

City of Spokane

Risk-Based Street Safety Assessment

Date: May 2024

Crash Data Time Period: 2018-2022

Developed using the FHWA *Systemic Safety Project Selection Tool*

Prepared by:
Integrated Capital Management



Introduction

The City of Spokane is committed to reducing fatal and serious injury crashes within its transportation network. Target Zero: Washington State Strategic Highway Safety Plan provides a data-driven approach to achieving this goal through established priorities and strategies, including guidance on using the Federal Highway Administration's (FHWA) *Systemic Safety Project Selection Tool*. Following the methodology set forward in the *Target Zero* plan guides the City toward reducing fatalities and serious injury crashes through a proven approach.

Using the recommended, standardized methods of data analysis allows the City to efficiently direct resources towards efforts that create the greatest reduction of the most severe crash types. Using Washington State Department of Transportation's (WSDOT) crash data allows the City to efficiently sort crash types and locations, identify trends, select the most effective treatments, and undertake a logical approach to addressing the most critical locations and behaviors in the transportation network.

Target Zero: Washington's Strategic Highway Safety Plan provides a guidebook to carrying out this data-driven process. By identifying priorities, creating common goals, developing a common language, and offering a menu of solutions, the Plan helps identify the unique risks in our community and the most effective strategies for addressing them.

Systemic Safety Project Selection

Methodology

WSDOT provided data for this analysis for the dates January 1, 2018 through December 31, 2022, with data derived from accident reports provided by the Washington State Patrol.

This analysis seeks to identify trends in fatal and serious crashes and then propose solutions. In achieving this goal, the analysis follows five steps:

1. Classify fatal and serious crashes by crash type, and assign priority levels to each type,
2. Identify roadway characteristics associated with high priority crash types,
3. Identify locations within the City transportation network that have these characteristics,
4. Identify treatments for these locations, and
5. Prioritize projects.

Step 1: Classify Crashes by Type and Assigning Priorities

In this step, WSDOT-provided data was sorted by crash type. Each crash type was then assigned a priority level, based on examples and approaches recommended in *Target Zero*. Based on this guidance, the selected priority levels are as follows:

- **Priority Level 1:** Contributing factors involved in 30% or more of fatal or serious injury crashes.
- **Priority Level 2:** Contributing factors involved in 10% to 30% of fatality or serious injury crashes.
- **Priority Level 3:** Contributing factors involved in all other fatality or serious injury crashes.

Figure 1 quantifies the City’s crash types and indicates priority levels for each crash type. Priority 1 and 2 crash types have been highlighted. The most prominent collision pattern is the “Vulnerable User Involved” at 36.8% of all Fatal/Serious crashes within the City of Spokane. This collision pattern has been selected as the focus of the analysis and project list for this round. Angle collisions were also high but not further evaluated in this round.

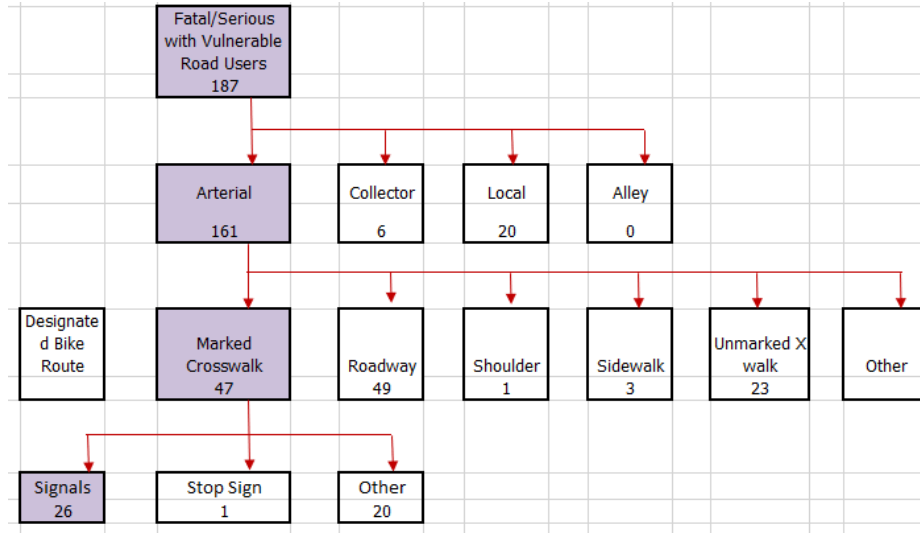
Figure 1. Analysis of City of Spokane Crash data (2018-2022, provided by WSDOT)

