

District:	1
Neighborhood:	Logan
Project Extent:	North Cincinnati Street and East Indiana Avenue

Problem Statement: Residents of the Logan neighborhood raised concerns about the lack of a crosswalk at the North Cincinnati Street and East Indiana Avenue intersection. The intersection is currently two-way stop-controlled on North Cincinnati Street. North Cincinnati Street is a one-lane roadway in each direction with a posted speed limit of 25 and is classified as both a local road and neighborhood greenway. East Indiana Avenue is a one-lane roadway in each direction with a posted speed limit of 30 mph and is classified as a minor arterial. An aerial photo of the intersection is provided below.



East Indiana Avenue and North Cincinnati Street Intersection

Traffic Analysis

The table below shows 2026 PM peak hour traffic volumes and 85th percentile speeds on East Indiana Avenue approximately 200 feet west of North Cincinnati Street. There are 716 vehicles in the peak hour with an 85th percentile speed of 33 miles per hour (3 mph higher than the 30-mph posted speed limit).

PM Peak Hour Traffic and Daily 85th Percentile Speeds on East Indiana Avenue West of North Cincinnati Street

Direction	# Lanes	2026 PM Peak Traffic (Vehicles per hour) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
EB	1	383	33	30
WB	1	333	33	30
Both Dir.	2	716	33	30

^a Traffic data collected in June 2026

The need for enhanced pedestrian crossing treatments across East Indiana Avenue was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562.¹ This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed. No current pedestrian crossing data is available at the North Cincinnati Street and East Indiana Avenue intersection; however, a pedestrian crossing volume of at least 20 is assumed during peak hours if crossing treatments are installed. Based on NCHRP 562, a signed and striped crosswalk is the preferred treatment due to vehicle volumes, speeds, and crossing distance.

Recommended Solution:

Due to the neighborhood greenway designation of North Cincinnati Street, both the east and west leg intersection crosswalks should be installed with appropriate advance signage. The crosswalks should be installed in conjunction with cross-bike striping, a median separator along East Indiana Avenue, and W11-15 signage consistent with the multi-use nature of the crossings. Intersection illumination should be provided with positive contrast to each crossing in the primary direction of travel.

¹ NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

District:	1
Neighborhood:	Logan
Project Extent:	North Hamilton Street from East Illinois Avenue to East Jackson Avenue

Problem Statement: Residents of the Logan neighborhood raised concerns about pedestrian access to Logan Elementary School, noting the only marked crossing in the vicinity is at North Hamilton Street and East Illinois Avenue. Many students and families living west of North Hamilton Street rely on this crossing to access the school. Residents reported excessive pedestrian wait times at the crossing, with pedestrians often waiting approximately two minutes after actuating the pedestrian push button. These delays result in groups of students congregating near the intersection for extended periods and may contribute to unsafe pedestrian behaviors while waiting to cross North Hamilton Street.

The North Hamilton Street and East Illinois Avenue intersection is currently signalized with continental crosswalk markings across all four legs of the intersection. Other East-West streets north of East Illinois Avenue are controlled as two-way stops. North Hamilton Street is a two-lane roadway in both directions with a posted speed limit of 30 mph and is classified as a principal arterial. East Illinois Avenue is a one-lane roadway in both directions, classified as major collector with a posted speed limit of 25 mph. All other East-West streets between East Illinois Avenue and East North Foothills Drive are one-lane roadways in both directions, classified as local roads with a posted speed limit of 25 mph. Notably, only East Jackson Avenue is part of the pedestrian bike network as a neighborhood greenway. An aerial photo of the corridor is provided below.



North Hamilton Street between East Illinois Avenue and East Jackson Avenue

Traffic Analysis

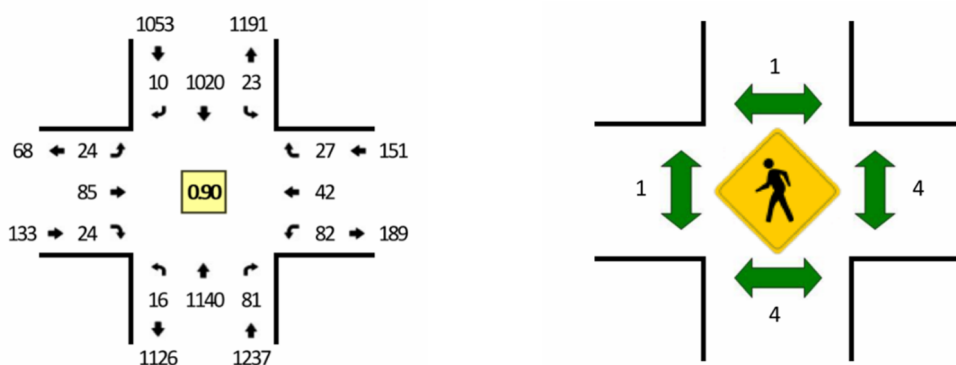
The table below shows 2019 PM peak hour traffic volumes and 85th percentile speeds on the North Hamilton Street corridor. This data was compared to 2025 turning movement count data and was found to have near identical Northbound/Southbound volumes.¹ There are 2,117 vehicles in the peak hour with an 85th percentile speed of 37.5 miles per hour (7.5 mph higher than the 30-mph posted speed limit).

2019 PM Peak Hour Traffic and 85th Percentile Speeds on North Hamilton Street

Direction	# Lanes	2019 PM Peak Hour Traffic (Vehicles per hour) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
NB	2	1,194	37	30
SB	2	923	38	30
Both Dir.	4	2,117	37.5	30

^a Traffic data collected in May 2019.

The figure below shows the 2025 PM peak hour traffic (4:00 PM-5:00 PM) volumes (left) and pedestrian volumes (right) at the North Hamilton Street and East Illinois Avenue intersection, based on a traffic count from April 30th, 2025. It is likely that pedestrian volumes are higher during Logan Elementary School pick-up and drop-off hours.



The available data indicates the existing North Hamilton Street and East Illinois Avenue traffic signal is still warranted based on warrant 3 of the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD).² Given the resident concerns with elevated vulnerable road users crossing during school start and end times, a pedestrian recall should be enabled during these hours to reduce wait times for pedestrians trying to cross the street. Leading Pedestrian Interval (LPI) should also be enabled to provide pedestrians with a head start before parallel vehicle movements receive a green indication.

¹ Traffic data collected at the North Hamilton Street and East Illinois Avenue intersection in April 2025.

