors			
Distracted Driver	16	20%	24%
Unrestrained Occupant	15	18%	17%
Driver 65 Plus Years Involved	14	17%	17%
Motorcycle Collision	13	16%	19%
Intersection Related Collision	10	12%	30%
Lighting Conditions			
Daylight	35	43%	56%
Dusk	5	6%	3%
Dark-No Street Lights	32	39%	24%
Dark-Street Lights On	9	11%	15%

Nearby Transit: There are 0 WTA bus stops within 100 feet of Interstate 5.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Interstate 5 is 1.61 or the lowest crash rate per VMT compared to other HIN Corridors (21/21).

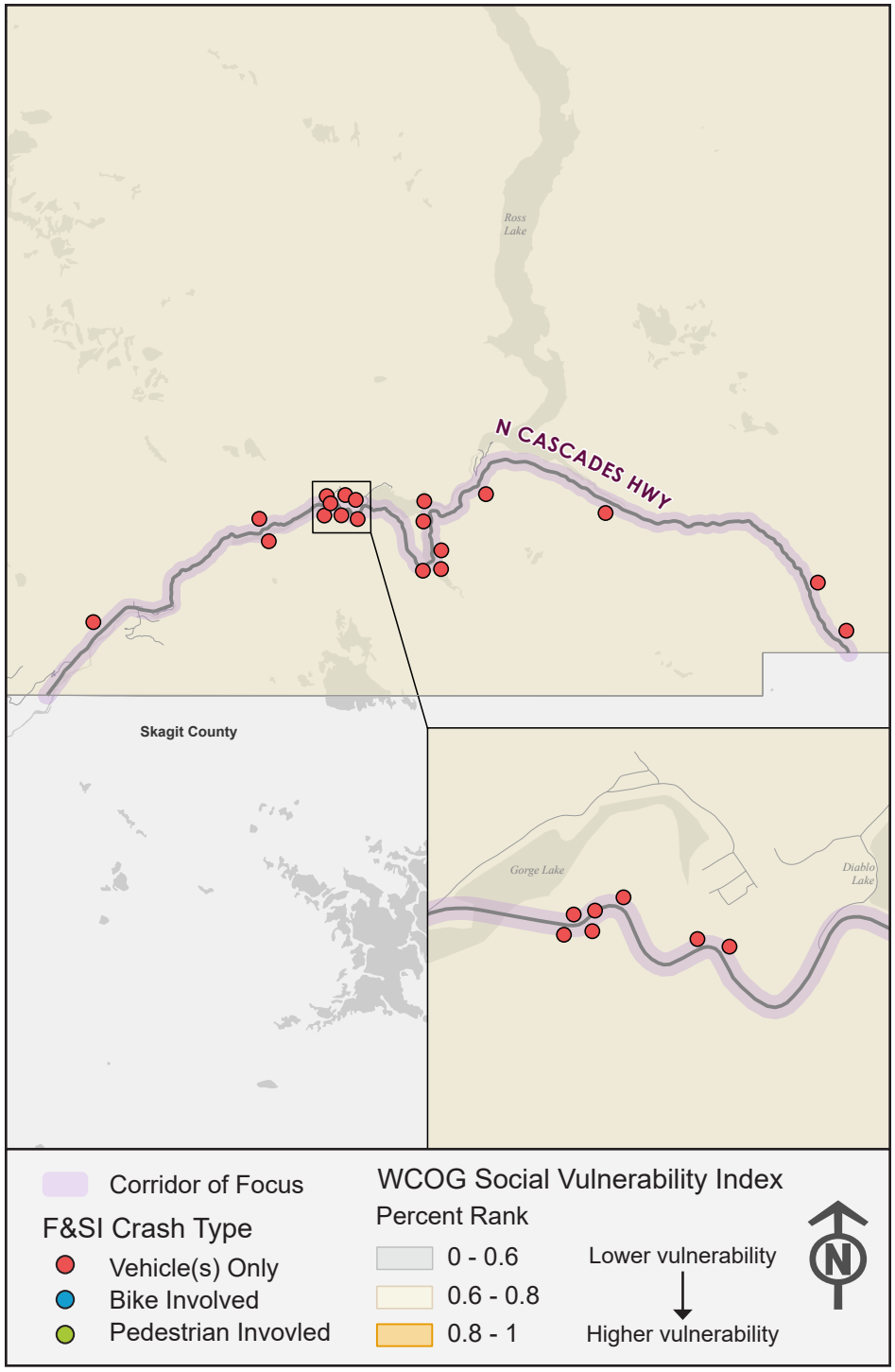


2. Mt. Baker Hwy (SR 542)

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	38	100%	--
Fatal Crashes	7	18%	22%
Serious Injury Crashes	31	82%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	1	3%	9%
Motorcycle Involved	5	13%	19%
Motor Vehicle(s) Only	32	84%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 SVI Area	15	39%	32%
Most Common Crash Factors			
Lane Departure	29	76%	44%
Run Off The Road	18	47%	35%
Impaired Involved Person	15	39%	25%
Unrestrained Occupant	13	34%	17%
Driver 16 To 25 Years Involved	13	34%	32%
Speeding Driver	12	32%	25%
Non Junction Opposite Direction Crash	11	29%	9%
Other Relevant TZ Factors			
Distracted Driver	7	18%	24%
Driver 65 Plus Years Involved	7	18%	17%
Motorcycle Collision	5	13%	19%
Lighting Conditions			
Dawn	1	3%	1%
Daylight	20	53%	56%
Dark-No Street Lights	16	42%	24%
Dark-Street Lights On	1	3%	15%

Nearby Transit: There are 7 WTA bus stops within 100 feet of Mt. Baker Hwy and approximately 0.13 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Mt. Baker Hwy is 3.03 – which ranks 18th out of 21 when compared to other HIN Corridors (18/21).

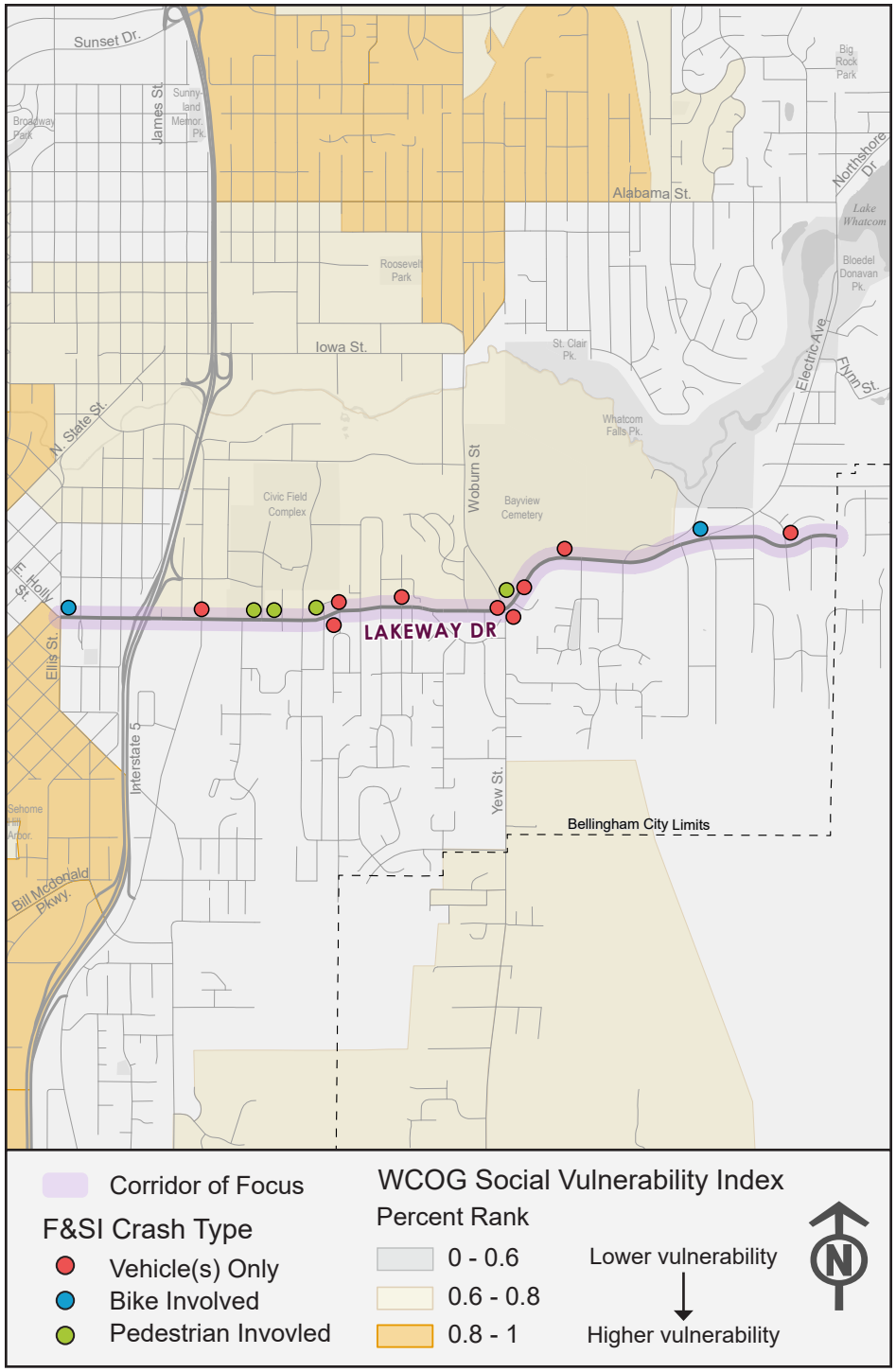


3. N. Cascades Hwy (SR 20)

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	19	100%	--
Fatal Crashes	3	16%	22%
Serious Injury Crashes	16	84%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	18	95%	19%
Motor Vehicle(s) Only	1	5%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 SVI Area	19	100%	32%
Most Common Crash Factors			
Motorcycle Collision	18	95%	19%
Speeding Driver	12	63%	25%
Lane Departure	12	63%	44%
Run Off The Road	10	53%	35%
Other Relevant Crash Factors			
Driver 16 To 25 Years Involved	5	26%	32%
Distracted Driver	2	11%	24%
Non Junction Opposite Direction Crash	2	11%	9%
Lighting Conditions			
Daylight	19	100%	56%

Nearby Transit: There are 0 WTA bus stops within 100 feet of N. Cascades Hwy.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for N. Cascades Hwy is 12.29 – or the fourth highest crash rate per VMT when compared to other HIN Corridors (4/21).

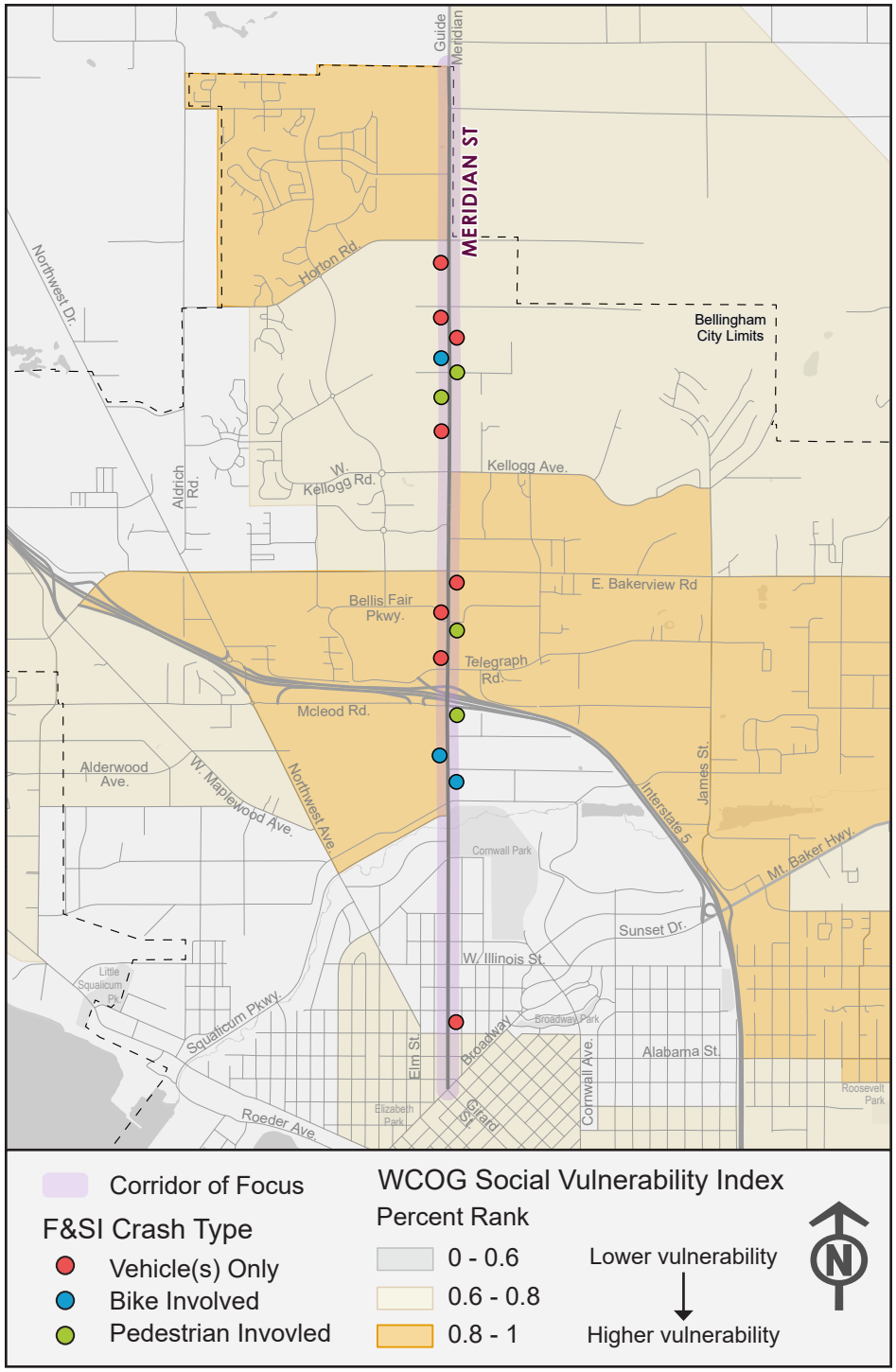


4. Lakeway Dr

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	15	100%	--
Fatal Crashes	4	27%	22%
Serious Injury Crashes	11	73%	78%
F&SI Crashes by Mode			
Pedestrian Involved	4	27%	18%
Bicycle Involved	2	13%	9%
Motorcycle Involved	2	13%	19%
Motor Vehicle(s) Only	7	47%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	1	7%	31%
Crashes Near 0.6-0.8 SVI Area	12	80%	32%
Most Common Crash Factors			
Intersection Related Collision	7	47%	30%
Speeding Driver	6	40%	25%
Lane Departure	6	40%	44%
Driver 16 To 25 Years Involved	6	40%	32%
Run Off The Road	4	27%	35%
Pedestrian Involved	4	27%	18%
Other Relevant Crash Factors			
Impaired Involved Person	2	13%	25%
Distracted Driver	2	13%	24%
Non Junction Opposite Direction Crash	2	13%	9%
Motorcycle Collision	2	13%	19%
Bicyclist Involved	2	13%	9%
Lighting Conditions			
Daylight	8	53%	56%
Dark-Street Lights On	6	40%	15%

Nearby Transit: There are 25 WTA bus stops within 100 feet of Lakeway Dr and approximately 10.27 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Lakeway Dr is 7.67 – which ranks 11th out of 21 when compared to other HIN Corridors (11/21).