Overall Numbers	Fatal/Serious Crashes		All Crashes		Priority Level
Total # of Collisions	483	-	18630	-	
# of Fatal Collisions	73	15%	73	<1%	
# of Serious Injury Collisions	410	85%	410	2%	
# of Drug/Alcohol-Related Collisions	55	11%	1230	7%	
By Collision Type					
Vulnerable User Hit (Ped and Bike)	178	36.8%	925	4.9%	1
Hit Pedestrian	143	29.6%	611	3.3%	1
All Angle (T,left,right)	164	33.9%	7650	41.1%	1
Hit Fixed Object	68	14.8%	2337	12.5%	2
Hit Cyclist	35	7.2%	314	1.7%	
Rearend	20	4.1%	3501	18.8%	
Overturn	12	2.5%	89	0.5%	
Sideswipe	9	1.8%	1087	5.8%	
Head On	11	2.3%	98	0.5%	
Other	13	2.7%	581	3.1%	
By Roadway Surface Condition					
Dry	412	85.3%	14083	75.6%	
Wet	51	10.5%	2266	12.1%	
Ice	13	2.7%	1015	5.4%	
Snow/Slush	3	0.6%	998	5.4%	
By Light Condition					
Daylight	254	52.6%	12294	66%	1
Dark (with and w/out streetlights)	207	42.8%	5347	28.7%	1
Dusk/Dawn	19	4.3%	738	3.9%	3
By Junction Relationship					
Intersection Related	262	54.2%	9720	52.2%	1
Non-Intersection (Not Related)	151	31.3%	5588	30%	
Driveway-Related	26	5.3%	1026	5.5%	
Roundabout Related	2	0.4%	71	0.4%	
By Traffic Control					
No Traffic Control	134	60.4%	3828	43.8%	1
Signals	72	32.4%	4301	48.7%	1
Stop Sign	10	4.5%	437	4.9%	2

Step 2. Identifying Roadway Characteristics

The tree in Figure 2 shows how we started with fatal/serious vulnerable user crashes and found a pattern on arterials signals with marked crosswalks.

Figure 2: Tree for Fatal/Serious Crashes with Vulnerable User at Signalized Marked Crosswalks



These collisions were reviewed for common characteristics and the risk factors listed below were identified. For details on this process see Appendix A.

- Arterial signal
- Parallel (transverse) crosswalk markings
- Used to access transit stop
- Number of entering travel lanes
- Land use generating foot traffic
- Highest entering speed limit
- Percentage of homes without access to a vehicle – used > 10% as threshold

Step 3. Identify Priority Locations

Step 3 includes locating marked, signalized crosswalks with the risk factors identified in Step 2 above. They are summarized in Figure 3 and also ranked in priority order using the risk factors discussed above. The ranking is based first on the number of “Y”s, then entering speed limit, then entering travel lanes. Fatal and serious non-motorized collisions at the location are ranked last as a tiebreaker.

The following signalized crosswalks are already funded for upgrades and were left off the list: Maxwell/Ash and Maxwell/Maple, and most signalized intersections within the Safe Streets for All Priority Study Area. The City received a 2023 SS4A award which will pay for improvements within most of the city center.

Figure 3. Prioritized Location List

East-West Street	North-South Street	Highway/ Arterial	Parallel Crosswalk Markings	Transit Route Access	# of Entering Travel Lanes	Land Use Generates foot traffic	Highest Entering Speed Limit	>10% of homes w/out vehicle	Ped-Veh Collisions
Hawthorne	Nevada	Y	Y	Y	12	Y	45	Y	0
Francis	Division	Y	Y	Y	16	Y	35	Y	0
Market	Euclid	Y	Y	Y	12	Y	35	Y	0
Francis	Addison	Y	Y	Y	10	Y	35	Y	0
Northwest Blvd	Ash	Y	Y	Y	10	Y	35	Y	0
Northwest Blvd	Maple	Y	Y	Y	10	Y	35	Y	0
Sprague	Havana	Y	Y	Y	10	Y	35	Y	0
Garland	Market	Y	Y	Y	6	Y	35	Y	2
Garland	Monroe	Y	Y	Y	10	Y	30	Y	1
Sprague	Altamont	Y	Y	Y	9	Y	30	Y	1
29th	Regal	Y	Y	Y	8	Y	30	Y	0
Indiana	Ash	Y	Y	Y	7	Y	30	Y	0
Indiana	Maple	Y	Y	Y	7	Y	30	Y	0
Mission	Napa	Y	Y	Y	7	Y	30	Y	0
Illinois	Perry	Y	Y	Y	7	Y	30	Y	0
14th	Grand Blvd	Y	Y	Y	6	Y	30	Y	1
14th	Monroe-Lincoln	Y	Y	Y	6	Y	30	Y	0
Boone	Ash	Y	Y	Y	5	Y	30	Y	1
Boone	Maple	Y	Y	Y	5	Y	30	Y	0
Country Homes Blvd	Division	Y	Y	Y	8	Y	45	N	0
Lincoln	Nevada	Y	Y	Y	10	N	40	Y	0
Magnesium	Nevada	Y	Y	Y	10	N	40	Y	0
Francis	Market	Y	Y	N	13	Y	35	Y	0
Francis	Crestline	Y	Y	Y	12	Y	35	N	0
Francis	Nevada	Y	Y	Y	12	Y	35	N	0
Francis (SR 291)	Monroe	Y	Y	Y	12	Y	35	N	0
Trent (SR 290)	Freya	Y	Y	Y	12	N	35	Y	0
Alki	Freya	Y	Y	Y	11	N	35	Y	1
Central	Division	Y	Y	Y	10	Y	35	N	0
Francis (SR 291)	Ash	Y	Y	Y	10	Y	35	N	0
Francis (SR 291)	Maple	Y	Y	Y	10	Y	35	N	0
Francis (SR 291)	Wall	Y	Y	Y	10	Y	35	N	0
Trent (SR 290)	Havana	Y	Y	Y	8	N	35	Y	0
Whistalks Way	Mitchell	Y	Y	Y	5	N	35	Y	0
Wellesley	Division	Y	Y	Y	15	Y	30	N	0
Garland-Empire	Division	Y	Y	Y	14	Y	30	N	0
Queen	Division	Y	Y	Y	14	Y	30	N	0
29th	Ray	Y	Y	Y	12	Y	30	N	1