² FHWA 11th Edition of the MUTCD with Revision 1, 2025.

https://mutcd.fhwa.dot.gov/pdfs/11th_Editionr1/mutcd11theditionr1hl.pdf

In addition, the lack of available midblock crossings to reduce out of direction pedestrian travel to 0.25 miles or less can be addressed with one new crossing of North Hamilton Street. The North Hamilton Street and East Jackson Avenue intersection is an ideal candidate based on spacing and East Jackson Avenue's designation as a neighborhood greenway.

The pedestrian crossing treatment needed at this location was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562.³ This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed. No current pedestrian crossing data is available at the intersection due to an absence of a crossing; however, a pedestrian crossing volume of at least 20 pedestrians in an hour is assumed during school drop-off and pick-up hours if crossing treatments are installed. Based on NCHRP 562, a pedestrian hybrid beacon (PHB) in conjunction with signs and pavement markings is the preferred treatment due to vehicle volumes, speeds, and crossing distance.

Recommended Solution:

A review of signal timings to turn on pedestrian recall and LPI during school drop-off and pick-up hours is recommended at the North Hamilton Street and East Illinois Avenue intersection to reduce pedestrian wait times. Additionally, the installation of a PHB in conjunction with signs and pavement markings on the south leg of the North Hamilton Street and East Jackson Avenue intersection is recommended long term to improve pedestrian crossing ability, safety, and to connect West of North Hamilton Street to Logan Elementary School.

³ NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

District: 1
Neighborhood: Shiloh Hills
Project Extent: East Lyons Avenue from North Nevada Street to North Standard Street

Problem Statement: Residents of the Shiloh Hills neighborhood raised safety concerns regarding excessive speeding on East Lyons Avenue between North Nevada Street and North Standard Street (0.23 miles). Residents noted that the existing traffic circle at East Lyons Avenue and North Cincinnati Street appears too small to effectively slow traffic and is substantially smaller than other traffic circles in the area, including those near Salk Middle School. Residents also cited concerns related to high traffic volumes, turning movements, pedestrian safety, and vehicle speeds that exceed the posted 25 mph speed limit. The existing traffic circle was installed in 2015; however, observed speeds indicate that it has not produced meaningful speed reduction along the corridor. East Lyons Avenue is a two-lane local roadway with a posted speed limit of 25 mph. An aerial photo of the corridor is provided below.



East Lyons Avenue between North Standard Street and North Nevada Street

Traffic Analysis

The table below shows 2014 and 2026 daily traffic volumes and 85th percentile speeds on East Lyons Avenue along the study corridor. In 2014, there were 2,554 vehicles per day with an 85th percentile speed of 26 miles per hour (1 mph higher than the 25-mph posted speed limit). In 2026, there are 2,523 vehicles per day with an 85th percentile speed of 29 miles per hour (4 mph higher than the 25-mph posted speed limit). Although the traffic circle was installed in 2015, there has been an increase in vehicle speeds along East Lyons Avenue.

2014 and 2026 Daily Traffic and 85th Percentile Speeds on East Lyons Avenue

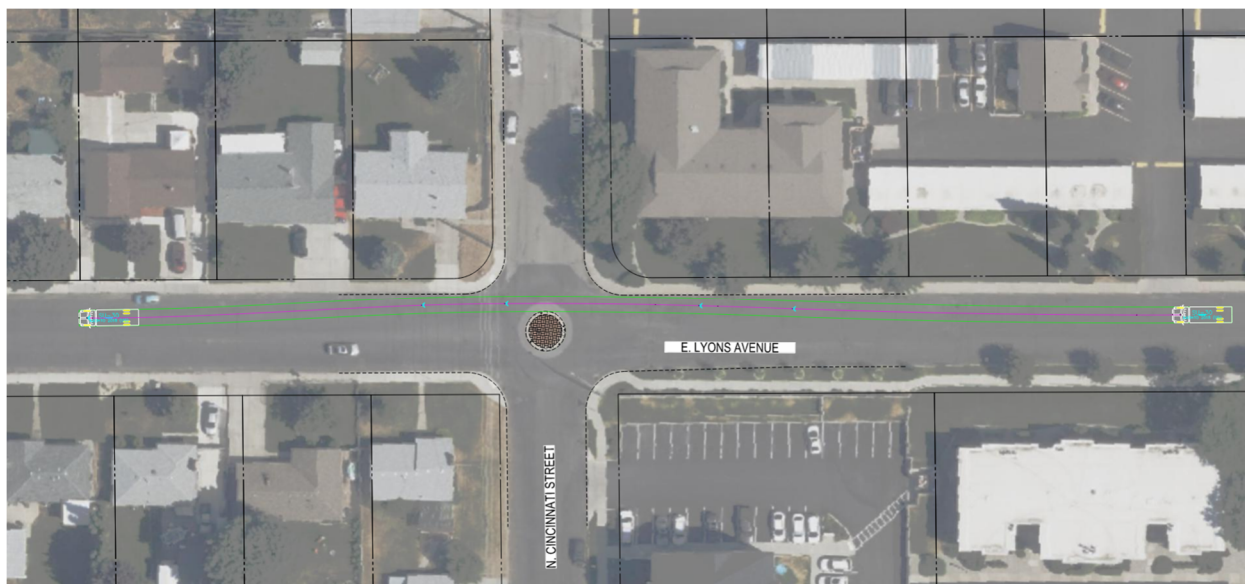
Direction	# Lanes	2026 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
2014 East of North Cincinnati Street				
EB	1	1,291	26	25
WB	1	1,263	26	25
Both Dir	2	2,554	26	25
2026 East of North Cincinnati Street				
EB	1	1,350	29	25
WB	1	1,173	28	25
Both Dir.	2	2,523	29	25

^a Traffic data collected in June 2026.