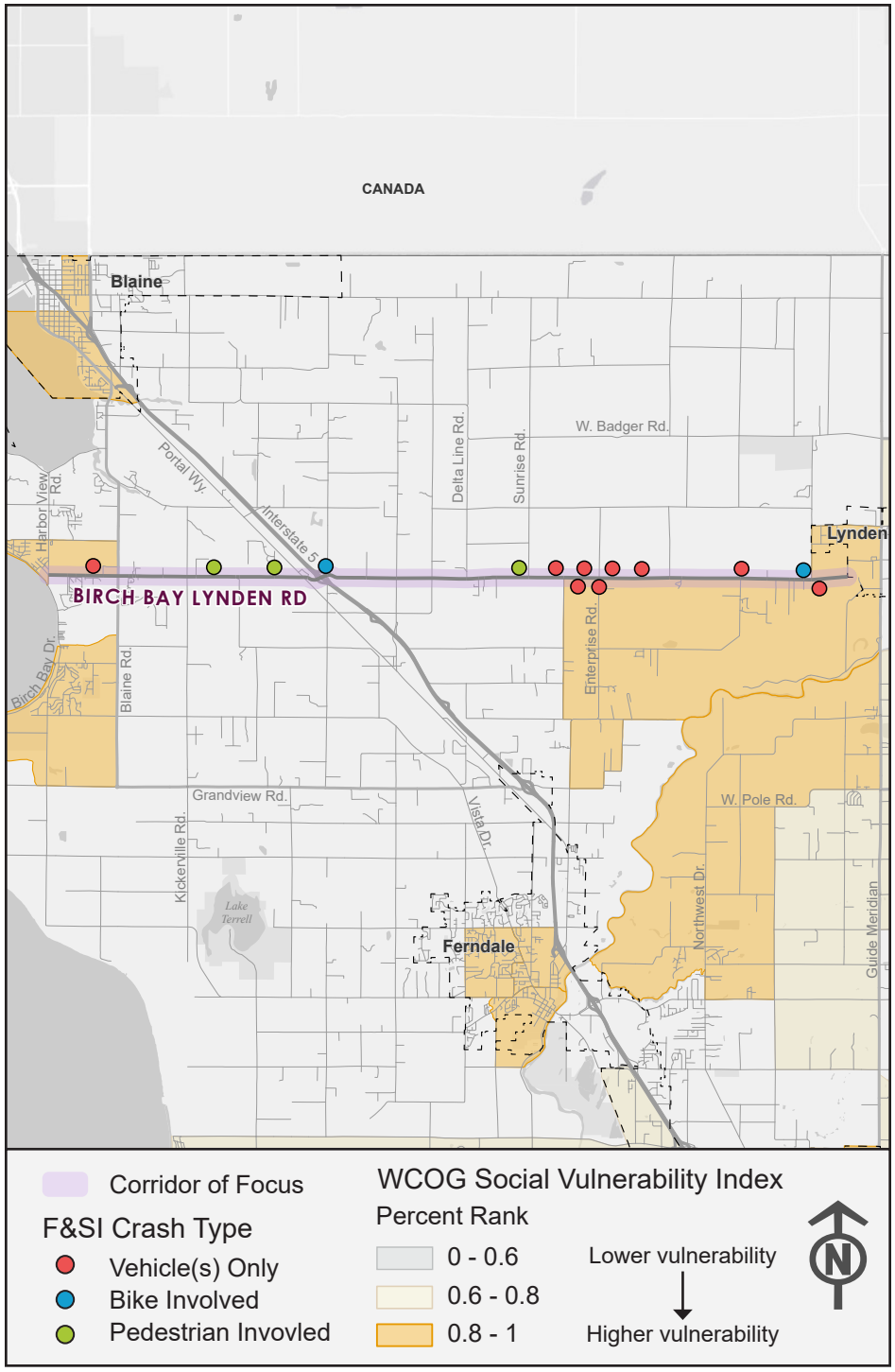


5. Meridian St

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	15	100%	--
Fatal Crashes	3	20%	22%
Serious Injury Crashes	12	80%	78%
F&SI Crashes by Mode			
Pedestrian Involved	4	27%	18%
Bicycle Involved	3	20%	9%
Motorcycle Involved	3	20%	19%
Motor Vehicle(s) Only	5	33%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	7	47%	31%
Crashes Near 0.6-0.8 SVI Area	7	47%	32%
Most Common Crash Factors			
Total Pedestrians Involved	6	40%	20%
Intersection Related Collision	5	33%	30%
Impaired Involved Person	5	33%	25%
Driver 16 To 25 Years Involved	5	33%	32%
Distracted Driver	4	27%	24%
Pedestrian Involved	4	27%	18%
Other Relevant Crash Factors			
Driver 65 Plus Years Involved	3	20%	17%
Motorcycle Collision	3	20%	19%
Bicyclist Involved	3	20%	9%
Lighting Conditions			
Daylight	9	60%	56%
Dark-No Street Lights	2	13%	24%
Dark-Street Lights On	4	27%	15%

Nearby Transit: There are 20 WTA bus stops within 100 feet of Meridian St and approximately 5.16 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Meridian St is 5.11 – which ranks 15th out of 21 when compared to other HIN Corridors (15/21).

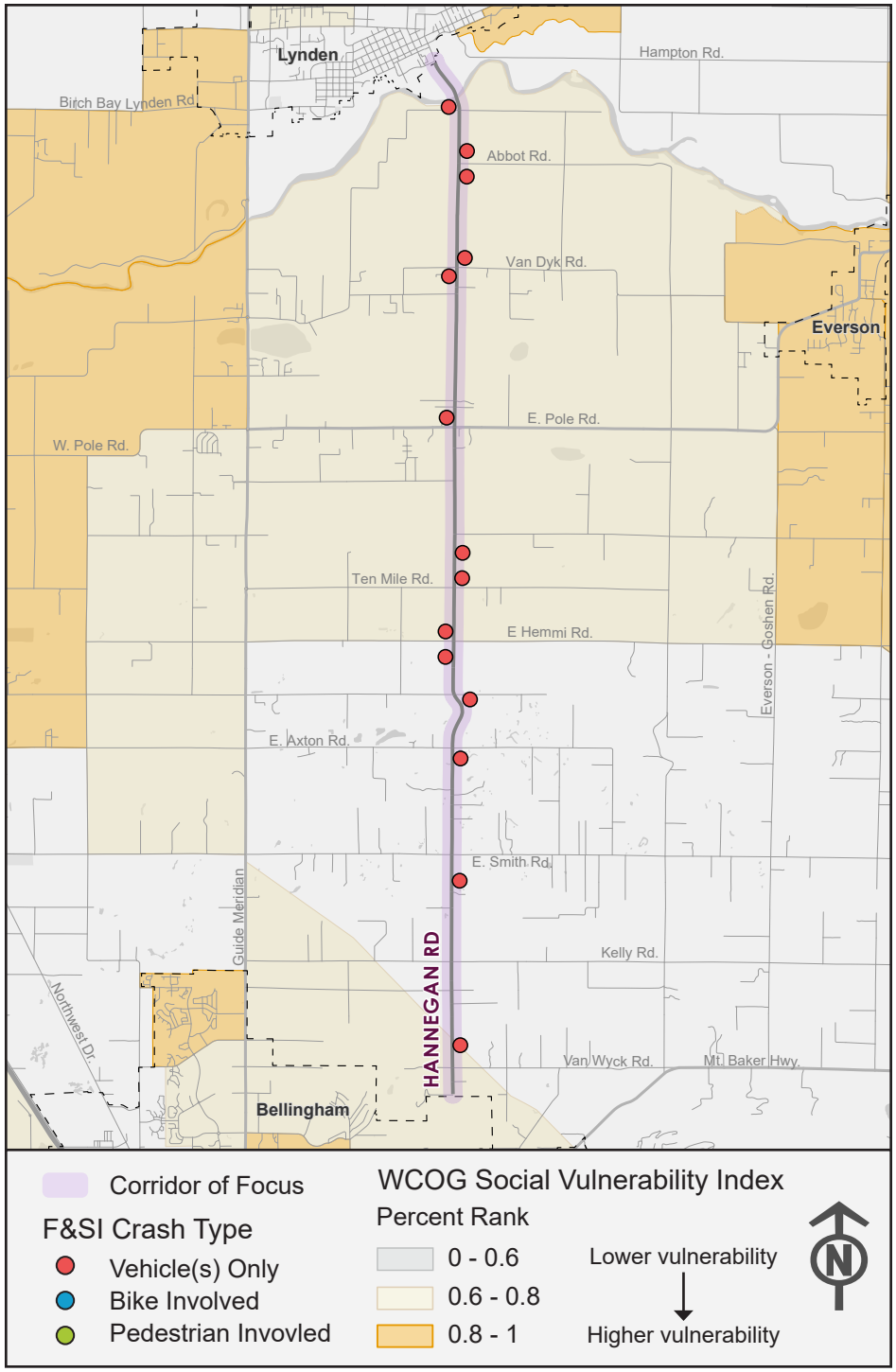


6. Birch Bay Lynden Rd

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	14	100%	--
Fatal Crashes	5	36%	22%
Serious Injury Crashes	9	64%	78%
F&SI Crashes by Mode			
Pedestrian Involved	3	21%	18%
Bicycle Involved	2	14%	9%
Motorcycle Involved	0	0%	19%
Motor Vehicle(s) Only	9	64%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area (Highest)	10	71%	31%
Most Common Crash Factors			
Lane Departure	8	57%	44%
Intersection Related Collision	5	36%	30%
Run Off The Road	5	36%	35%
Distracted Driver	4	29%	24%
Other Relevant Crash Factors			
Driver 65 Plus Years Involved	3	21%	17%
Heavy Vehicle Crash	3	21%	7%
Pedestrian Involved	3	21%	18%
Impaired Involved Person	2	14%	25%
Speeding Driver	2	14%	25%
Unrestrained Occupant	2	14%	17%
Driver 16 To 25 Years Involved	2	14%	32%
Bicyclist Involved	2	14%	9%
Lighting Conditions			
Daylight	5	36%	56%
Dawn	1	7%	1%
Dark-No Street Lights	7	50%	24%

Nearby Transit: There are 2 WTA bus stops within 100 feet of Birch Bay Lynden Rd and approximately 0.17 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Birch Bay Lynden Rd is 4.09 – which ranks 17th out of 21 when compared to other HIN Corridors (17/21).