29th	Southeast Blvd	Y	Y	Y	12	Y	30	N	0
Wellesley	Nevada	Y	Y	Y	12	Y	30	N	0
Empire	Nevada	Y	Y	Y	10	Y	30	N	1
17th	Ray	Y	Y	N	10	Y	30	Y	0
Trent (SR 290)	Helena	Y	Y	Y	10	N	30	Y	0
Wellesley	Alberta	Y	Y	Y	10	Y	30	N	0
Wellesley	Lidgerwood	Y	Y	Y	10	Y	30	N	0
Northwest Blvd	Alberta	Y	Y	Y	9	Y	30	N	0
Rowan	Division	Y	Y	Y	8	Y	30	N	2
Bridgeport	Division	Y	Y	Y	8	Y	30	N	0
Bridgeport	Nevada	Y	Y	Y	8	Y	30	N	0
Trent (SR 290)	Napa	Y	Y	Y	8	N	30	Y	0
Wellesley	Belt	Y	Y	Y	8	Y	30	N	0
Wellesley	Maple	Y	Y	Y	8	Y	30	N	0
Garland	Maple	Y	Y	Y	7	Y	30	N	0
Northwest Blvd	Cochran-TJ Meenach	Y	Y	Y	7	Y	30	N	0
Wellesley	Ash	Y	Y	Y	7	Y	30	N	0
14th	Bernard	Y	Y	Y	6	N	30	Y	0
37th	Grand Blvd	Y	Y	Y	6	Y	30	N	0
Garland	Ash	Y	Y	Y	6	Y	30	N	0
Wellesley	Pittsburg	Y	Y	Y	6	Y	30	N	0
Francis	Freya	Y	Y	N	11	N	35	Y	0
Francis (SR 291)	Indian Trail	Y	Y	Y	8	N	35	N	0
Wellesley	Monroe	Y	Y	Y	12	N	30	N	0
Wellesley	Wall	Y	Y	Y	10	N	30	N	0
29th	Bernard	Y	Y	Y	8	N	30	N	0
Rowan	Nevada	Y	Y	Y	8	N	30	N	0
25th	Grand Blvd	Y	Y	Y	6	N	30	N	0
29th	Perry	Y	Y	Y	6	N	30	N	0
US 2	Flint	Y	Y	N	15	N	45	N	0
Broadway	Havana	Y	Y	N	9	N	35	N	0
Garland	Alberta	Y	Y	N	6	N	30	N	0

Step 4: Select Countermeasures

Following identification of locations, effective countermeasures are identified for each crash type, shown in **Figure 4**, and then applied to high-ranking locations. Countermeasures are evaluated through FHWA’s Crash Modification Factors (CMF) clearinghouse. The CMF clearinghouse contains safety countermeasures and scores its effectiveness at reducing crashes. The CMF rating estimates the reduced frequency of crashes following the installation of the countermeasure. For example, if the CMF is 0.70, the amount of crashes would be expected to be 70% of the existing number of crashes.

Figure 4. CMF’s for Fatal/Serious crashes with Vulnerable User

CMF	ID #	Countermeasure	Crash Type	Severity
0.60	#4123	High visibility crosswalk markings	Veh-Ped	All
equation	#2372	Stopbars – increase pavement marking retroreflectivity	All	All
0.54	#175	Add raised median with marked crosswalk	Veh-Ped	All
0.61	#176	Add raised median without marked crosswalk	Veh-Ped	All
0.41	#441	Provide intersection illumination	Veh-Ped	S, M
0.5 (?)	-	Add curb extensions (estimated CMF)	all	all
0.53	#9024	Install RRFB	Veh-Ped	All
0.43	#9021	Install PHB with advanced yield or stop markings	Veh-Ped	All
0.77	#319	Install traffic signal	All	All
0.55	#136	Install raised pedestrian crosswalks	Veh-Ped	All
0.81	#9903	Implement leading pedestrian interval	Veh-Ped	All
0.59	#11246	Install sidewalk	Veh-Ped	All
0.43	#10737	Install bicycle lanes	All	All
0.76	#7825	Convert 12-foot lanes to 11-foot lanes	All	All
0.5 (?)	-	Traffic circle (estimated CMF)	all	all
0.93	#7694	Doghouse to FLA for lefts	All	All
0.53	#2841	4 to 3 conversion	All	All
0.95	#6885	Speed feedback sign	All	All
0.6	#132	Speed hump	All	A,B,C