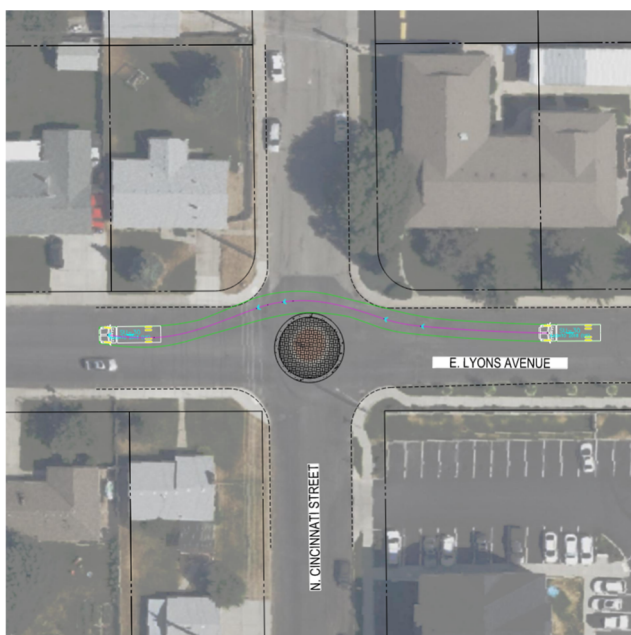
To address the vehicle speeds on East Lyons Avenue, speed humps should be considered. Speed humps were evaluated using the FHWA Traffic Calming ePrimer, which identifies speed humps as an effective vertical deflection measure on local streets where speeding is a concern. Speed humps require drivers to reduce speed to comfortably traverse the roadway, creating a self-enforcing traffic calming treatment. Based on FHWA guidance, speed humps are appropriate on low-volume residential streets and typically reduce 85th percentile speeds by approximately 5 to 7 mph, depending on spacing and design.¹

The need to modify the existing traffic control at East Lyons Avenue and North Cincinnati Street was evaluated based on vehicle turning movement requirements using a standard design vehicle (SU-30). The current configuration, with an Inscribed Circle Diameter (ICD) of approximately 20 feet and an opening width of about 25 feet, does not constrain vehicle paths or require meaningful steering input. As a result, the motorists can traverse the intersection with minimal deflection, limiting the ability of the traffic circle to influence operating speeds. Based on accommodating SU-30 turning movements, it is recommended that the ICD be expanded from 20 feet to 34 feet. The revised design will reduce the opening width to about 18 feet, and reduce effective travel paths, requiring vehicles to follow a tighter, curved trajectory around the central island. This increased deflection will force drivers to reduce speeds to safely navigate the intersection while still maintaining necessary access for service and delivery vehicles. The figures below show the SU-30 through movement at maximum possible speeds on the existing traffic circle and proposed traffic circle at the East Lyons Avenue and North Cincinnati Street intersection. An SU-30 can travel through the existing traffic circle at 45 mph with minimum deflection and only 15 mph on the proposed traffic circle.

¹ ¹ FHWA Traffic Calming ePrimer Module 3: Toolbox of Individual Traffic Calming Measures, 2017.
<https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer/module-3-part-1#3.6>



SU-30 through movement at 45 mph on existing traffic circle



SU-30 through movement at 15 mph on proposed traffic circle

Recommended Solution:

It is recommended that speed humps be considered for installation on East Lyons Avenue, with one installed midblock on each side of the existing traffic circle at the North Cincinnati Street intersection.

In the long-term, increasing the ICD of the traffic circle at East Lyons Avenue and North Cincinnati Street to 34 feet will increase deflection and reduce vehicle speeds.

District:	1
Neighborhood:	Shiloh Hills
Project Extent:	East Magnesium Road from North Dakota Street to North Nevada Street

Problem Statement: Residents of the Shiloh Hills neighborhood raised multiple concerns regarding pedestrian safety along East Magnesium Road from North Dakota Street to North Nevada Street (0.25 miles). The main concern noted excessive speeding and the use of the existing two-way left turn lane as a passing lane to bypass the pickup/drop-off queue occurring for Spokane International Academy (SIA). Residents noted concern for students crossing East Magnesium Road within this stretch of roadway.

East Magnesium Road has one lane in each direction with a two-way left turn lane along most extents of the corridor. The posted speed limit is 30-mph with a 20-mph school zone speed limit when children are present between North Standard Road and 300 feet east of North Antietam Drive, serving the Safe Routes to School (SRTS) crosswalk for Shiloh Hills Elementary School at the East Magnesium Road and North Antietam Drive intersection. East Magnesium Road is classified as a major collector. Additionally, there are continental crosswalks on all legs of the East Magnesium Drive and North Nevada Street signalized intersection. An aerial photo of the corridor is provided below.



East Magnesium Road Corridor from North Dakota Street to North Nevada Street

Traffic Analysis

The table below shows 2026 daily traffic volumes and 85th percentile speeds on the East Magnesium Road corridor. There is a daily volume of 5,966 vehicles with an average 85th percentile speed of 37 mph West of North Nevada Street (7 mph higher than the 30-mph posted speed limit). This represents an approximate 1% per year increase in total traffic volume since 2015, with no statistically significant change in traffic speed behavior.¹

2026 Daily Traffic and 85th Percentile Speeds on East Magnesium Road

Direction	# Lanes	2026 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
West of North Nevada Street				
EB	1	2,895	38	30
WB	1	3,071	35	
Both Dir.	2 ^b	5,966	37	

^a Traffic data collected in June 2026.

^b East Magnesium Road also has a two-way left turn lane along most extents of the project.

The table below shows the severity and types of crashes occurring on East Magnesium Road between North Dakota Street and North Nevada Street over the last three years (2023 to 2025²). There were a total of 10 crashes, with 5 minor injury crashes over the three-year study period. As shown, there have been no pedestrian or bicycle crashes recently, but a high percentage of turning movement related crashes.

Crashes on East Magnesium Avenue between North Dakota Street and North Nevada Street by Severity from 2023 to 2025^b

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Rear End	-	-	-	2	-	2
Head On	-	-	-	-	-	-
Turning	-	-	4	2	-	6
Sideswipe	-	-	-	-	-	-
Fixed Object	-	-	1	-	1	2
Pedestrian	-	-	-	-	-	-
Other	-	-	-	-	-	-
Total	-	-	5	4	1	10

^b Crash data collected from 2023 to 2025. 2025 crash data is preliminary.

¹ Traffic data provided by City of Spokane, April 2015.

² 2025 crash data is preliminary.

A raised median within the vicinity of Spokane International Academy would eliminate the ability of traffic to pass via the two-way left turn lane. However, a raised median may induce new pedestrian crossings from the apartment complex across East Magnesium Road at this location, rather than North Antietam Drive. The need for enhanced pedestrian crossing treatments (across East Magnesium Road) was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562.³ This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed. Approximately 60 feet east of the SIA driveway was chosen to be analyzed for crossing improvements to improve connectivity and safety. Selection of this intersection was based on the following factors:

- Improving connectivity for students walking from the housing complex north of East Magnesium Road to Shiloh Hills Elementary School.
- Preventing vehicles from using the two-way left turn lane to pass the pickup/drop-off queue for SIA.
- Reducing 85th percentile speed.

