



Safe Streets 4 All: Vision Zero Crash Data Analysis



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Introduction

- Crash data analysis informing the Vision Zero Action Plan
 - Comprehensive Safety Action Plan (CSAP) required for SS4A
 - CSAP requires a safety analysis

Vision Zero Action Plan

- Adopted Vision Zero Resolution in December 2022
 - Goal to eliminate traffic deaths and severe injuries by 2042
- Current Vision Zero Action Plan (CSAP)
 - Adopted June 2023
 - Used to apply for the SS4A grant

Vision Zero Action Plan

Date: June 2023
 Crash Data Time Period: 2017-2021
 Developed using the FHWA Systemic Safety Project Selection Tool and Risk-Based Safety Assessment
 Prepared by:
 Integrated Capital Management
 Planning Services



Required Safety Analysis

- Analysis of existing conditions and historical trends that provides a baseline level of crashes involving fatalities and serious injuries across the city.
- Analysis of locations where there are crashes and the severity of the crashes, as well as contributing factors and crash types by relevant road users.
- Analysis of systemic and specific safety needs is also performed, as needed.
- To the extent practical, the analysis should include all roadways within the jurisdiction, without regard for ownership. Based on the analysis performed, a geospatial identification of higher-risk locations is developed (a high-injury network).



Analysis

- Covers the most recently available WSDOT crash data 2021-2025
 - Excludes highways, ramps, and other misc. roads such as private roads and parking lots
- 16,970 total crashes
 - 581 (3.4%) resulted in a fatal or serious injury (FSI)

Analysis

- Vehicle Only - **92% of the total crashes**, but **41% of the FSI crashes**.
- Motorcycle - **2% of total crashes**, but **22% of FSI crashes**.
- Pedestrian - **4% of total crashes**, but **31% of FSI crashes**.
- Bicycle – **2% of total crashes**, but **7% of FSI crashes**.

Analysis



Table 5 Most Common Action for Vulnerable Road Users in Fatal and Serious Injury (FSI) Crashes (2021 - 2025)

Vulnerable Road User	Action		
	Most Common	2nd Most Common	3rd Most Common
Pedestrian	Crossing at non-intersection with no crosswalk (21%)	Crossing at intersection without signal (14%)	Crossing at intersection with signal (13%)
Bicyclist	Riding with traffic (53%)	Crossing or entering roadway (29%)	Riding against traffic (8%)
Motorcyclist	Angle crash (57%)	Run-off road (28%)	Sideswipe (6%)



High Injury Network

- Corridor HIN
 - Primary HIN includes corridors that are in the top 25% of the annual severity score derived from WSDOT's financial cost of a crash.
 - Fatal and serious injury crashes: 239 points each
 - Minor injury crashes: 17 points
 - Possible injury crashes: 10 points
 - No injury crashes: 1 point
- Intersection HIN
 - Crashes that occur within 250 feet of the intersection.
 - Same severity score as Corridor HIN

High Injury Network

- Pedestrian and Bicycle HIN
 - Includes corridors that account for 50% of all pedestrian and bicycle fatalities
 - FSI and Minor injury crashes rated the same (100 points each)

High Injury Network

- The corridor HIN includes all modes and encompasses roadways where 50% of FSIs occurred. These roadways cover 5.5% of the city's network, or 58 total centerline miles.
- The intersection HIN encompasses intersections where 25% of the intersection-related FSIs occurred. These 58 intersections represent only 0.8% of the city's intersections.
- The pedestrian HIN captures 50% of pedestrian FSI crashes and covers 3.2% of the city's network or 34 centerline miles.
- The bicycle HIN captures 50% of bicyclist FSI crashes and covers 3.4% of the city's network or 36 centerline miles.



Top 15 High Injury Corridors/Intersections

Corridor	From	To	All Modes	Bike Only	Ped Only	# of Intersections
Browne St	Spokane Falls Blvd	7th Ave	●	●	●	4
Lincoln St	4th Ave	Spokane Falls Blvd	●	●		1
Walnut St	Riverside Ave	7th Ave	●		●	1
Division St	Cleveland Ave	Spokane Falls Blvd	●		●	2
Ruby St	North River Dr	Cleveland Ave	●		●	3
Riverside Ave	Monroe St	Division St	●			0
2nd Ave	Sunset Blvd	Division St	●	●	●	3
Sunset Hwy	Airport Dr	Rustle Rd	●			0
North Foothills Dr	Division St	Hamilton St	●	●		1
Nevada St	Longfellow Ave	Hamilton St	●	●	●	2
Newport Hwy	Division St	Westview Ave	●			0
Francis Ave	Walnut St	Alberta St	●	●		1
Nevada St	Westview Ct	Central Ave	●	●	●	4
Division St	Westview Ave	Cleveland Ave	●		●	7
Freya Way	Misson St	Freya St	●			2

	Intersection	All Crashes	FSI ¹ Crashes	Severity Score
1	Greene St / Mission Ave	77	3	237
2	Division St / Foothills Dr / Buckeye Ave	71	3	227
3	Monroe St / 2nd Ave	54	3	223
4	Freya St / Francis Ave	26	4	214
5	Division St / Euclid Ave	23	4	204
6	Regal St / 44th Ave	38	3	199
7	Monroe St / Maxwell Ave	39	3	195
8	Walnut St / 2nd Ave	39	3	188
9	Francis Ave / Crestline St	35	3	179
10	Division St / Sprague Ave	61	2	175
11	Market St / Garland Ave	33	3	174
12	Washington St / Mission Ave / Maxwell Ave	28	3	174
13	Browne St / 2nd Ave	63	2	173
14	Airport Dr / Spotted Rd	32	3	173
15	Ruby St / Indiana Ave	57	2	169

Thank you

Questions/Comments:

ICM Website

<https://my.spokanecity.org/projects/capital-programs/>

ICM Email

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