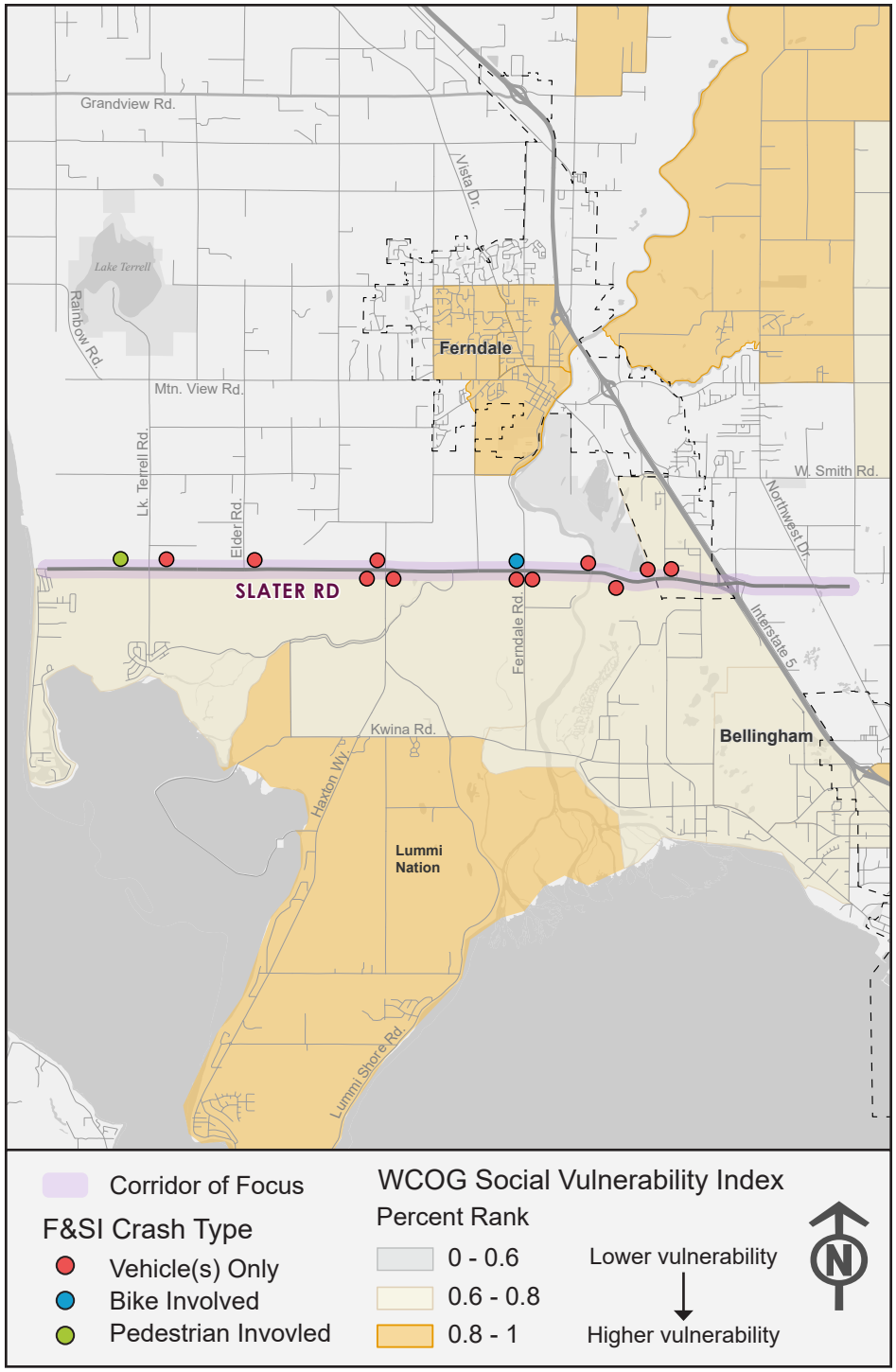


7. Hannegan Rd

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	14	100%	--
Fatal Crashes	4	29%	22%
Serious Injury Crashes	10	71%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	1	7%	19%
Motor Vehicle(s) Only	13	93%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 SVI Area	10	71%	32%
Most Common Crash Factors			
Driver 16 To 25 Years Involved	8	57%	32%
Intersection Related Collision	6	43%	30%
Distracted Driver	5	36%	24%
Unrestrained Occupant	5	36%	17%
Driver 65 Plus Years Involved	5	36%	17%
Other Relevant Crash Factors			
Lane Departure	4	29%	44%
Impaired Involved Person	3	21%	25%
Non Junction Opposite Direction Crash	3	21%	9%
Speeding Driver	2	14%	25%
Lighting Conditions			
Daylight	7	50%	56%
Dark-No Street Lights	6	43%	24%
Dark-Street Lights On	1	7%	15%

Nearby Transit: There are 0 WTA bus stops within 100 feet of Hannegan Rd.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Hannegan Rd is 5.2 – which ranks 15th out of 21 when compared to other HIN Corridors (15/21).

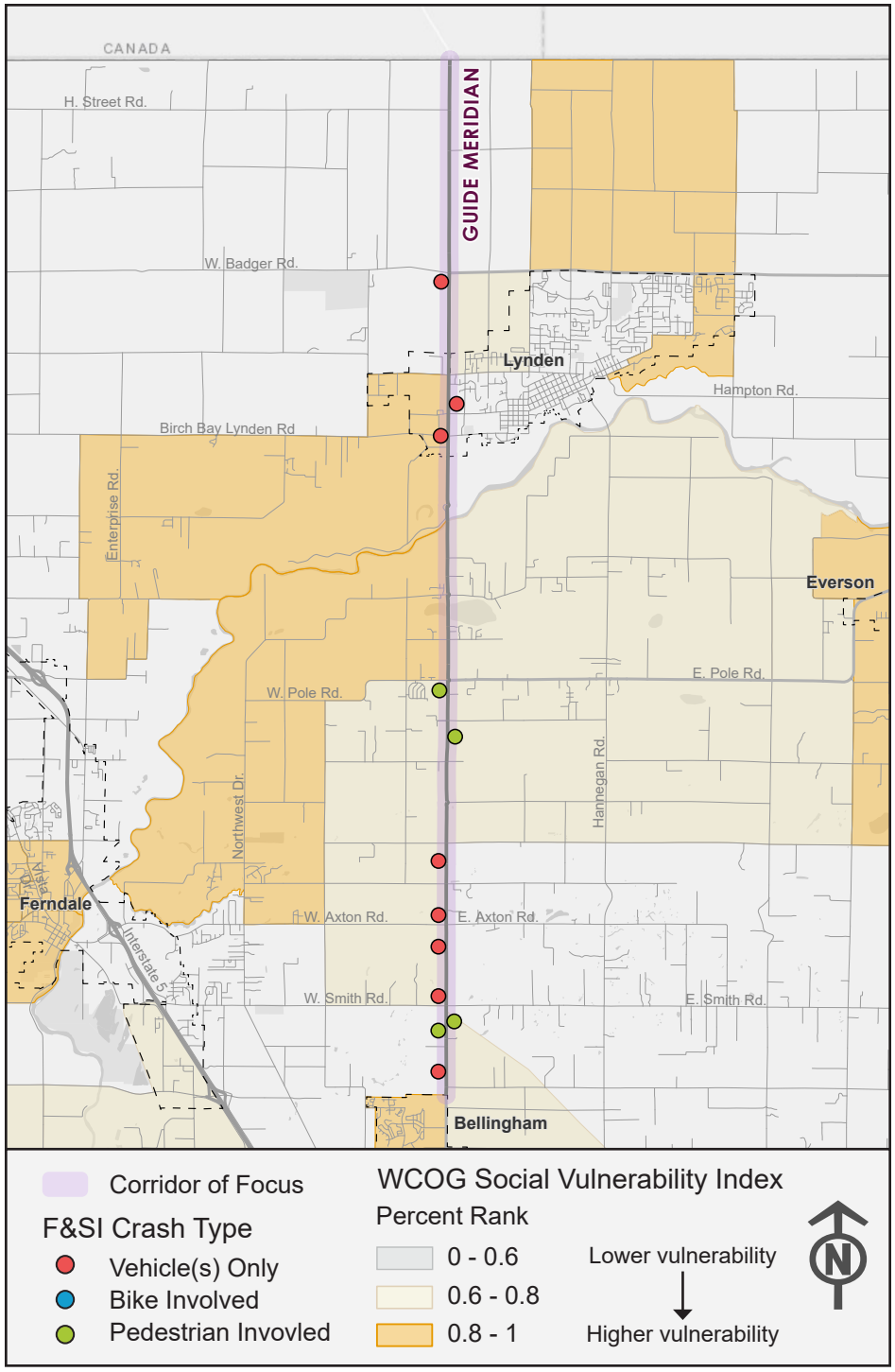


8. Slater Rd

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	13	100%	--
Fatal Crashes	5	38%	22%
Serious Injury Crashes	8	62%	78%
F&SI Crashes by Mode			
Pedestrian Involved	1	8%	18%
Bicycle Involved	1	8%	9%
Motorcycle Involved	0	0%	19%
Motor Vehicle(s) Only	11	85%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 SVI Area	13	100%	32%
Most Common Crash Factors			
Intersection Related Collision	6	46%	30%
Distracted Driver	6	46%	24%
Unrestrained Occupant	4	31%	17%
Lane Departure	4	31%	44%
Driver 16 To 25 Years Involved	4	31%	32%
Other Relevant Crash Factors			
Run Off The Road	3	23%	35%
Driver 65 Plus Years Involved Person	3	23%	17%
Heavy Vehicle Crash	3	23%	7%
Impaired Involved Person	2	15%	25%
Lighting Conditions			
Daylight	8	62%	56%
Dark-No Street Lights	4	31%	24%

Nearby Transit: There is 1 WTA bus stops within 100 feet of Slater Rd and approximately 0.12 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Slater Rd is 6.32 – which ranks 13th out of 21 when compared to other HIN Corridors (13/21).

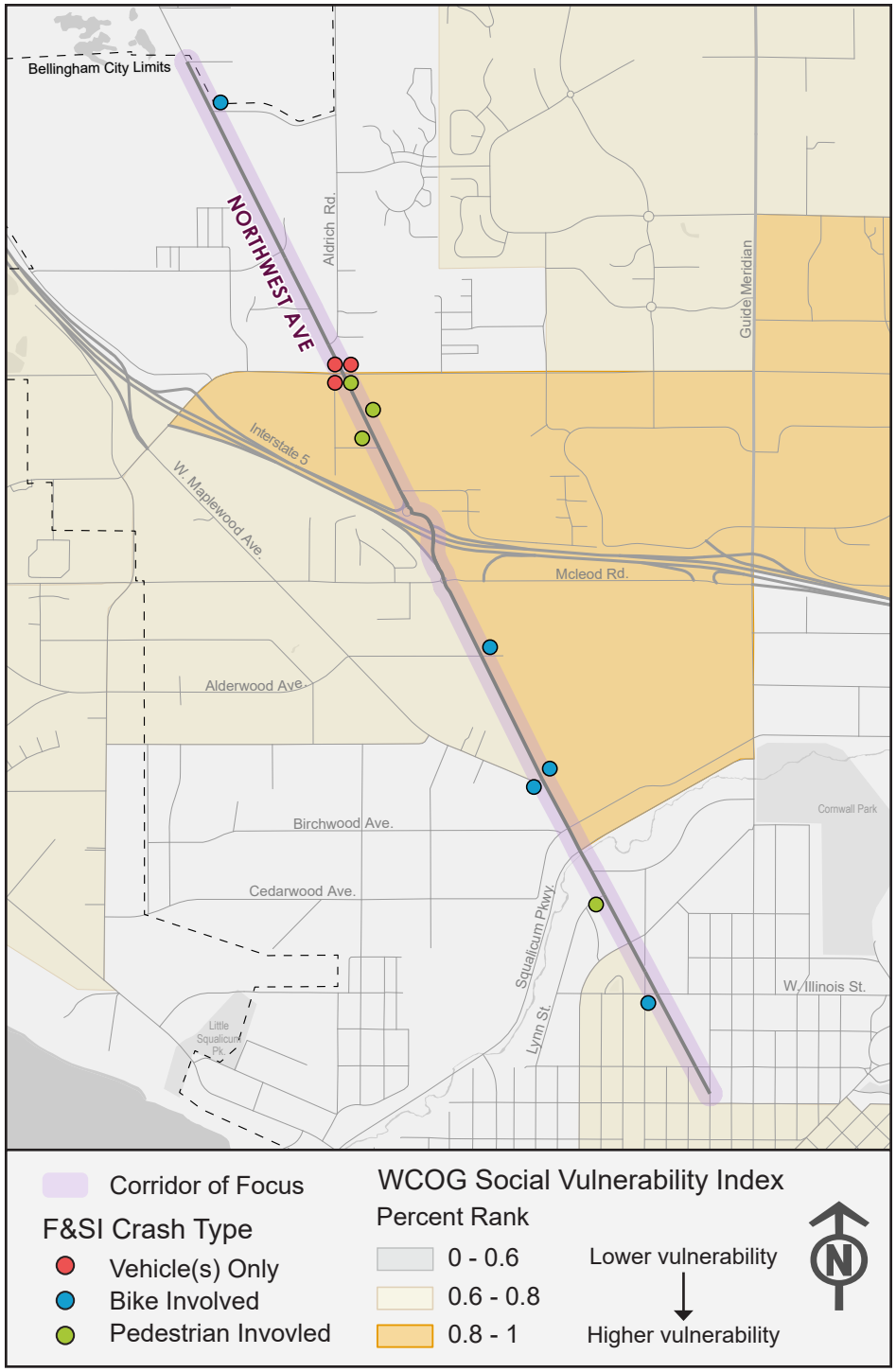


9. Guide Meridian (SR 539)

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	12	100%	--
Fatal Crashes	4	33%	22%
Serious Injury Crashes	8	67%	78%
F&SI Crashes by Mode			
Pedestrian Involved	4	33%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	3	25%	19%
Motor Vehicle(s) Only	5	42%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	2	17%	31%
Crashes Near 0.6-0.8 SVI Area	10	83%	32%
Most Common Crash Factors			
Motorcycle Collision Indicator	6	50%	19%
Distracted Driver	5	42%	24%
Intersection Related Collision	5	42%	30%
Driver 65 Plus Years Involved	5	42%	17%
Impaired Involved Person	4	33%	25%
Pedestrian Involved	4	33%	18%
Other Relevant Crash Factors			
Driver 16 To 25 Years Involved	4	33%	32%
Lane Departure	3	25%	44%
Unrestrained Occupant	2	17%	17%
Run Off The Road	2	17%	35%
Lighting Conditions			
Daylight	8	58%	56%
Dawn	1	8%	1%
Dark-No Street Lights	2	17%	24%
Dark-Street Lights On	1	8%	15%

Nearby Transit: There are 17 WTA bus stops within 100 feet of Guide Meridian and approximately 1.32 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Guide Meridian is 1.82 – or the second lowest crash rate per VMT when compared to other HIN Corridors (20/21).