This segment was analyzed with the scenario of building a center island, allowing for two-stage pedestrian crossings, where each direction is crossed in isolation. This provides pedestrian refuge and lowers pedestrian risk while also providing a small traffic calming benefit.⁴ Additionally, the center island prevents vehicles from using the center lane as a passing lane. No current pedestrian crossing data is available at the segment; however, a pedestrian crossing volume of at least 20 pedestrians in an hour is assumed during peak hours if crossing treatments are installed. Based on NCHRP 562 methodologies, a crosswalk in conjunction with a center island and Rectangular Rapid Flashing Beacons (RRFB) is the preferred treatment.

The proposed crosswalk is outside the designated school zone and is not considered part of the school crossing network. Therefore, the recommended signage for this crossing is the W11-2 pedestrian crossing sign with diagonal downward arrows.

Recommended Solution:

The following traffic calming solutions are recommended for East Magnesium Road from North Dakota Street to North Nevada:

- Installation of a raised median island approximately 60 feet east of the Spokane International Academy driveway to address the queue bypass concerns.
- Installation of a crosswalk (W11-2) with RRFB in conjunction with the raised median island.

³ NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

⁴ FHWA: *Engineering Speed Management Countermeasures: A desktop Reference of Potential Effectiveness in Reducing Speed*, July 2014. https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/eng_ctm_spd_14.pdf

District:	1
Neighborhood:	Shiloh Hills
Project Extent:	North Nevada Street from East Lyons Avenue to East Hawthorne Road

Problem Statement: Residents of the Shiloh Hills neighborhood raised concerns about pedestrian safety along North Nevada Street from East Lyons Avenue to East Hawthorne Road (2.25 miles), noting multiple collisions between vehicles and pedestrians. Additionally, residents were concerned with the lack of crosswalks across North Nevada Street, which would allow connectivity between shopping centers and residential zones.

North Nevada Street has two lanes in each direction with a two-way left turn lane along most extents of the corridor. The posted speed limit is 40 mph south of East Magnesium Road and 45 mph north of East Magnesium Road. North Nevada Street is classified as a principal arterial. There are currently continental crosswalks at the signalized intersections of North Nevada Street at East Lyons Avenue, Lincoln Road, East Magnesium Road, East Jay Avenue, East Holland Avenue, and East Hawthorne Road. In addition, there is a new Pedestrian Hybrid Beacon (PHB) scheduled for installation at East Cozza Drive. An aerial photo of the corridor is provided below.



North Nevada Street Corridor from East Lyons Avenue to East Hawthorne Avenue

Traffic Analysis

The table below shows 2025 daily traffic volumes and 85th percentile speeds on the North Nevada Street corridor. Average daily traffic volumes range from approximately 17,200 to 23,100 vehicles per day, with an overall corridor average of 20,080 vehicles per day. Observed 85th percentile speeds are 45 mph south of East Magnesium Road (5 mph higher than the 40-mph posted speed limit) and 42.5 mph north of East Magnesium Road (2.5 mph lower than the 45-mph posted speed limit). Although residents identified speeding as a concern, a preliminary review of two separate speed limit evaluations (USLIMITS2 and NCHRP 966) indicate the speed limit appears to be appropriately set. Additional speed study evaluations may be beneficial in the future if speeding remains a concern.

Other traffic calming measures such as a road diet conversion to a three-lane roadway are not recommended due to the daily traffic exceeding the planning level capacity of 18,000 vehicles per day at multiple locations along the corridor. Any recommended improvements should focus on measures that improve safety and moderate speeds without reducing the capacity of the roadway.

2025 Daily Traffic and 85th Percentile Speeds on North Nevada Street

Direction	# Lanes	2025 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
South of East Sharpsburg Avenue				
NB	2	9,936	46	40
SB	2	10,047	44	
Both Dir.	4	19,983	45	
North of East Magnesium Road				
NB	2	11,397	40	45
SB	2	11,666	39	
Both Dir.	4	23,063	39.5	
South of East Hawthorne Road				
NB	2	8,648	45	45
SB	2	8,547	46	
Both Dir.	4	17,195	45.5	
Average		20,080		

^a Traffic data collected in June 2025.

The table below shows the severity and types of crashes occurring on North Nevada Street between East Lyons Avenue and East Hawthorne Road over the last three years (2023 to 2025¹). There was a total of 83 crashes, with 37 injury crashes, and one fatality. Crashes with pedestrians involved represent six percent of all crashes, with four of the five pedestrian crashes occurring at either the East Lyons Avenue or East Cozza Drive intersections. Turning crashes were the most common crash type, accounting for 34 crashes (41 percent of all crashes), followed by rear end crashes with 24 crashes (29 percent). The prevalence of turning crashes suggests that vehicles entering and exiting driveways and side streets

¹ 2025 crash data is preliminary.

experience difficulty finding acceptable gaps in the North Nevada Street traffic stream. The crash history indicates that access-management strategies and intersection improvements may provide greater safety benefits than speed related traffic calming measures.

Crashes^b on North Nevada Street between East Lyons Avenue and East Hawthorne Avenue by Severity

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Rear End	1	-	9	14	-	24
Head On	-	-	1	-	-	1
Turning	-	2	14	17	1	34
Sideswipe	-	1	-	2	-	3
Fixed Object	-	-	5	10	-	15
Pedestrian	-	2	3	-	-	5
Other	-	-	-	1	-	1
Total	1	5	32	44	1	83

^b Crash data collected from 2023 to 2025. 2025 crash data is preliminary.

Several locations along North Nevada Street were selected for evaluation due to the lack of controlled crossing opportunities, the presence of nearby commercial and residential destinations, and the need to maintain reasonable pedestrian access across the corridor. East Sharpsburg Avenue, East Vicksburg Avenue, East St Thomas More Way, and the shopping center entrance at 9900 North Nevada Street were identified as candidate crossing locations because they provide connections between residential neighborhoods, transit stops, commercial destinations, and existing pedestrian facilities. In addition, these locations maintain approximately quarter-mile spacing between crossing opportunities, reducing the distance pedestrians must travel to access a protected crossing.

The need for enhanced pedestrian crossing treatments across North Nevada Street was evaluated using the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.² This report identifies appropriate pedestrian crash countermeasures based on three primary criteria: average daily vehicle volumes, the posted speed limit, and roadway cross section. Each location was analyzed with and without a raised median. The addition of a raised median would allow pedestrians to cross one direction of traffic at a time, reducing exposure to conflicting vehicles and providing a refuge area between crossings. This treatment improves pedestrian safety and can provide a modest traffic-calming effect by visually narrowing the roadway. Although the treatment is not expected to substantially reduce corridor speeds, it can contribute to lower average operating speeds and increased driver awareness of crossing pedestrians.