Step 5: Prioritize Projects

As the list in **Figure 3** includes 70 locations, they are broken into two separate projects below. **Figure 5** lists the countermeasures and prioritized projects. The methodology used to prioritize individual intersections is described in step 3. Cost estimates are detailed in Appendix B.

Figure 5. Prioritized Systemic Project List

Group #	Locations	Countermeasures	Cost
1	Hawthorne/Nevada, Francis/Division, Market/Euclid, Francis/Addison, Northwest Blvd/Ash, Northwest Blvd/Maple, Sprague/Havana, Garland/Market, Garland/Monroe, Sprague/Altamont, 29 th /Regal, Indiana/Ash, Indiana/Maple, Mission/Napa, Illinois/Perry, 14 th /Grand Blvd, 14 th /Monroe-Lincoln, Boone/Ash, Boone/Maple, Country Homes Blvd/Division, Lincoln/Nevada, Magnesium/Nevada, Francis/Market, Francis/Crestline, Francis/Nevada, Francis (SR 291)/Monroe, Trent (SR 290)/Freya, Alki/Freya, Central/Division, Francis (SR 291)/Ash, Francis (SR 291)/Maple, Francis (SR 291)/Wall, Trent (SR 290)/Havana, Whistalks Way/Mitchell, Wellesley/Division	Replace transverse crosswalk markings with high-visibility stop bars and piano key (double pair) crosswalks	\$1,546,481
2	Garland-Empire/Division, Queen/Division, 29 th /Ray, 29 th /Southeast Blvd, Wellesley/Nevada, Empire/Nevada, 17 th /Ray, Trent (SR 290)/Helena, Wellesley/Alberta, Wellesley/Lidgerwood, Northwest Blvd/Alberta, Rowan/Division, Bridgeport/Division, Bridgeport/Nevada, Trent (SR 290)/Napa, Wellesley/Belt, Wellesley/Maple, Garland/Maple, Northwest Blvd/Cochran-TJ Meenach, Wellesley/Ash, 14 th /Bernard, 37 th /Grand Blvd, Garland/Ash, Wellesley/Pittsburg, Francis/Freya, Francis (SR 291)/Indian Trail, Wellesley/Monroe, Wellesley/Wall, 29 th /Bernard, Rowan/Nevada, 25 th /Grand Blvd, 29 th /Perry, US 2/Flint, Broadway/Havana, Garland/Alberta	Replace transverse crosswalk markings with high-visibility stop bars and piano key (double pair) crosswalks	\$1,546,481

Spot Location Analysis

Spot locations were not included in the analysis for this time period.

Citywide Neighborhood Traffic Calming

The City of Spokane began an effort to develop Neighborhood Traffic Calming projects throughout the City in 2022. The goal was to develop a deep list of safety-oriented projects that could be funded using Red Light camera and School Speed Zone camera revenues over the next six years. The process to develop the project list included two rounds of workshops with the 27 Neighborhood Councils within the City. At the first workshop the residents identified locations with safety concerns. Next the City’s consulting engineering firm performed an analysis of each of the locations and recommended improvements based on the speeds, volumes, risk, and crash history of each site. The improvements were shared at the second workshop and prioritized for funding by neighborhood residents. This effort is documented on the following webpage where the final report, project concepts and estimates are available. <https://my.spokanecity.org/neighborhoods/programs/traffic-calming/>

The projects utilize a number of the countermeasures identified in Figure 4 including a variety of crosswalk enhancements, lane restriping to reduce speeds, traffic signal revisions, and new sidewalks and bike lanes. The City is incorporating the safety-oriented projects on the list into this Risk Based Street Safety Assessment in order to emphasize the importance of the safety projects and help them to receive funding from other sources. The list is provided in Appendix C.

Conclusion

In summary, this Risk-Based Safety Assessment followed Target Zero and used the Systemic Safety Project Selection Tool to identify key roadway characteristics associated with fatal and serious injury crashes occurring in the City of Spokane. After identifying locations with a high likelihood for such crashes, this assessment identified appropriate treatments for these locations. The resulting project list provides the City with a path forward for proactively addressing future fatal and serious injury crashes throughout the City's transportation network.