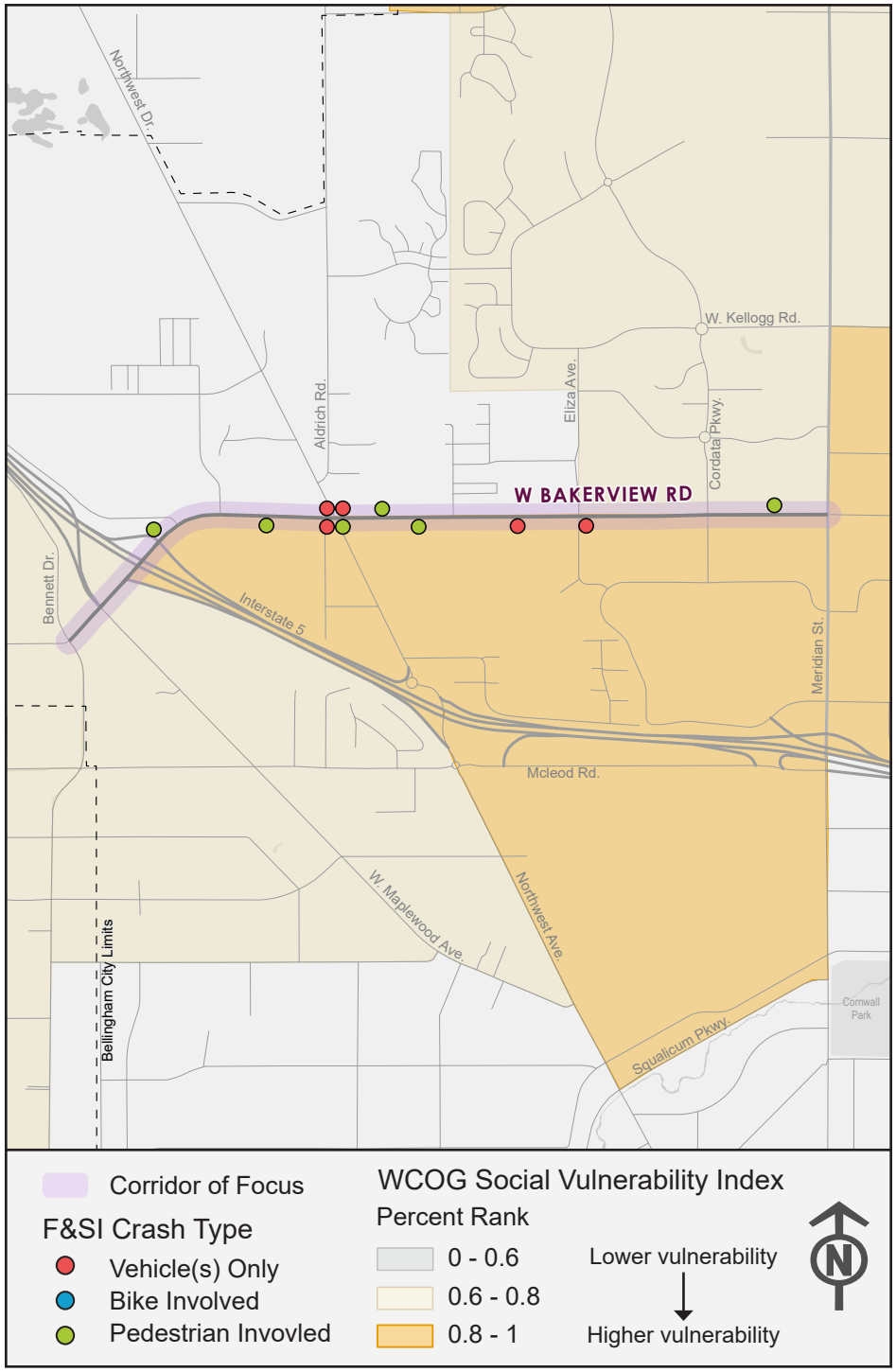


10. Northwest Ave

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	12	100%	--
Fatal Crashes	0	0%	22%
Serious Injury Crashes	12	100%	78%
F&SI Crashes by Mode			
Pedestrian Involved	4	33%	18%
Bicycle Involved	5	42%	9%
Motorcycle Involved	0	0%	19%
Motor Vehicle(s) Only	3	25%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	9	75%	31%
Crashes Near 0.6-0.8 SVI Area	1	8%	32%
Most Common Crash Factors			
Intersection Related Collision	10	83%	30%
Bicyclist Involved	5	42%	9%
Pedestrian Involved	4	33%	18%
Distracted Driver	4	33%	24%
Driver 65 Plus Years Involved	4	33%	17%
Other Relevant Crash Factors			
Impaired Involved Person	2	17%	25%
Driver 16 To 25 Years Involved	2	17%	32%
Lighting Conditions			
Daylight	8	67%	56%
Dark-Street Lights On	4	33%	15%

Nearby Transit: There are 20 WTA bus stops within 100 feet of Northwest Ave and approximately 7.11 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Northwest Ave is 10.38 – which ranks 8th out of 21 when compared to other HIN Corridors (8/21).

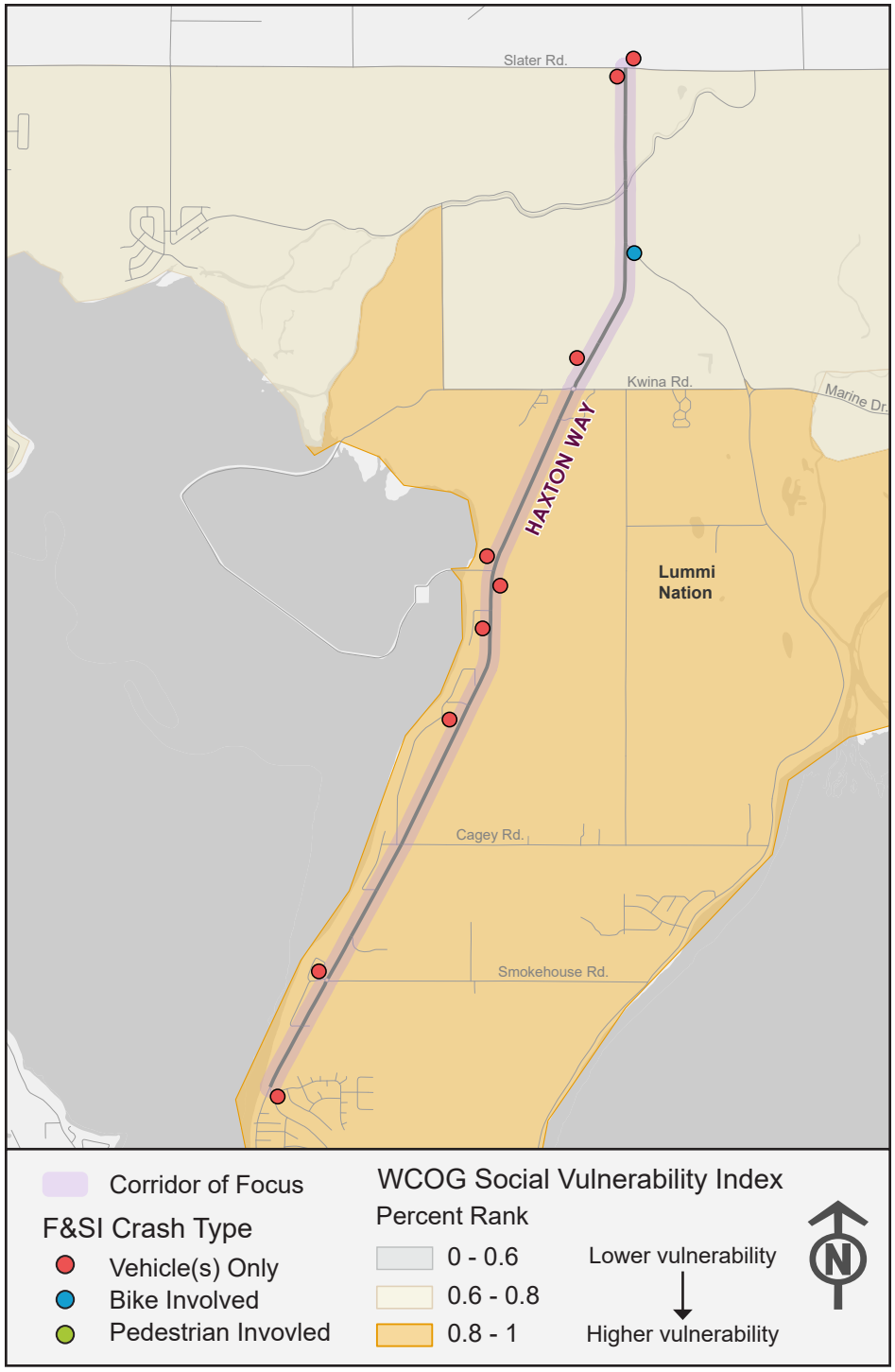


11. W. Bakerview Rd

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	11	100%	--
Fatal Crashes	1	9%	22%
Serious Injury Crashes	10	91%	78%
F&SI Crashes by Mode			
Pedestrian Involved	6	55%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	2	18%	19%
Motor Vehicle(s) Only	3	27%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	11	100%	31%
Most Common Crash Factors			
Intersection Related Collision	6	55%	30%
Pedestrian Involved	6	55%	18%
Driver 16 To 25 Years Involved	4	36%	32%
Impaired Involved Person	3	27%	25%
Other Relevant Crash Factors			
Distracted Driver	2	18%	24%
Driver 65 Plus Years Involved	2	18%	17%
Motorcycle Collision	2	18%	19%
Heavy Vehicle Crash	2	18%	7%
Lighting Conditions			
Daylight	6	55%	56%
Dark-Street Lights On	5	45%	15%

Nearby Transit: There are 6 WTA bus stops within 100 feet of W. Bakerview Rd and approximately 3.7 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for W, Bakerview Rd is 11.87 – which ranks 6th out of 21 when compared to other HIN Corridors (6/21).

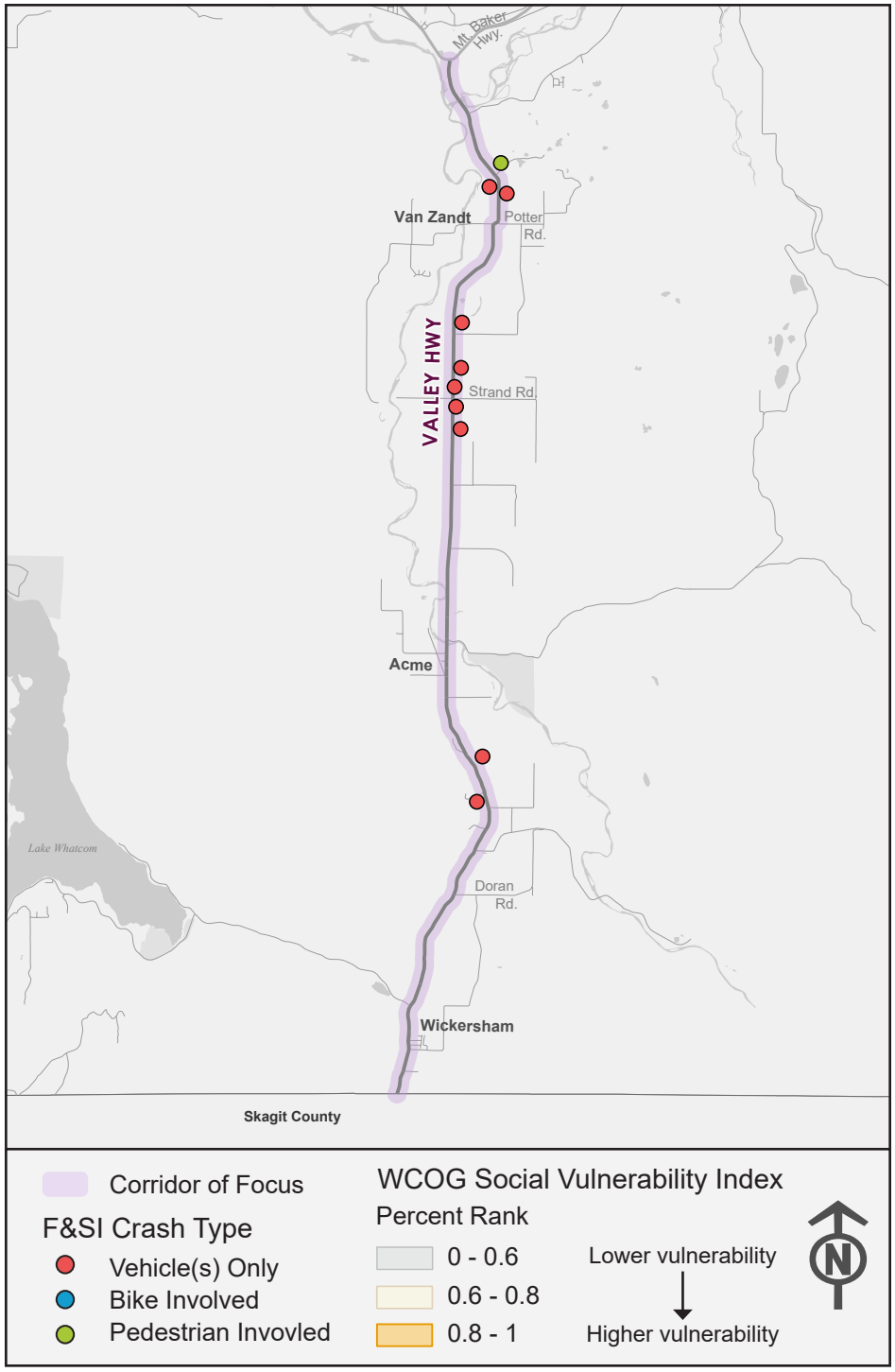


12. Haxton Way

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	10	100%	--
Fatal Crashes	3	30%	22%
Serious Injury Crashes	7	70%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	1	10%	9%
Motorcycle Involved	0	0%	19%
Motor Vehicle(s) Only	9	90%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	6	60%	31%
Crashes Near 0.6-0.8 SVI Area	4	40%	32%
Most Common Crash Factors			
Driver 16 To 25 Years Involved	6	60%	32%
Lane Departure	5	50%	44%
Intersection Related Collision	4	40%	30%
Speeding Driver	3	30%	25%
Run Off The Road	3	30%	35%
Other Relevant Crash Factors			
Impaired Involved Person	2	20%	25%
Distracted Driver	2	20%	24%
Unrestrained Occupant	2	20%	17%
Non Junction Opposite Direction Crash	2	20%	9%
Lighting Conditions			
Daylight	6	60%	56%
Dawn	1	10%	1%
Dark-No Street Lights	2	20%	24%
Dark-Street Lights On	1	10%	15%

Nearby Transit: There are 15 WTA bus stops within 100 feet of Haxton Way and approximately 2.5 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Haxton Way is 11.99 – or the fifth highest crash rate per VMT when compared to other HIN Corridors (5/21).