² *Guide for Improving Pedestrian Safety at Uncontrolled Crossing*. FHWA-SA-17-072, 2018.
<https://highways.dot.gov/media/15306>

Applicable Pedestrian Crossing Treatment(s) by location

Location	Applicable Pedestrian Crossing treatments
East Sharpsburg Avenue	High visibility markings, Advance stop/yield line, raised median, PHB
East Vicksburg Avenue	High visibility markings, Advance stop/yield line, PHB
East St Thomas More Way	High visibility markings, Advance stop/yield line, raised median, PHB
9900 North Nevada Street (Shopping center entrance)	High visibility markings, Advance stop/yield line, raised median, PHB

The planned pedestrian crossing at East Cozza Drive includes a PHB, consistent with these recommendations.

While both East Vicksburg Avenue and East St Thomas More Way are evaluated in this analysis, only one is recommended for installation due to signal spacing and traffic coordination needs. East Vicksburg Avenue currently connects the apartment complex east of North Nevada Street with Shiloh Hills Elementary School directly. However, East Vicksburg Avenue is not ideally spaced along North Nevada Street like East St Thomas More Way would be. Due to signal spacing considerations and the ability to develop the crossing with future development, the East St Thomas More Way crossing is recommended.

A pedestrian path should be constructed between the cul-de-sac at the west end of East Sharpsburg Avenue to North Wilding Drive to further improve pedestrian connectivity and adoption of the proposed crossing. This connection would provide a direct route between the proposed crossing on North Nevada Street and Friendship Park, reducing walking distances and improving access to recreational amenities for nearby residents.

In addition to enhanced pedestrian crossings, street trees should be considered throughout the North Nevada Street corridor to provide passive traffic calming benefits. Unlike geometric traffic calming measures that may reduce roadway capacity, roadside landscaping influences driver behavior through visual enclosure and perceived roadway width. The introduction of street trees can create a more constrained roadway environment, encouraging drivers to select lower operating speeds while maintaining the corridor's ability to accommodate more than 20,000 vehicles per day. Although the expected speed reduction is modest, the treatment can support lower average travel speeds, improve pedestrian comfort, and complement the proposed crossing improvements without adversely affecting arterial operations.³

³ *Urban Forestry/Urban Greening Research: Green Cities: Good Health, 2018.*
https://depts.washington.edu/hhwb/Thm_SafeStreets.html

Recommended Solution:

It is recommended that crosswalks with PHBs and raised medians be installed at the following locations, where possible:

- North Nevada Street/ East Sharpsburg Avenue
- North Nevada Street/ East St Thomas More Way
- 9900 North Nevada Street (Shopping center entrance)

Additionally, a pedestrian path should be constructed between the cul-de-sac at the west end of East Sharpsburg Avenue to North Wilding Drive to improve connectivity to Friendship Park.

Street trees are also recommended along the North Nevada Street corridor to support lower travel speeds and improve pedestrian comfort.

District:	1
Neighborhood:	Riverside
Project Extent:	North Monroe Street at West Spokane Falls Boulevard and West Main Avenue

Problem Statement: Residents of the Riverside neighborhood raised concerns about pedestrian safety at the closely spaced intersections of North Monroe Street at West Spokane Falls Boulevard, West Main Avenue, and West Riverside Avenue. Residents reported difficulty navigating the crossings due to the complex intersection geometry and wide crossing distances. Residents also observed low driver yielding rates and expressed concerns about conflicts between pedestrians and vehicles near several major pedestrian destinations, including the Spokane Club, Spokane Public Library, and Cathedral of Our Lady of Lourdes.

The intersection at North Monroe Street, West Spokane Falls Boulevard, and West Main Avenue is a five-leg signalized intersection with continental crosswalks on all approaches.

North Monroe Street is classified as a principal arterial with a posted speed limit of 30 mph through the project area. North Monroe Street carries two lanes in each direction on the Monroe Street Bridge north of the intersection. South of the bridge, the roadway transitions to a five-lane, one-way southbound facility as it passes through the project area.

West Spokane Falls Boulevard is classified as a minor arterial with a posted speed limit of 25 mph. At the study intersection, West Spokane Falls Boulevard operates as a two-lane, one-way roadway carrying southwest bound traffic onto North Monroe Street.

West Main Avenue is classified as a minor arterial with a posted speed limit of 25 mph. West Main Avenue provides one through lane in each direction at the intersection and includes a two-lane, one-way slip lane east of the intersection that allows northbound vehicles to merge onto the North Monroe Street Bridge. The slip lane intersects West Spokane Falls Boulevard at a separate signalized intersection immediately northeast of North Monroe Street.

An aerial of the project extents is provided below.



Figure 1: North Monroe Street at West Spokane Falls Boulevard and West Main Avenue

Traffic Analysis

The table below shows the severity and types of crashes occurring at North Monroe Street, West Spokane Falls Boulevard, and West Main Avenue intersections over the last three years (2023 to 2025¹). There were a total of 11 crashes, with three possible injury crashes, and eight property damage only crashes. Pedestrian involved crashes accounted for 27 percent of all crashes at the intersection, indicating a pedestrian safety concern and a higher proportion of pedestrian crashes than is typically observed at urban signalized intersections.

¹ 2025 crash data is preliminary.

**Crashes North Monroe Street at West Spokane Falls Boulevard and West Main Avenue by Severity
from 2023 to 2025^b**

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Possible Injury	Property Damage Only	Unknown	
Rear End	-	-	-	1	-	-
Head On	-	-	-	-	-	-
Turning	-	-	1	5	-	-
Sideswipe	-	-	-	-	-	-
Fixed Object	-	-	-	-	-	-
Pedestrian	-	-	2	1	-	-
Other	-	-	-	1	-	-
Total	-	-	3	8	-	11

^b Crash data collected from 2023 to 2025. 2025 crash data is preliminary.

Due to the elevated rate of pedestrian collisions, it is recommended that Leading Pedestrian Intervals (LPIs) be incorporated into the signal timing at the intersection. LPIs provide pedestrians with a head start, typically three to seven seconds, before parallel vehicle movements receive a green indication. This treatment increases pedestrian visibility by allowing pedestrians to establish themselves within the crosswalk before turning vehicles enter the intersection. The Federal Highway Administration (FHWA) identifies LPIs as a proven safety countermeasure and reports that LPIs can reduce pedestrian crashes by up to 13 percent at intersections.² In addition to reducing pedestrian-vehicle conflicts, LPIs improve driver awareness of pedestrians and can increase yielding rates, making them particularly effective at intersections with high pedestrian activity and complex turning movements. Given the proximity of major pedestrian destinations, LPIs would provide a low-cost improvement that compliments other recommendations.