Appendix A

Risk Factor Identified details

Appendix A

Risk Factors observed from detailed collision reports (2018-2022)

Risk Factors from Fatal/Serious, Ped/Bike collisions at Arterial Signals

Report #	Main Street	Cross Street	Highway /Arterial	Parallel Crosswalk Markings	Unprotected lefts	Used to access transit stop?	Ped most signal cycles?	# entering travel lanes (all directions)	Commercial Land Use	Grocery	School/ Park	Major Street Speed Limit	10% or more homes w/out vehicle
EA25022	002	2nd	Y	N	Y	Y	Y	8	Y	N	N	30	Y
E924210	002	Cozza	Y	N	N	Y	N	13	Y	N	N	40	Y
EB34875	002	Magnesium	Y	N	Y	Y	N	12	Y	N	N	45	Y
EC79386	002	Main	Y	N	Y	Y	Y	5	Y	Y	N	30	Y
EB66117	002	Rowan	Y	Y	N	Y	N	8	Y	Y	Y	30	N
EB60597	002	Rowan	Y	Y	N	Y	N	8	Y	N	Y	30	N
E840844	002	Sharp	Y	N	PP	Y	N	9	Y	N	N	30	Y
EA00731	290 - SFB	Hamilton - MP 0.74	Y	Y	N	Y	N	12	Y	N	Y	30	Y
E805001	002COBROWNE	2nd	Y	N	Y	Y	Y	7	Y	N	N	30	Y
EB66158	002COBROWNE	2nd	Y	N	Y	Y	Y	7	Y	N	N	30	Y
EB70133	002CODIVISN	Buckeye-Foothills	Y	N	N	Y	N	9	Y	N	N	30	N
EA28091	E EMPIRE AVE	N NEVADA ST	Y	Y	Y	Y	N	10	Y	Y	Y	30	N
EA61115	E INDIANA AVE	N HAMILTON ST	Y	N	Y	Y	N	12	Y	Y	N	30	Y
EA21399	E JAY AVE	N NEVADA ST	Y	N	N	Y	N	8	Y	Y	N	45	Y
E963832	E MARTIN LUTHER KIN	N PINE ST	Y	Y	Y	Y	N	7	Y	N	N	30	Y
E925112	E SPRAGUE AVE	N ALTAMONT ST	Y	Y	Y	Y	N	9	Y	N	N	30	Y
E972885	E WELLESLEY AVE	N CRESTLINE ST	Y	N	PP	Y	N	12	Y	N	N	30	Y
ED10313	N ASH ST	W FIVE MILE RD	Y	N	Y	Y	N	7	Y	Y	N	30	N
E847243	N FREYA ST	E ALKI AVE	Y	Y	PP	Y	N	11	N	N	N	35	Y
EA72139	N GREENE ST	E MISSION AVE	Y	N	N	Y	N	13	Y	N	Y	35	Y
EA68883	N MARKET ST	E GARLAND AVE	Y	Y	PP	Y	N	6	Y	Y	N	35	Y
EA68503	N MARKET ST	E GARLAND AVE	Y	Y	PP	Y	N	6	Y	Y	N	35	Y
EC66602	N MONROE ST	W GARLAND AVE	Y	Y	N	Y	Y	10	Y	N	N	30	Y
EB31997	N STEVENS ST	W RIVERSIDE AVE	Y	Y	Y	Y	Y	8	Y	N	N	30	Y
EA78914	N WASHINGTON ST	W MAXWELL AVE	Y	Y	Y	Y	N	12	Y	N	Y	30	Y
EA15084	S ARTHUR ST	E 2ND AVE	Y	Y	Y	Y	N	8	N	N	N	30	Y
EB66114	S GRAND BLVD	E 14TH AVE	Y	Y	Y	Y	N	6	Y	N	N	30	Y
E839790	S MONROE ST	W 2ND AVE	Y	Y	Y	Y	Y	7	Y	N	N	30	Y
EC20545	S RAY ST	29th	Y	Y	N	Y	N	12	Y	Y	Y	30	N
E922964	S STEVENS ST	Sprague	Y	Y	Y	Y	Y	7	Y	N	N	30	Y
EC64962	W 3RD AVE	S JEFFERSON ST	Y	Y	Y	Y	N	5	Y	N	N	30	Y
EB15325	W BOONE AVE	N ASH ST	Y	Y	Y	Y	N	5	Y	N	N	30	Y
EC13260	W MAIN AVE	N HOWARD ST	Y	Y	Y	Y	Y	5	Y	N	Y	30	Y
EB70124	W MAXWELL AVE	N ASH ST	Y	Y	Y	Y	N	5	Y	N	N	30	Y
EA70999	W MAXWELL AVE	N MAPLE ST	Y	Y	Y	Y	N	5	Y	N	N	30	Y
EA39760	W SPOKANE FALLS BLV	N POST ST	Y	Y	Y	Y	Y	3	Y	N	Y	30	Y
E818613	W SPRAGUE AVE	S MONROE ST	Y	Y	Y	Y	Y	7	Y	N	N	30	Y