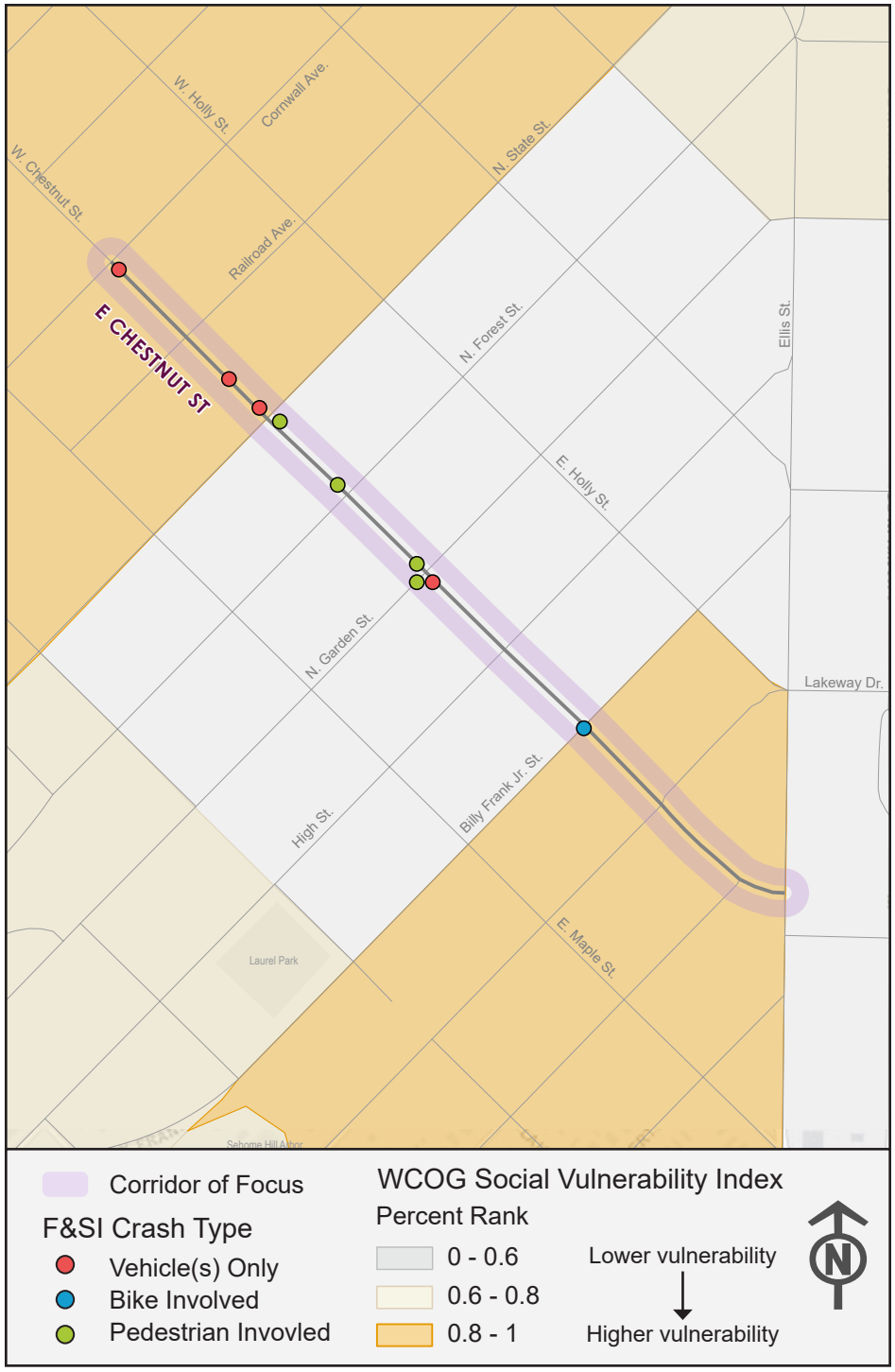


13. Valley Hwy (SR 9)

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	10	100%	--
Fatal Crashes	3	30%	22%
Serious Injury Crashes	7	70%	78%
F&SI Crashes by Mode			
Pedestrian Involved	1	10%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	2	20%	19%
Motor Vehicle(s) Only	7	70%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 or 0.8-1 SVI Area	0	0%	62%
Most Common Crash Factors			
Lane Departure	8	80%	44%
Run Off The Road	6	60%	35%
Impaired Involved Person	4	40%	25%
Unrestrained Occupant	4	40%	17%
Other Relevant Crash Factors			
Speeding Driver	3	30%	25%
Driver 16 To 25 Years Involved	3	30%	32%
Distracted Driver	2	20%	24%
Non Junction Opposite Direction Crash	2	20%	9%
Driver 65 Plus Years Involved	2	20%	17%
Motorcycle Collision	2	20%	19%
Lighting Conditions			
Daylight	6	60%	56%
Dark-No Street Lights	4	40%	24%

Nearby Transit: There are 2 WTA bus stops within 100 feet of Valley Hwy and approximately 0.16 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Valley Hwy is 10.37 – which ranks 9th out of 21 when compared to other HIN Corridors (9/21).

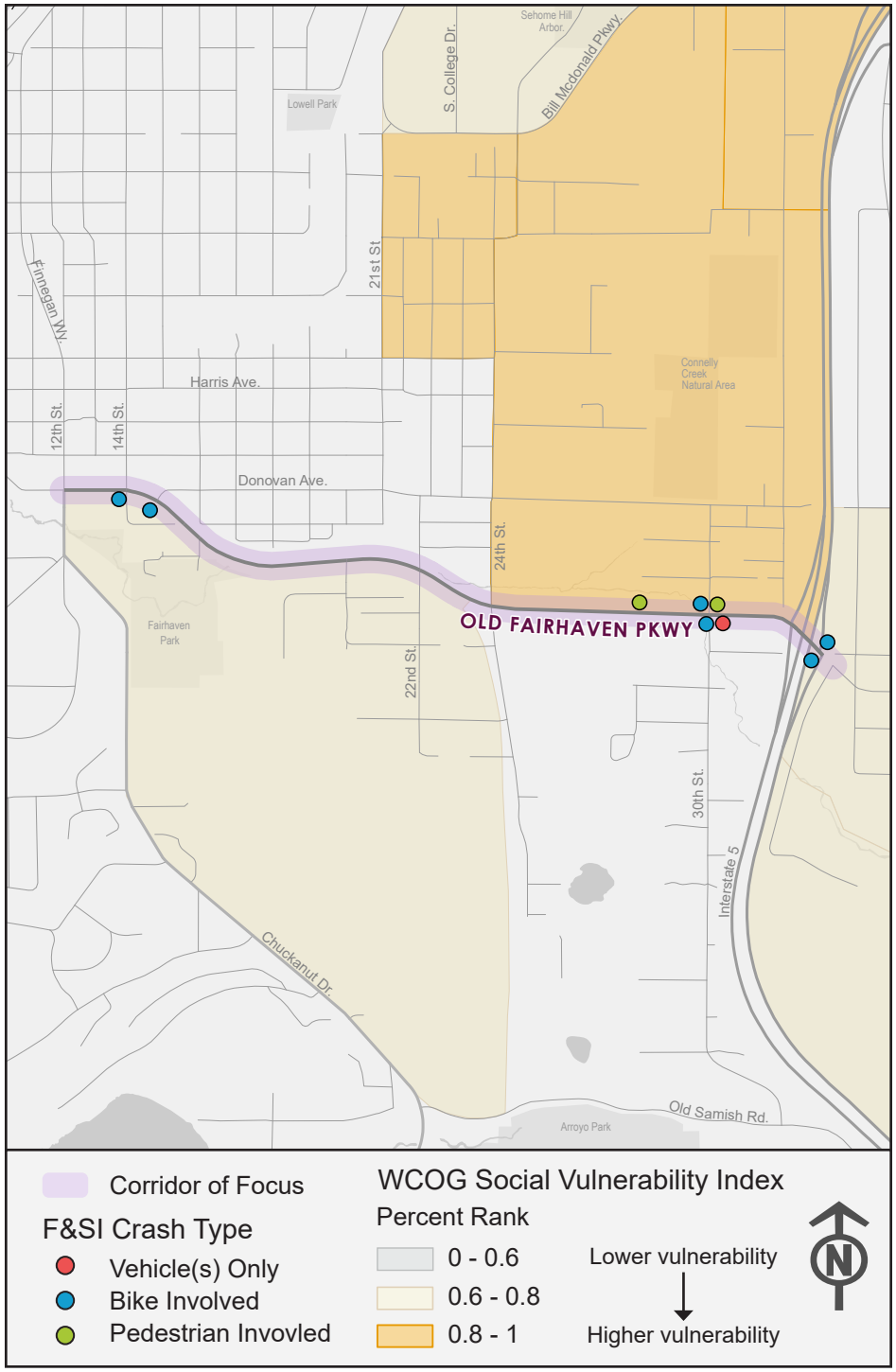


14. E. Chestnut St

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	9	100%	--
Fatal Crashes	1	11%	22%
Serious Injury Crashes	8	89%	78%
F&SI Crashes by Mode			
Pedestrian Involved	4	44%	18%
Bicycle Involved	1	11%	9%
Motorcycle Involved	2	22%	19%
Motor Vehicle(s) Only	2	22%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	5	56%	31%
Most Common Crash Factors			
Intersection Related Collision	8	89%	30%
Driver 16 To 25 Years Involved	4	44%	32%
Pedestrian Involved	4	44%	18%
Impaired Involved Person	3	33%	25%
Other Relevant Crash Factors			
Speeding Driver	2	22%	25%
Unrestrained Occupant	2	22%	17%
Motorcycle Collision	2	22%	19%
Lighting Conditions			
Daylight	5	56%	56%
Dark-Street Lights On	4	44%	15%

Nearby Transit: There are 2 WTA bus stops within 100 feet of Valley Hwy and approximately 3.59 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for E. Chestnut St is 59.55 – or the highest crash rate per VMT when compared to other HIN Corridors (1/21).

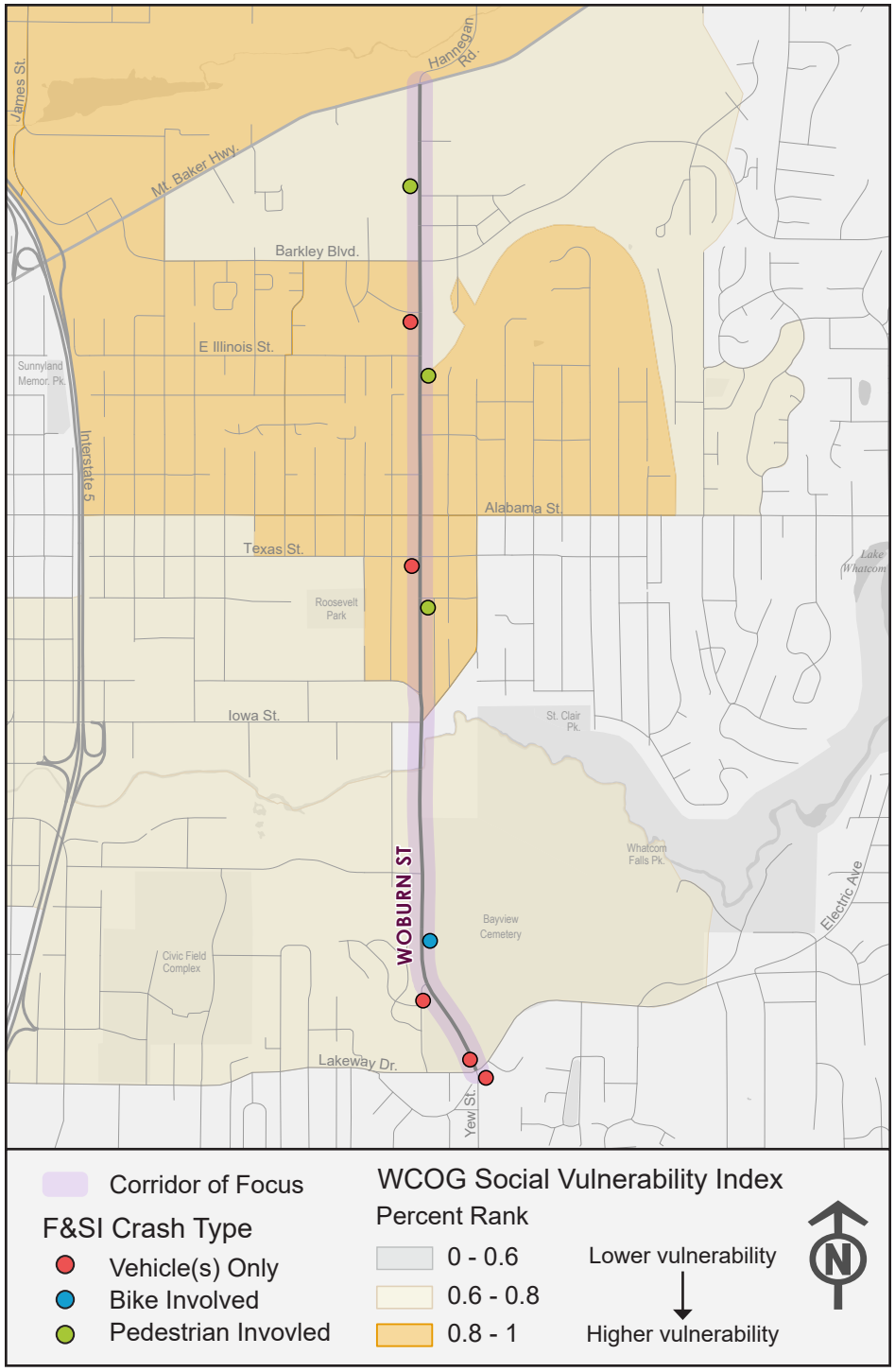


15. Old Fairhaven Pkwy (SR 11)

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	9	100%	--
Fatal Crashes	2	22%	22%
Serious Injury Crashes	7	78%	78%
F&SI Crashes by Mode			
Pedestrian Involved	2	22%	18%
Bicycle Involved	6	67%	9%
Motorcycle Involved	1	11%	19%
Motor Vehicle(s) Only	0	0%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	5	56%	31%
Crashes Near 0.6-0.8 SVI Area	4	44%	32%
Most Common Crash Factors			
Intersection Related Collision	7	78%	30%
Bicyclist Involved	6	67%	9%
Driver 16 To 25 Years Involved	3	33%	32%
Other Relevant Crash Factors			
Distracted Driver	2	22%	24%
Pedestrian Involved	2	22%	18%
Lighting Conditions			
Daylight	8	89%	56%
Dark-Street Lights On	1	11%	15%

Nearby Transit: There are 12 WTA bus stops within 100 feet of Old Fairhaven Pkwy and approximately 8.73 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Old Fairhaven Pkwy is 13.22 – or the third highest crash rate per VMT when compared to other HIN Corridors (3/21).