The West Spokane Falls Boulevard and North Monroe Street legs of this intersection were identified as the primary source of intersection complexity due to number of lanes on the north and south leg pedestrian crossings. On the north leg, a pedestrian makes a two-stage crossing across seven lanes of traffic. On the south leg, a pedestrian crosses five lanes of traffic while navigating the eastbound right and permitted westbound left.

As shown in Figure 2, the turning movements along Spokane Falls Boulevard exceed 500 vehicles during the PM peak hour at the W Main Avenue slip lanes. Closing West Spokane Falls Boulevard between North Monroe Street and North Lincoln Street would an intersection leg, but this was attempted by City of Spokane in 2018 during construction of the nearby Combined Sewer Overflow (CSO) tank and the resulting operations did not work.

² FHWA Office of Safety, *Proven Safety Countermeasures*, October 2018.
https://highways.dot.gov/sites/fhwa.dot.gov/files/Leading_Pedestrian_Interval_1.pdf



**Figure 2: W Main Ave/ N Monroe St/ W Spokane Falls Boulevard Intersection
Turning Movement Count (2026)**

Instead of a full closure, a PM peak hour traffic operations analysis indicates North Monroe Street can be reduced to three through lanes with a dedicated left turn pocket. This allows the southern crosswalk to be reduced with a bump out to three lanes wide. The West Spokane Falls Boulevard approach can be reduced to a single through lane with the drop of a right turn lane at the West Main Street slip lane intersection.

For reference, the City of Spokane has traditionally accepted a minimum LOS D for signalized intersections.³ Based on Highway Capacity Manual (HCM) 2000 methodology, the existing intersection operates at a LOS C.⁴ With the proposed lane closures along North Monroe Street and West Spokane Falls Boulevard, the intersection is expected to operate at LOS D overall. These results indicate that the proposed lane adjustments could be implemented within acceptable intersection operations.

³ Victory Heights transpogroup. Revised Traffic Impact Analysis, December 2024.
<https://static.spokanecity.org/documents/projects/victory-heights-preliminary-long-plat-pud/victory-heights-preliminary-plat-pud-revised-traffic-impact-analysis-2024-12-02.pdf>

⁴ Highway Capacity Manual 2000 Edition used due to the five approach configuration not meeting NEMA phasing standards for modern HCM computation.

Recommended Solution:

Based on the traffic operations analysis, the following improvements are recommended at North Monroe Street, West Spokane Falls Boulevard, and West Main Avenue to reduce intersection complexity and improve pedestrian safety:

- Incorporate LPIs into the signal timing at the intersection to provide pedestrians with a 3-7 second head start.
- Reduce the West Spokane Falls Boulevard approach between southbound North Monroe Street northbound North Monroe Street to a single lane, by converting the second lane of West Spokane Falls Boulevard to a right turn only drop lane.
- Reduce southbound North Monroe Street to three through lanes and a left turn pocket.
- Reduce the southbound receiving roadway on North Monroe Street from five lanes to three lanes by constructing a curb extension to the southeast corner of the North Monroe Street and West Main Avenue intersection.

District:	2
Neighborhood:	Cliff-Cannon
Project Extent:	South Monroe Street from West 5 th Avenue to West 14 th Avenue

Problem Statement: Residents of the Cliff-Cannon neighborhood raised concerns about pedestrian safety along South Monroe Street from West 5th Avenue to West 14th Avenue (0.62 miles), noting excessive speeding and dangerous maneuvers, leading to many near misses. From West 5th Avenue to West 8th Avenue, South Monroe Street is a one-way road, with two lanes traveling southbound and a speed limit of 25 mph. Between West 8th Avenue and West 14th Avenue, South Monroe Street has a posted speed limit of 30 mph and has one lane traveling northbound, one lane traveling southbound, and a two-way left turn lane along most of the extents of the corridor. South Monroe Street is classified as a minor arterial. There are currently continental crosswalks across South Monroe Street at the two-way stop-controlled intersections of West 5th Avenue, West 7th Avenue, and West 9th Avenue. There is a standard crosswalk on all legs of the signalized intersection of South Monroe Street at West 14th Avenue. Additionally, there are unmarked crosswalks across South Monroe Street at the two-way stop-controlled intersections of West Bishop Court, West 6th Avenue, West 8th Avenue, West 10th Avenue, West 12th Avenue, and West 13th Avenue. An aerial photo of the corridor is provided below.



South Monroe Street from West 5th Avenue to West 14th Avenue

Traffic Analysis

The table below shows 2026 daily traffic volumes and 85th percentile speeds on the South Monroe Street corridor. There is an average daily volume of approximately 6,000 vehicles with an average 85th percentile speed of 34 mph south of West 5th Avenue (9 mph higher than the 25-mph posted speed limit) and 34 mph south of West 12th Avenue (4 mph higher than the 30-mph posted speed limit).

2026 Daily Traffic and 85th Percentile Speeds on South Monroe Street

Direction	# Lanes	2022 Daily Traffic (Vehicles per day)	85 th Percentile Speed (mph)	Posted Speed (mph)
South of West 5th Avenue^a				
NB	-	-	-	
SB	2	5,895	34	25
Both Dir.	2	5,895	34	
South of West 12th Avenue^b				
NB	1	2,751	34	
SB	1	4,057	34	30
Both Dir.	2	6,808	34	
Average	-	6,352	34	-

^a Traffic volumes south of West 5th Avenue were collected in 2023. Volumes were grown at a 1.0% annual growth rate, to estimate 2026 traffic conditions.

^b Traffic volumes south of West 12th Avenue were collected in 2026. No adjustment to the volumes were made.

The table below shows the severity and types of crashes occurring on South Monroe Street between West 5th Avenue and West 14th Avenue over the last three years (2023 to 2025¹). There was a total of 18 crashes, with 7 injury crashes. Two of the injury related crashes were the two pedestrian involved crashes. One was at the West 5th Avenue intersection, and one was at the West 14th Avenue intersection.