Countif "Y"

37 24 23 37 11 35 9 9 31

Recommended Risk Factor	yes	yes	no	yes	no	yes	yes	no	no	yes	yes
						prioritize higher number of lanes				prioritize higher speeds	

Appendix B

Project Cost Estimates

Date Prepared: 1/23/2024

Prepared by: J. Ball

Project Name: HSIP Grant - Intersection Re-striping **\$1,546,481** Proj ID: ???
Description: Assumed 13 PCCP & 22 ACCP intersections. Avg 9.4 Entry Lanes per/intersection. (9.4x2x12'¹/₄=56.4' each leg). Longitudinal Cross Walks (Piano Key). Durable H.A. (ACCP) & MMA with Grooving (PCCP). Remove Transverse striping. Assumed ADA updates for 15 Curb Returns.

<u>Item Description</u>	<u>Bid Item No.</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Extension</u>
Division 1 - General Requirements					
SPCC Plan	1071020	1.0	LS	\$2,000	\$2,000
Mobilization	1090000	1.0	LS	\$133,000	\$133,000
Project Temporary Traffic Control	1100000	1.0	LS	\$133,000	\$133,000
				subtotal:	\$268,000
Division 2 - Earthwork					
Remove Existing Curb and/or Gutter	20200_0	480	LF	\$15	\$7,200
Remove Cement Concrete Sidewalk & Driveway	2020040	267	SY	\$25	\$6,675
Sawcutting Curb	2020130	30	EA	\$45	\$1,350
Sawcutting Rigid and Flexible Pavement	202015_	600	LFI	\$2.00	\$1,200
				subtotal:	\$16,425
Division 4 - Bases					
CSTC for Sidewalk and Driveways	4040030	18	CY	\$150	\$2,700
				subtotal:	\$2,700
Division 5 - Surface Treatments & Pavements					
				subtotal:	\$0
Division 6 - Structures					
				subtotal:	\$0
Division 7 - Drainage Structures, Storm Sewers, Sanitary Sewers, Water mains & Conduits					
				subtotal:	\$0
Division 8 - Miscellaneous Construction					
Cement Concrete Curb and/or Gutter	80400__	480	LF	\$40	\$19,200
Cement Concrete Sidewalk	8140000	320	SY	\$100	\$32,000
Ramp Detectable Warning	8140040	240	SF	\$35	\$8,400
Pavement Marking (Durable Heat Applied & MMA W/Grooving)	82200_0	1	LS	\$582,520	\$582,520
				subtotal:	\$642,120
Legacy ICM Items					
				subtotal:	\$0
Construction Subtotal					\$929,245
Scope Contingency		15.0%			\$139,387
Construction Contingency		10.0%			\$106,863
Construction total					\$1,175,495
Property Purchase					\$0
Geotech		0.0%			\$0
Surveying		3.0%			\$35,265
Design & Bid Docs		7.0%			\$82,285
Admin, Legal, & Permits		1.5%			\$17,632
Construction Mgmt		15.0%			\$176,324
Project Total					\$1,487,001
		Unit costs from year...		for construction in...	
		2024	2025		
For Program					
Preconstruction		135	\$140,589		
Property Purchase		0	\$0		
Construction Total		1,175	\$1,222,515		
Const mgmt		176	\$183,377		
		1,487	\$1,546,481	Project Cost	