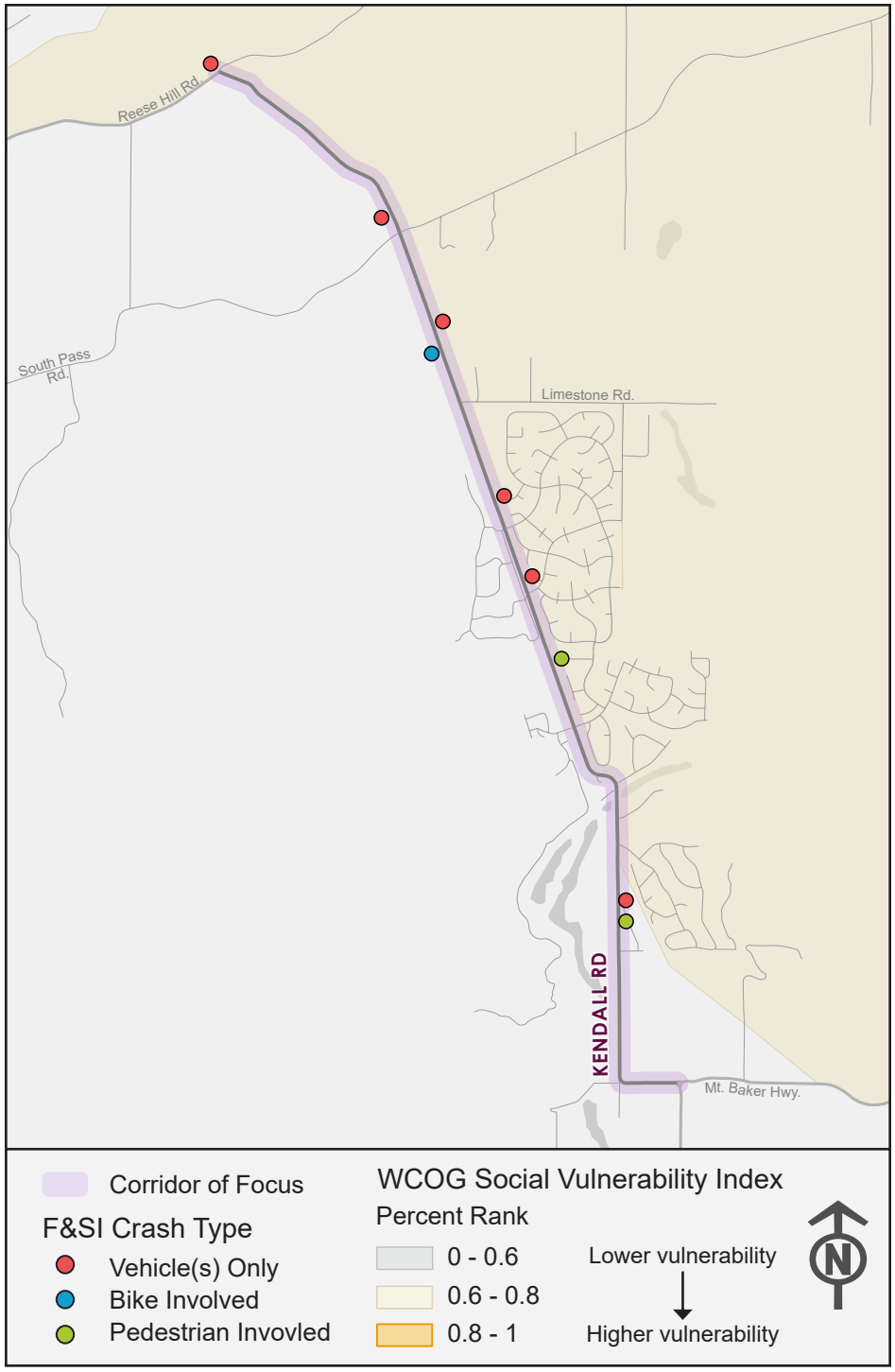


16. Woburn St

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	9	100%	--
Fatal Crashes	1	11%	22%
Serious Injury Crashes	8	89%	78%
F&SI Crashes by Mode			
Pedestrian Involved	3	33%	18%
Bicycle Involved	1	11%	9%
Motorcycle Involved	2	22%	19%
Motor Vehicle(s) Only	3	33%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	4	44%	31%
Crashes Near 0.6-0.8 SVI Area	5	56%	32%
Most Common Crash Factors			
Intersection Related Collision	5	56%	30%
Distracted Driver	4	44%	24%
Impaired Involved Person	3	33%	25%
Run Off The Road	3	33%	35%
Lane Departure	3	33%	44%
Pedestrian Involved	3	33%	18%
Other Relevant Crash Factors			
Speeding Driver	2	22%	25%
Motorcycle Collision	2	22%	19%
Lighting Conditions			
Daylight	5	56%	56%
Dark-Street Lights On	4	44%	15%

Nearby Transit: There are 16 WTA bus stops within 100 feet of Woburn St and approximately 7.28 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Woburn St is 9.21 – which ranks 10th out of 21 when compared to other HIN Corridors (10/21).

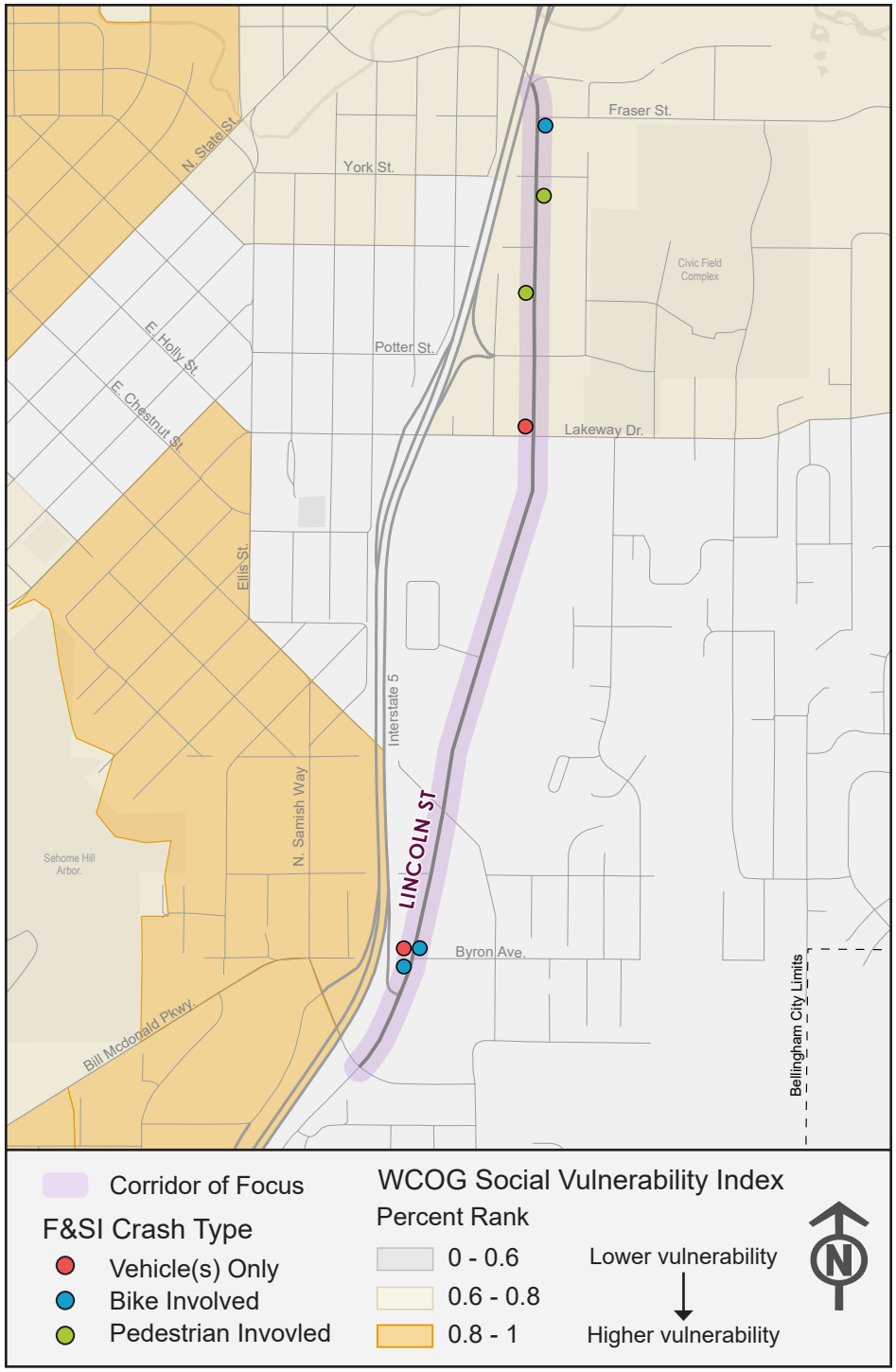


17. Kendall Rd (SR 547)

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	9	100%	--
Fatal Crashes	2	22%	22%
Serious Injury Crashes	7	78%	78%
F&SI Crashes by Mode			
Pedestrian Involved	2	22%	18%
Bicycle Involved	1	11%	9%
Motorcycle Involved	1	11%	19%
Motor Vehicle(s) Only	5	56%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 SVI Area	7	78%	32%
Most Common Crash Factors			
Run Off The Road	5	56%	35%
Lane Departure	5	56%	44%
Other Relevant Crash Factors			
Speeding Driver	2	22%	25%
Distracted Driver	2	22%	24%
Unrestrained Occupant	2	22%	17%
Drowsy Driver	2	22%	3%
Pedestrian Involved	2	22%	18%
Lighting Conditions			
Daylight	5	56%	56%
Dark-No Street Lights	4	44%	24%

Nearby Transit: There are 5 WTA bus stops within 100 feet of Kendall Rd and approximately 1.02 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Kendall Rd is 10.58 – which ranks 7th out of 21 when compared to other HIN Corridors (4/21).