Crashes^b on South Monroe Street between West 5th Avenue and West 14th Avenue by Severity

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Rear End	-	-	-	3	-	3
Head On	-	-	-	-	-	-
Turning	-	-	3	3		6
Sideswipe	-	-	-	1	-	1
Fixed Object	-	-	2	1	-	3
Pedestrian	-	-	2	-	-	2
Other	-	-	-	2	1	3
Total	0	0	7	10	1	18

^b Crash data collected from 2023 to 2025. 2025 crash data is preliminary.

¹ 2025 crash data is preliminary.

Given the relatively high 85th percentile speed between West 5th Avenue and West 12th Avenue, a road diet was considered as a means to narrow the roadway, reduce travel speeds and enhance safety for pedestrian crossings. With an estimated 800 vehicles in the peak hour (4:45 PM to 5:45 PM), South Monroe Avenue could be reduced to a one-lane cross section with a buffered parking lane. The southbound through-left turn lane at the South Monroe Street and West 5th Avenue intersection would be converted to a left turn only lane, reducing the intersection to one southbound through lane. Additionally, a bulb out on the southeast corner of the South Monroe St and West 5th Avenue intersection should be installed to prevent vehicles from performing a through movement. This could be accomplished with either quick-build or permanent materials. As a point of reference, the planning level capacity of a one-lane urban arterial is about 1,776 vehicles per hour.²

While limited research isolates the specific condition of converting a two-lane, one-way roadway into a single-lane configuration with on-street parking, multiple well-established bodies of research consistently demonstrate that removing excess travel lanes and reducing effective roadway width results in lower operating speeds. FHWA guidance indicates that lane reductions influence driver speed selection by reducing available maneuvering space and limiting passing opportunities. In single-lane configurations, drivers are constrained by a lead vehicle, which produces more uniform traffic flow and reduces high-end speeding behavior. Additionally, research on lane width and roadway geometry shows that narrower travel environments are associated with reductions in both average and 85th percentile speeds, with studies indicating speed decreases on the order of approximately 1 to 3 miles per hour per foot of reduced effective width. The introduction of on-street parking further contributes to this effect by adding edge friction and creating a more constrained driving environment, which encourages more cautious driver behavior.³

In addition to a road diet, a pair of Dynamic Speed Feedback Signs (DSFS) is recommended south of West 8th Avenue in the three lane cross section portion of South Monroe Street where a road diet is not feasible. Studies show DSFS can lower 85th percentile speeds up to 4 mph for passenger cars.⁴ It is recommended the DSFS be installed near West 12th Avenue due to its midpoint location between West 9th Avenue and West 14th Avenue.

Recommended Solution:

The traffic calming recommendations for South Monroe Street between West 5th Avenue and West 8th Avenue are as follows:

- South Monroe St between West 5th Avenue and West 8th Avenue should be converted from a two-lane, one-way roadway, into a one-lane roadway with on street parking.

² FHWA HPMS Field Manual: Appendix N: Procedures for Estimating Highway Capacity, October 2022.
<https://www.fhwa.dot.gov/ohim/hpmsmanl/appn7.cfm>

³FHWA Safety Program: Road Diet Informational Guide, November 2014.
<https://highways.fhwa.dot.gov/sites/fhwa.dot.gov/files/2022-06/rdig.pdf>

⁴ USDOT National Transportation Library: Effectiveness of Dynamic Speed Feedback Signs [Traffic Tech], July 2021.
<https://rosap.ntl.bts.gov/view/dot/57510>

- The southbound through-left lane of the South Monroe Street and West 5th Avenue intersection should be converted into a left turn only lane.
- Install a bulb out on the southeast corner of the South Monroe Street and West 5th Avenue intersection to prevent through movements with either quick-build or permanent installation materials.
- Install a pair of DSFS within the vicinity of West 12th Avenue.

District: 2
Neighborhood: East Central
Project Extent: South Ray Street and East 5th Avenue

Problem Statement: Residents of the East Central neighborhood raised concerns about the lack of a crosswalk at the South Ray Street and East 5th Avenue intersection. The intersection is currently two-way stop-controlled on South Ray Street. South Ray Street is a local road with a posted speed of 25 mph and a single travel lane for each direction. East 5th Avenue is an urban major collector with a speed limit of 25 mph and a single travel lane for each direction. An aerial photo of the intersection is provided below.



South Ray Street and East 5th Avenue Intersection

Traffic Analysis

The table below shows 2026 PM peak hour traffic volumes and 85th percentile speeds on East 5th Avenue east of South Ray Street. There are 448 vehicles in the peak hour with an 85th percentile speed of 31 miles per hour (6 mph higher than the 25-mph posted speed limit).

PM Peak Hour Traffic and Daily 85th Percentile Speeds on East 5th Avenue east of South Ray Street

Direction	# Lanes	2026 PM Peak Traffic (Vehicles per hour) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
EB	1	222	32	25
WB	1	226	30	25
Both Dir.	2	448	31	25

^a Traffic data collected in June 2026

To improve pedestrian connectivity, specifically across East 5th Avenue, pedestrian routes and infrastructure were reviewed in the study area. The desired destination for pedestrians near the study area is the Fred Meyer store north of East 5th Avenue, with the nearest crossings at the intersections of East 5th Avenue with South Fiske Street and with South Thor Street. As such, pedestrians have to travel out of the desired direction to get to the previously mentioned crossings.

A crosswalk at South Ray Street and East 5th Avenue would reduce the required out of direction travel for pedestrians on the study corridor. As such, the east leg of the South Ray Street and East 5th Avenue intersection was selected for analysis due to proximity to the Fred Meyer store and parking lot and anticipated utilization.

The need for enhanced pedestrian crossing treatments across East 5th Avenue was analyzed based on National Cooperative Highway Research Program (NCHRP) Report 562 methodology.¹ This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed.

No current pedestrian crossing data is available at the South Ray Street and East 5th Avenue intersection; however, a pedestrian crossing volume of at least 20 is assumed during the peak hour if crossing treatments are installed. Based on NCHRP 562, a signed and striped crosswalk is the preferred treatment due to vehicle volumes, speeds, and crossing distance.

To properly light this crossing, it is recommended that the luminaire on the southwest corner of the intersection be protected, and a new luminaire be installed on the northeast corner to front light pedestrians crossing at the new crossing.

Additionally, curb bulb outs can be installed to decrease pedestrian crossing distance, and place pedestrians out ahead of cars parked in the parking lane. Curb bulb outs also decrease vehicle speeds with an expected reduction in the 85th percentile speed of 4 mph.²

Recommended Solution:

The installation of a crosswalk in conjunction with signs on the east leg of the South Ray Street and East 5th Avenue intersection is recommended to improve pedestrian crossing ability and safety. Additionally, it is recommended that a new luminaire be installed on the northeast corner, to properly light this new crossing. Lastly, curb bulb outs are recommended to make pedestrians more visible, reduce crossing distance, and lower vehicular speeds.