Appendix C

Neighborhood Traffic Calming Safety Projects

Appendix C - Traffic Calming Projects for Safety Plan

<https://my.spokanecity.org/neighborhoods/programs/traffic-calming/>

Current Council	District	Neighborhood	Project	Sum of funding Request	Project Includes Safety Countermeasures?
	D3	Audubon Downriver	NW Blvd (TJ to Assembly)	\$ 573,000.00	Y
	D3	Audubon Downriver	Belt @ Longfellow	\$ 240,000.00	Y
	D3	Audubon Downriver	NW Blvd @ TJ	\$ 86,000.00	Y
	D3	Audubon Downriver	Wellesley @ Flett MS	\$ -	Y
	D3	Audubon Downriver	Wellesley @ Alberta	\$ -	Y
	D3	Balboa South Indian Trail	Indian Trail (Holyoke to Janice)	\$ 966,000.00	Y
	D3	Balboa South Indian Trail	Maple-Ash @ Country Homes	\$ 709,000.00	Y
	D3	Balboa South Indian Trail	Woodside (Indian Trail to Five Mile)	\$ 115,000.00	N
	D3	Balboa South Indian Trail	Five Mile (Cochran to Ash)	\$ -	Y
	D3	Balboa South Indian Trail	Francis @ Five Mile Shopping Center	\$ -	Y
	D1	Bemiss	Market Street Speed Display (Garland to Illinois)	\$ 50,000.00	Y
	D1	Bemiss	Wellesley @ Crestline	\$ 62,000.00	Y
	D1	Bemiss	Illinois @ Crestline	\$ 186,000.00	Y
	D1	Bemiss	Euclid (Market to Crestline)	\$ 430,000.00	Y
	D1	Bemiss	Regal @ Rich	\$ 59,000.00	Y
	D3	Browne's Addition	2nd @ Cannon	\$ 262,000.00	Y
	D3	Browne's Addition	Spruce @ CdA	\$ 266,000.00	Y
	D3	Browne's Addition	1st @ Maple	\$ -	Y
	D3	Browne's Addition	Sunset (2nd to Spruce)	\$ -	Y
	D1	Chief Garry	Mission @ Crestline and Chief Garry Park	\$ 93,000.00	N
	D1	Chief Garry	Marshall (Mission to Regal)	\$ 317,000.00	Y
	D2	Cliff Cannon	Cliff Drive @ Edwidge Woldson	\$ 1,115,000.00	N
	D2	Cliff Cannon	Cedar (12th to 21st)	\$ -	Y
	D2	Cliff Cannon	5th @ Lincoln-Monroe Couplet	\$ -	Y
	D2	Cliff Cannon (and Rockwood)	Grand Blvd (9th to 17th)	\$ 1,510,000.00	Y
	D2	Comstock	37th (High to Bernard)	\$ 714,000.00	Y
	D2	Comstock	37th @ Perry	\$ -	N
	D2	Comstock	33rd @ Grand	\$ -	Y
	D2	Comstock	33rd @ Lincoln Dr	\$ 134,000.00	Y
	D2	Comstock	37th (Bernard to Grand)	\$ 94,000.00	Y
	D2	East Central	9th (Altamont to Perry)	\$ 288,000.00	Y
	D2	East Central	Grant Elementary	\$ 10,000.00	N
	D2	East Central	Rebecca (4th to 5th)	\$ 8,000.00	Y
	D2	East Central	9th @ Altamont	\$ -	Y
	D3	Emerson-Garfield	Buckeye @ Washington	\$ 592,000.00	Y
	D3	Emerson-Garfield	Buckeye (Post to Division)	\$ 494,000.00	Y
	D3	Emerson-Garfield	Corbin Park	\$ 424,000.00	Y
	D3	Emerson-Garfield	Audubon Elementary	\$ -	Y
	D3	Emerson-Garfield	Monroe to Post cross streets	\$ -	Y
	D3	Five Mile	Strong @ Nettleton	\$ 173,000.00	Y
	D3	Five Mile	Cascade Way (Five Mile to Austin)	\$ 13,000.00	N
	D3	Five Mile	Cedar (Strong to Johannsen Rd)	\$ -	N
	D3	Five Mile	Strong Rd (Five Mile to Nettleton)	\$ -	Y
	D2	Grandview-Thorpe	16th (Milton to 17th)	\$ 1,886,000.00	Y
	D2	Grandview-Thorpe	17th @ D St	\$ 24,000.00	Y
	D2	Grandview-Thorpe	14th Ave (Trolley to Fish Lake)	\$ 747,000.00	Y
	D2	Grandview-Thorpe	21st @ D St	\$ -	Y
	D1	Hillyard	Bruce (Crestline to Lee) - RRFB and sidewalk	\$ 499,000.00	Y
	D1	Hillyard	Market-Haven Couplet (Rich to Joseph)	\$ 462,000.00	Y
	D2	Latah-Hangman	Hatch @ Highland-Westchester	\$ 293,000.00	N
	D2	Latah-Hangman	Qualchan (Lincoln to Cheney-Spokane)	\$ 2,369,000.00	Y
	D2	Latah-Hangman	Hatch (US-195 to 57th) Pt 1	\$ 3,787,000.00	N
	D2	Latah-Hangman	Hatch (US-195 to 57th) Pt 2	\$ 6,242,000.00	N
	D2	Lincoln Heights	17th (Havana to Rockwood)	\$ 749,000.00	Y
	D2	Lincoln Heights	Rockwood Retirement Walk Path	\$ 219,000.00	Y
	D2	Lincoln Heights	Ray (17th to 29th)	\$ 853,000.00	Y
	D2	Lincoln Heights	Ray @ 25th	\$ -	N