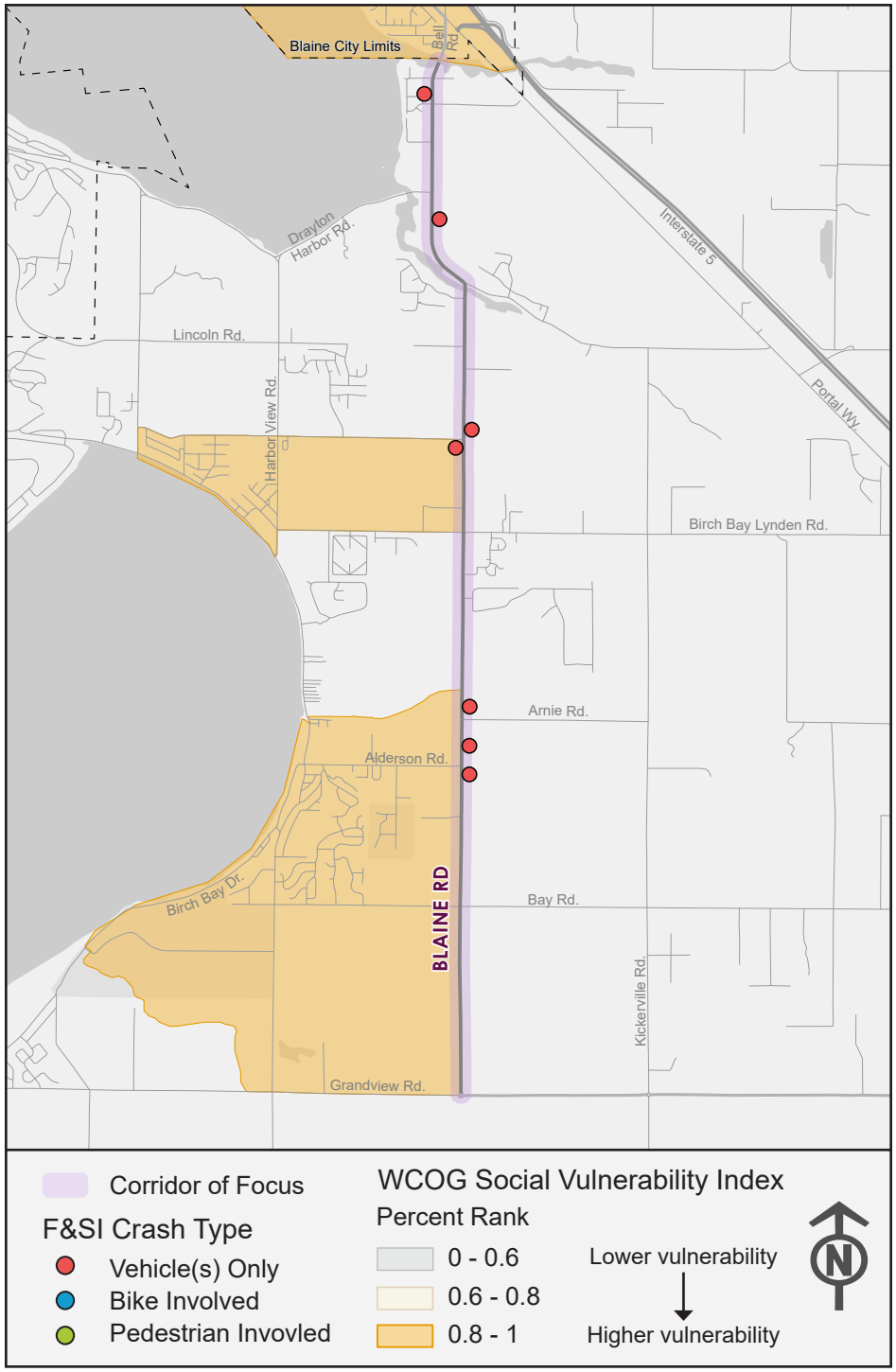


18. Lincoln St

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	7	100%	--
Fatal Crashes	2	29%	22%
Serious Injury Crashes	5	71%	78%
F&SI Crashes by Mode			
Pedestrian Involved	2	29%	18%
Bicycle Involved	3	43%	9%
Motorcycle Involved	0	0%	19%
Motor Vehicle(s) Only	2	29%	54%
Socially Vulnerable Areas			
Crashes Near 0.6-0.8 SVI Area	4	57%	32%
Most Common Crash Factors			
Intersection Related Collision	4	57%	30%
Bicyclist Involved	3	43%	9%
Other Relevant Crash Factors			
Distracted Driver	2	29%	24%
Driver 65 Plus Years Involved	2	29%	17%
Pedestrian Involved	2	29%	18%
Drowsy Driver	1	14%	3%
Run Off The Road	1	14%	35%
Lane Departure	1	14%	44%
Heavy Vehicle Crash	1	14%	7%
Lighting Conditions			
Daylight	5	71%	56%
Dark-Street Lights On	2	29%	15%

Nearby Transit: There are 10 WTA bus stops within 100 feet of Lincoln St and approximately 6.59 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Lincoln St is 18.85 – or the second highest crash rate per VMT when compared to other HIN Corridors (2/21).

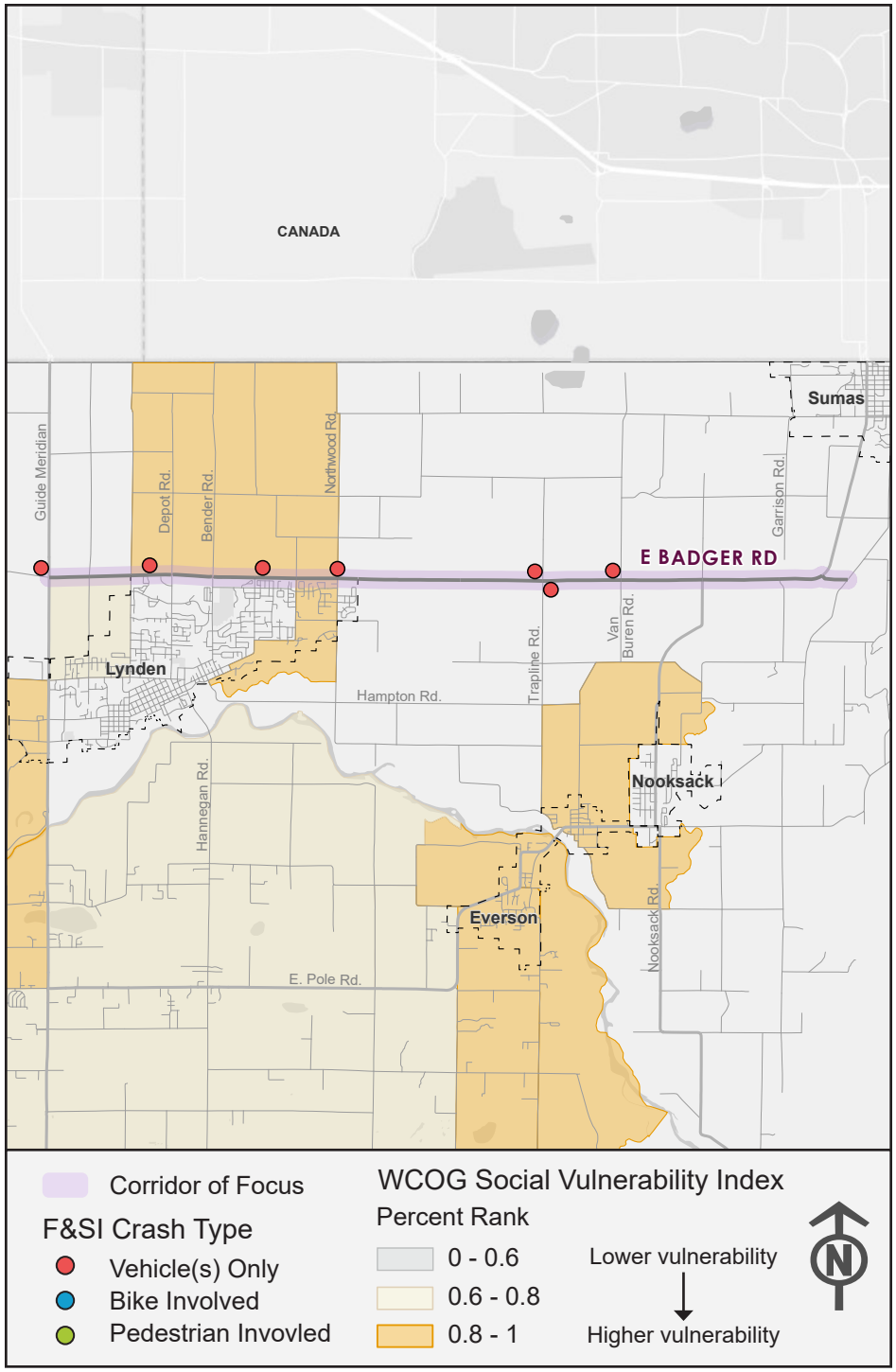


19. Blaine Rd (SR 548)

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	7	100%	--
Fatal Crashes	1	14%	22%
Serious Injury Crashes	6	86%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	2	29%	19%
Motor Vehicle(s) Only	5	71%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	5	71%	31%
Most Common Crash Factors			
Impaired Involved Person	4	57%	25%
Unrestrained Occupant	4	57%	17%
Intersection Related Collision	3	43%	30%
Lane Departure	3	43%	44%
Other Relevant Crash Factors			
Run Off The Road	2	29%	35%
Driver 16 To 25 Years Involved	2	29%	32%
Motorcycle Collision	2	29%	19%
Speeding Driver	1	14%	25%
Non Junction Opposite Direction Crash	1	14%	9%
Lighting Conditions			
Daylight	3	43%	56%
Dusk	1	14%	3%
Dark-No Street Lights	3	43%	24%

Nearby Transit: There are 0 WTA bus stops within 100 feet of Blaine Rd.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Blaine Rd is 7.59 – or the fourth highest crash rate per VMT when compared to other HIN Corridors (4/21).

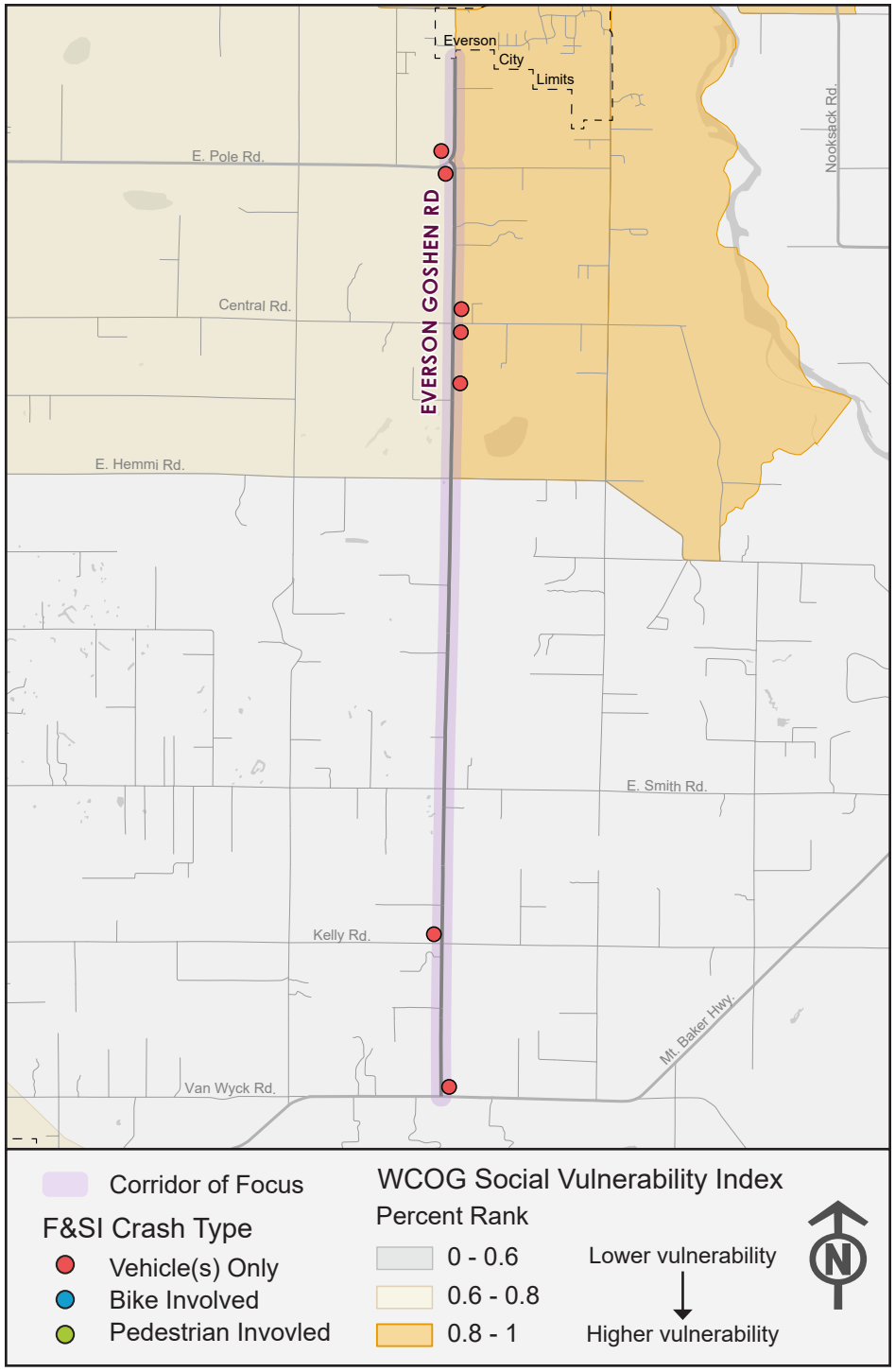


20. E. Badger Rd (SR 546)

	Corridor		Countywide
Summary Statistics	**Count**	**Percent**	**Percent**
Total F&SI Crashes	7	100%	--
Fatal Crashes	3	43%	22%
Serious Injury Crashes	4	57%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	0	0%	19%
Motor Vehicle(s) Only	7	100%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	3	43%	31%
Crashes Near 0.6-0.8 SVI Area	1	14%	32%
Most Common Crash Factors			
Intersection Related Collision	6	86%	30%
Unrestrained Occupant	4	57%	17%
Driver 16 To 25 Years Involved	3	43%	32%
Heavy Vehicle Crash	3	43%	7%
Other Relevant Crash Factors			
Driver 65 Plus Years Involved	2	29%	17%
Impaired Involved Person	1	14%	25%
Speeding Driver	1	14%	25%
Distracted Driver	1	14%	24%
Non Junction Opposite Direction Crash	1	14%	9%
Lane Departure	1	14%	44%
Lighting Conditions			
Daylight	4	57%	56%
Dusk	1	14%	3%
Dark-No Street Lights	1	14%	24%
Dark-Street Lights On	1	14%	15%

Nearby Transit: There is 1 WTA bus stops within 100 feet of E. Badger Rd and approximately 0.1 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for E Badger Rd is 2.39 – or the third lowest crash rate per VMT when compared to other HIN Corridors (19/21).



21. Everson Goshen Rd

Summary Statistics	Corridor Count	Corridor Percent	Countywide Percent
Total F&SI Crashes	7	100%	--
Fatal Crashes	1	14%	22%
Serious Injury Crashes	6	86%	78%
F&SI Crashes by Mode			
Pedestrian Involved	0	0%	18%
Bicycle Involved	0	0%	9%
Motorcycle Involved	1	14%	19%
Motor Vehicle(s) Only	6	86%	54%
Socially Vulnerable Areas			
Crashes Near 0.8-1 SVI Area	5	71%	31%
Most Common Crash Factors			
Intersection Related Collision	4	57%	30%
Speeding Driver	3	43%	25%
Lane Departure	3	43%	44%
Other Relevant Crash Factors			
Run Off The Road	2	29%	35%
Heavy Vehicle Crash	2	29%	7%
Impaired Involved Person	1	14%	25%
Distracted Driver	1	14%	24%
Non Junction Opposite Direction Crash	1	14%	9%
Driver 16 To 25 Years Involved	1	14%	32%
Motorcycle Collision	1	14%	19%
Lighting Conditions			
Daylight	2	29%	56%
Dawn	1	14%	1%
Dark-No Street Lights	3	43%	24%
Dark-Street Lights On	1	14%	15%

Nearby Transit: There are 2 WTA bus stops within 100 feet of Everson Goshen Rd and approximately 0.3 stops per mile along this corridor.

Vehicle Miles Traveled (VMT): The F&SI crash rate per 100 million VMT for Everson Goshen Rd is 5.38 – which ranks 14th out of 21 when compared to other HIN Corridors (14/21).

Appendix C:
Corridor Prioritization Scoring Methodology

This appendix explains the method for ranking the 21 identified High Injury Network (HIN) corridors.

While the initial list of 21 regional corridors was developed based on the cumulative number of fatal and serious-injury (F&SI) crashes over the most recent 10-year period (2014-2023), a scoring method was developed to prioritize the corridors on four criteria. 100 available points are distributed among the five criteria.

1. Total F&SI crashes
2. F&SI crashes in or adjacent to socially vulnerable residential areas
3. Active transportation vulnerabilities
4. Transit
5. Recent investment

Criterion 1: Total F&SI Crashes

Available points: 50 out of 100.

Table C1:10 Year Total F&SI Crashes – Point Assignment

Corridor No.	Corridor	F&SI Count	Points Scored
1	Interstate 5	82	50
2	Mt Baker Hwy - 542	38	25.3
3	N. Cascades Hwy - 20	19	12.7
4	Lakeway Dr	15	10.0
5	Meridian St	15	10.0
6	Birch Bay - Lynden Rd	14	9.3
7	Hannegan Rd	14	9.3
8	Slater Rd	13	8.7
9	Guide Meridian - Hwy 539	12	8.0
10	Northwest Ave	12	8.0
11	W. Bakerview Rd.	11	7.3
12	Haxton Way	10	6.7
13	Valley Hwy 9	10	6.7
14	E Chestnut St	9	6.0
15	Old Fairhaven Pkwy - Hwy 11	9	6.0
16	Woburn St	9	6.0
17	Kendall Rd - Hwy 547	9	6.0
18	Lincoln St	7	4.7
19	Blaine Rd - Hwy 548	7	4.7
20	E Badger Rd - Hwy 546	7	4.7
21	Everson Goshen Rd	7	4.7

Accordant with the initial HIN corridor selection and the objective of reducing F&SI crashes, this criterion assigns half the point-based emphasis to corridors where most F&SI crashes occur.

Assignment of available points to each corridor starts with the highest crash corridor (I-5 with 82 F&SI crashes) getting all 50 points. The other 20 corridors are awarded a proportionate share of the available 50 points based on the observed range of crash totals. With the lowest 10-year F&SI crash total being 7 (4 corridors have this total), the range (82-7) is 75. Dividing the available points (50) by the range (75), equals .667. This value becomes the multiplier applied each corridor's crash count to determine the points scored.

Criterion 2: F&SI Crashes in or Adjacent to Socially Vulnerable Residential Areas.

Available points: 20 out of 100.

Accordant with WCOG's equity objectives, this criterion avails 20 of the 100 points based on the number of crashes occurring in or adjacent to census tracts identified though application of WCOG's Social Vulnerability Index (SVI). Based on each corridor map (Appendix B), crashes were categorized as 1) in or adjacent to a census tract with an SVI index of .8 or greater, 2) in or adjacent to a census tract with an SVI index between .6 and .8, and 3) not in or adjacent to either of the previously listed categories.

Before awarding SVI points to each of the 21 HIN corridors an intermediate step gave each corridor an SVI score. Each F&SI crash in or adjacent to a .8 or higher SVI census tract is given two points and each crash in or adjacent to a .6 to .8 census tract is given one point. The total points in calculated in this intermediate step is the SVI score.

The SVI scores are then used in the same way as with the previous criteria, applying a multiplier to the score based on the range of SVI scores (a high of 21 and low of 1). The application of this method is shown in Table C2 below.

Please note: Because I-5 is a limited access highway, crashes on this corridor, while *geographically adjacent* to several SVI census tracts, are functionally separated from these communities in terms of corresponding exposure to crashes on the interstate. Therefore, I-5 does not receive any scoring for this criterion.

Table C2: Social Vulnerability Points Assignment

Available Points	20	
First step SVI "Scoring"	Crashes in/adj. to .8	= crashes x 2
	Crashes in/adj. to .6	= crashes
Resulting SVI Score Range	21-1 =	20
Multiplier =	20/21 =	0.95
SVI Points	=SVI Score x .95	

Corrdior No.	Corridor	Crashes In or Adjacent to:		SVI Score	SVI Points
		SVI .6	SVI .8		
1	Interstate 5	0	0	0	0.0
2	Mt Baker Hwy - 542	10	0	10	9.5
3	N. Cascades Hwy - 20	18	0	18	17.1
4	Lakeway Dr	12	0	12	11.4
5	Meridian St	7	7	21	20.0
6	Birch Bay - Lynden Rd	0	9	18	17.1
7	Hannegan Rd	10	0	10	9.5
8	Slater Rd	13	0	13	12.4
9	Guide Meridian - Hwy 539	9	2	13	12.4
10	Northwest Ave	1	9	19	18.1
11	W. Bakerview Rd.	0	11	22	20.0
12	Haxton Way	4	6	16	15.2
13	Valley Hwy 9	0	0	0	0.0
14	E Chestnut St	0	4	8	7.6
15	Old Fairhaven Pkwy - Hwy 11	4	5	14	13.3
16	Woburn St	5	4	13	12.4
17	Kendall Rd - Hwy 547	9	0	9	8.6
18	Lincoln St	1	0	1	1.0
19	Blaine Rd - Hwy 548	0	5	10	9.5
20	E Badger Rd - Hwy 546	0	3	6	5.7
21	Everson Goshen Rd	0	5	10	9.5

Criteria 3: Active Transportation Vulnerabilities.

Available points: 15 out of 100.

Accordant with WCOG's concern about increasing rates of pedestrian and cyclist (active transportation) involved F&SI crashes, this criterion avails 15 of the 100 points based on the percentage of a corridor's F&SI crashes that involve a pedestrian or cyclist.

As illustrated in Table C3, the corridor with the highest percentage of pedestrian and bicycle involved F&SI crashes (Old Fairhaven Pkwy) receives the full 15 points. The resulting calculation to proportionately assign points to the other corridors is laid atop Table C3 below.

Table C3: Active Transportation Points Assignment

	Available Points	15			
	Top of point range (15)	Assinged to Highest Active % (88.9)			
	Resulting Point Assignment Formula	= ((Available Points)*(Active %)) / (Highest Active %)			
	e.g.: Northwest Ave	(15 * .750) / .889 = 12.7			
Corridor No.	**Corridor**	**F&SI Crashes (last 10 years)**	**Bike & Ped. Crashes (Active)**	**Active %**	**Active Transportation Points**
15	Old Fairhaven Pkwy - Hwy 11	9	8	88.9%	15
10	Northwest Ave	12	9	75.0%	12.7
18	Lincoln St	7	5	71.4%	12.1
5	Meridian St	15	9	60.0%	10.1
14	E Chestnut St	9	5	55.6%	9.4
11	W. Bakerview Rd.	11	6	54.5%	9.2
16	Woburn St	9	4	44.4%	7.5
4	Lakeway Dr	15	6	40.0%	6.8
6	Birch Bay - Lynden Rd	14	5	35.7%	6.0
9	Guide Meridian - Hwy 539	12	4	33.3%	5.6
17	Kendall Rd - Hwy 547	9	3	33.3%	5.6
1	Interstate 5	82	15	18.3%	3.1
8	Slater Rd	13	2	15.4%	2.6
12	Haxton Way	10	1	10.0%	1.7
13	Valley Hwy 9	10	1	10.0%	1.7
2	Mt Baker Hwy - 542	38	2	5.3%	0.9
3	N. Cascades Hwy - 20	19	0	0.0%	0.0
7	Hannegan Rd	14	0	0.0%	0.0
19	Blaine Rd - Hwy 548	7	0	0.0%	0.0
21	Everson Goshen Rd	7	0	0.0%	0.0
20	E Badger Rd - Hwy 546	7	0	0.0%	0.0

Criteria 4: Transit

Available points: 10 out of 100.

The presence of transit on corridors is relevant to prioritization of safety investments because users of transit walk and bike to and from bus stops. For assignment of points to this criterion, corridors are ranked by the number of bus-stops per mile and points are awarded proportionately from the total points available.

Table C4: Active Transportation Points Assignment

Available Points	10
Range = 10.27 - 0.1 =	10.17
Stops/Mi. Multiplier	= 10/10.17 = 0.983

Corridor No.	Corridor	Stops per Mile	Points
1	Interstate 5	0	0.0
2	Mt Baker Hwy - 542	0.13	0.1
3	N. Cascades Hwy - 20	0	0.0
4	Lakeway Dr	10.27	10.0
5	Meridian St	5.16	5.1
6	Birch Bay - Lynden Rd	0.17	0.2
7	Hannegan Rd	0	0.0
8	Slater Rd	0.12	0.1
9	Guide Meridian - Hwy 539	1.32	1.3
10	Northwest Ave	7.11	7.0
11	W. Bakerview Rd.	3.7	3.6
12	Haxton Way	2.5	2.5
13	Valley Hwy 9	0.16	0.2
14	E Chestnut St	3.59	3.5
15	Old Fairhaven Pkwy - Hwy 11	8.73	8.6
16	Woburn St	7.28	7.2
17	Kendall Rd - Hwy 547	1.02	1.0
18	Lincoln St	6.59	6.5
19	Blaine Rd - Hwy 548	0	0.0
20	E Badger Rd - Hwy 546	0.1	0.1
21	Everson Goshen Rd	0.3	0.3

Criteria 5: Recent Investment

Available points: 5 out of 100.

Various corridors in the Whatcom region have received safety-oriented investments in the last several years. In addition to providing some justification that less-improved corridors may be more deserving of investment, it may also be the case that crashes on these roads are already declining in frequency. Therefore, this criterion gives a small number of points (5) to any of the HIN corridors that have not had some amount of safety related investment in the last five years.

Table C5: Lack of Recent Investment Points Assignment

Corridor No.	Corridor	Safety Related Improvements in the Last Five Years?	Lack of Recent Investment Points
1	Interstate 5	No	5
2	Mt Baker Hwy - 542	No	5
3	N. Cascades Hwy - 20	No	5
4	Lakeway Dr	No	5
5	Meridian St	Yes	0
6	Birch Bay - Lynden Rd	No	5
7	Hannegan Rd	No	5
8	Slater Rd	No	5
9	Guide Meridian - Hwy 539	No	5
10	Northwest Ave	No	5
11	W. Bakerview Rd.	No	5
12	Haxton Way	No	5
13	Valley Hwy 9	No	5
14	E Chestnut St	No	5
15	Old Fairhaven Pkwy - Hwy 11	No	5
16	Woburn St	No	5
17	Kendall Rd - Hwy 547	No	5
18	Lincoln St	Yes	0
19	Blaine Rd - Hwy 548	No	5
20	E Badger Rd - Hwy 546	No	5
21	Everson Goshen Rd	No	5

Total Corridor-Ranking Points

Applying the points from all four criteria Table C6 below lists the HIN corridors in priority rank order.

Table C6: Corridors in Priority Rank Order

Corridor No.	Priority Rank	Corridor	F&SI Crashes (last 10 years)	Crashes Points	SVI Points	Active Trans-portation Points	Transit Points	Lack of Recent Investment Points	TOTAL POINTS
1	1	Interstate 5	82	50	0.0	3.1	0.0	5	58.1
10	2	Northwest Ave	12	8.0	18.1	12.6	7.0	5	50.7
15	3	Old Fairhaven Pkwy - Hwy 11	9	6.0	13.3	15.0	8.6	5	47.9
5	4	Meridian St	15	10.0	20.0	10.1	5.1	0	45.2
11	5	W. Bakerview Rd.	11	7.3	20.0	9.2	3.6	5	45.2
4	6	Lakeway Dr	15	10.0	11.4	6.7	10.0	5	43.2
2	7	Mt Baker Hwy - 542	38	25.3	9.5	0.9	0.1	5	40.9
16	8	Woburn St	9	6.0	12.4	7.5	7.2	5	38.0
6	9	Birch Bay - Lynden Rd	14	9.3	17.1	6.0	0.2	5	37.7
3	10	N. Cascades Hwy - 20	19	12.7	17.1	0.0	0.0	5	34.8
9	11	Guide Meridian - Hwy 539	12	8.0	12.4	5.6	1.3	5	32.3
14	12	E Chestnut St	9	6.0	7.6	9.4	3.5	5	31.5
12	13	Haxton Way	10	6.7	15.2	1.7	2.5	5	31.0
8	14	Slater Rd	13	8.7	12.4	2.6	0.1	5	28.8
17	15	Kendall Rd - Hwy 547	9	6.0	8.6	5.6	1.0	5	26.2
18	16	Lincoln St	7	4.7	1.0	12.0	6.5	0	24.1
7	17	Hannegan Rd	14	9.3	9.5	0.0	0.0	5	23.9
21	18	Everson Goshen Rd	7	4.7	9.5	0.0	0.3	5	19.5
19	19	Blaine Rd - Hwy 548	7	4.7	9.5	0.0	0.0	5	19.2
20	20	E Badger Rd - Hwy 546	7	4.7	5.7	0.0	0.1	5	15.5
13	21	Valley Hwy 9	10	6.7	0.0	1.7	0.2	5	13.5