D2	Lincoln Heights	29th @ Fiske and Mt Vernon	\$	-	Y
D1	Logan	Marietta Ave Sidewalk	\$	618,000.00	Y
D1	Logan	Logan Elementary SRTS	\$	446,000.00	Y
D1	Logan	North Foothills Drive	\$	317,000.00	Y
D1	Logan	Montgomery @ Cincinnati	\$	-	Y
D1	Logan	Upriver (North Center to Crestline)	\$	-	Y
D2	Manito-Cannon Hill	Bernard (18th to 21st)	\$	547,000.00	Y
D2	Manito-Cannon Hill	25th (Bernard to Tekoa)	\$	382,000.00	Y
D2	Manito-Cannon Hill	29th (Lincoln to High)	\$	-	?
D2	Manito-Cannon Hill	28th (Bernard to High)	\$	-	Y
D2	Manito-Cannon Hill (and Rockwood)	Grand Blvd (17th to 29th)	\$	1,539,000.00	Y
D1	Minnehaha	Euclid-Frederick Corridor	\$	1,048,000.00	Y
D1	Minnehaha	Marietta @ Freya	\$	262,000.00	Y
D1	Minnehaha	Myrtle @ Frederick	\$	16,000.00	N
D1	Minnehaha	Euclid @ Ferrall	\$	101,000.00	Y
D1	Nevada Heights	Longfellow SRTS	\$	94,000.00	Y
D1	Nevada Heights	Garry MS SRTS	\$	134,000.00	Y
D1	Nevada Heights	Lidgerwood (Empire to Wellesley)	\$	770,000.00	Y
D1	Nevada Heights	Perry @ Rogers High School	\$	102,000.00	Y
D3	North Hill	Rowan @ Maple-Ash Couplet	\$	2,330,000.00	Y
D3	North Hill	Ash St (Francis to Courtland)	\$	579,000.00	Y
D3	North Hill	Madison (Rowan to Garland)	\$	154,000.00	Y
D3	North Hill	Neighborhood Park Zones	\$	-	N
D3	North Hill	Providence @ Wall-Post Couplet	\$	-	Y
D3	North Indian Trail	Shawnee @ Farmdale	\$	288,000.00	Y
D3	North Indian Trail	Indian Trail (Bedford to Ridgecrest)	\$	510,000.00	Y
D3	North Indian Trail	Pamela (Barnes to Pacific Park)	\$	114,000.00	Y
D3	North Indian Trail	Indian Trail Ped/Bike Connection	\$	-	Y
D3	Northwest	Francis @ A St (PHB not signal)	\$	450,000.00	Y
D3	Northwest	Francis @ Fotheringham	\$	450,000.00	Y
D3	Northwest	Greenwood @ Litchfield	\$	-	N
D3	Northwest	Wellesley @ Driscoll	\$	600,000.00	Y
D3	Northwest	Wellesley @ Assembly	\$	586,000.00	Y
D3	Peaceful Valley	Main @ Cedar	\$	13,000.00	N
D3	Peaceful Valley	Spruce St Stairs	\$	1,816,000.00	N
D3	Peaceful Valley	Cedar St Stairs	\$	-	N
D3	Peaceful Valley	Main @ Maple	\$	-	Y
D1	Riverside	2nd @ browne	\$	291,000.00	Y
D1	Riverside	Riverside @ Stevens	\$	122,000.00	Y
D1	Riverside	3rd @ Division	\$	122,000.00	Y
D1	Riverside	3rd @ Howard	\$	-	Y
D2	Rockwood	Rockwood (11th to 12th)	\$	-	Y
D2	Rockwood	18th Ave	\$	-	?
D2	Rockwood (and Cliff Cannon)	Grand Blvd (9th to 17th)	\$	-	Y
D2	Rockwood (and Manito-Cannon Hill)	Grand Blvd (17th to 29th)	\$	-	Y
D1	Shiloh Hills	Standard @ St Thomas More Way	\$	240,000.00	Y
D1	Shiloh Hills	Standard @ Lyons	\$	138,000.00	Y
D1	Shiloh Hills	Magnesium (Nevada to N Dakota)	\$	-	Y
D2	Southgate	Freya (45th to Palouse)	\$	550,000.00	Y
D2	Southgate	37th @ Napa	\$	206,000.00	Y
D2	Southgate	Palouse (Freya to Regal)	\$	-	Y
D2	Southgate	44th (Altamont to Cook)	\$	-	Y
D3	West Central	Broadway @ Chestnut and Elm	\$	686,000.00	Y
D3	West Central	Broadway (Maple to Courthouse)	\$	459,000.00	Y
D3	West Central	Holmes Elementary	\$	-	Y
D2	West Hills	Rosamund @ F St	\$	406,000.00	Y
D2	West Hills	West Drive (Westcliff to Azalea)	\$	174,000.00	N
D2	West Hills	A st (Riverside to 7th Ave)	\$	64,000.00	N
D2	West Hills	Sand Ridge Ave (Gov't Way to Whistalks Way)	\$	50,000.00	Y
D2	West Hills	F St @ Whittier Park	\$	725,000.00	Y
D1	Whitman	Pittsburg (Central to Francis)	\$	221,000.00	Y
D1	Whitman	Crown (Helena to Magnolia)	\$	384,000.00	Y
D1	Whitman	Nebraska (Nevada to Napa)	\$	368,000.00	Y
D1	Whitman	Martin (Queen to Rowan)	\$	-	Y
D1	Whitman	Napa (Nebraska to Francis)	\$	-	Y