¹ NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

² *Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Speed*. Federal Highway Administration, July 2014.

District:	2
Neighborhood:	Rockwood
Project Extent:	South Rockwood Boulevard at East 16 th Avenue

Problem Statement: Residents of the Rockwood neighborhood raised concerns about safety caused by excessive speeding and large volumes of semi-trucks along East 16th Avenue between South Rockwood Boulevard and South Southeast Boulevard. Additionally, residents noted lack of compliance with the stop sign at East 16th Avenue and South Rockwood Boulevard, leading to unsafe pedestrian crossings. East 16th Avenue is classified as a local road with a speed limit of 25 mph. South Rockwood Boulevard is classified as a major collector through the project area with a speed limit of 25 mph. South Rockwood Boulevard is also signed no trucks along the entire roadway.¹ An aerial photo of the intersection is provided below.



East 16th Avenue between South Rockwood Boulevard and South Southeast Boulevard

Traffic Analysis

The table below shows 2026 daily traffic volumes, 85th percentile speeds, and vehicle classifications around the project area. As shown in the table, there are about 4,150 vehicles per day on South Rockwood Boulevard with 10.5 percent of vehicles classified as a truck. Of the 4,150 vehicles, 0.8 percent are 5 axels. The 85th percentile speed is 32 mph (7 mph higher than the posted speed limit). There are about 1,381 vehicles per day on East 16th Avenue. The 85th percentile speed is 28 mph (3 mph higher than the posted speed limit).

¹ Truck Routes Map of Spokane, March 2026. <https://static.spokanecity.org/documents/streets/maintenance/truck-routes-map-2026-03-19.pdf>

2026 Daily traffic and 85th Percentile Speeds on East 16th Avenue and South Rockwood Boulevard

Location	# Lanes	2026 Daily Traffic (Vehicles per day)	Truck Volume (%)	85 th Percentile Speed (mph)	Posted Speed (mph)
East 16 th Avenue between South Rockwood Boulevard and South Southeast Boulevard ^a					
EB	1	682	-	28	25
WB	1	699	-	27	
Both Dir.	2	1,381	- ^c	28	
South Rockwood Boulevard north of East Syringa Road ^b					
NB	1	1,838	-	32	25
SB	1	2,353	-	31	
Both Dir.	2	4,191	10.5%	32	

^a Traffic volumes on East 16th Avenue were collected in 2026. No adjustments to the volumes were made.

^b Traffic volumes on South Rockwood Boulevard were collected in 2025. Volumes were grown at a 1.0% annual growth rate, to estimate 2026 traffic conditions.

^c Truck volumes data on East 16th Avenue is not available.

The need to improve operations at South Rockwood Boulevard and East 16th Avenue was evaluated using guidance from the Federal Highway Administration (FHWA) Traffic calming ePrimer, based on observed speeding, stop sign non-compliance, and pedestrian visibility constraints at the intersection.² Observations indicate that the current intersection geometry allows relatively unimpeded vehicle movement along South Rockwood Boulevard, which reduces driver awareness of the stop-controlled approach on East 16th Avenue. This condition contributes to roll-through behavior and limits the visibility of both the stop sign and crossing pedestrians.

The recommended treatment consists of installing a corner extension (bulbout) on the northeast corner of the intersection to narrow the effective roadway width and pinch vehicle movements. This modification will tighten the receiving area for through and turning vehicles, encouraging lower approach and turning speeds while increasing driver focus on the intersection control. The bump-out will also improve the visibility of the stop sign by bringing it closer to the driver's line of sight and reducing competing visual space. In addition, the treatment will shorten pedestrian crossing distance and position pedestrians more prominently within the driver's field of view, improving yielding rates and overall pedestrian safety.

Additionally, the need for speed humps along East 16th Avenue was evaluated using the FHWA Traffic Calming ePrimer, which identifies speed humps as an effective vertical deflection measure on local streets where speeding is a concern. Speed humps require drivers to reduce speed to comfortably traverse the roadway, creating a self-enforcing traffic calming treatment. Based on FHWA guidance, speed humps are appropriate on low-volume residential streets and typically reduce 85th percentile speeds by approximately 5 to 7 mph, depending on spacing and design. The treatment would help

² FHWA Traffic Calming ePrimer Module 3: Toolbox of Individual Traffic Calming Measures, 2017.
<https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer/module-3-part-1#3.6>

reduce vehicle speeds along the corridor, reinforce the 25-mph speed limit, and improve safety for all roadway users.

Recommended Solution:

It is recommended that the following treatments are implemented on South Rockwood Boulevard and East 16th Avenue:

- Install a corner extension on the northeast corner of the intersection to narrow the effective roadway width, improve visibility of the stop sign, and improve pedestrian safety.
- Implementation of speed humps along East 16th Avenue to reduce travel speeds.

District:	2
Neighborhood:	Lincoln Heights / Rockwood
Project Extent:	South Southeast Boulevard from East 25 th Avenue to East 29 th Avenue

Problem Statement: Residents of the Lincoln Heights / Rockwood neighborhood raised concerns about pedestrian and bicyclist safety along South Southeast Boulevard from East 25th Avenue to East 29th Avenue (0.25 miles). Additionally, residents were concerned with vehicle speeds on South Southeast Boulevard, creating unsafe conditions at the pedestrian crossing at East 27th Avenue and for bicyclists along the corridor. South Southeast Boulevard from East 27th Avenue to East 29th Avenue is a shared road for bicyclists and has a single dedicated southbound bike lane from East 27th Avenue that continues north along the corridor.

South Southeast Boulevard is a three-lane (two southbound lanes from East 25th Avenue to East 27th Avenue, three-lane with TWTL configuration from East 27th Avenue to East 29th Avenue) urban minor arterial with a posted speed of 30 mph. There is an existing striped crosswalk across the north leg of South Southeast Boulevard at East 27th Avenue. An aerial photo of the corridor is provided below.



South Southeast Boulevard Corridor from East 25th Avenue to East 29th Avenue

Traffic Analysis

The table below shows projected 2026 daily traffic volumes and 85th percentile speeds on the South Southeast Boulevard corridor. There is an average daily volume of 16,950 vehicles with an average 85th percentile speed of 33 mph (3 mph higher than the 30-mph posted speed limit).

Projected 2026 Daily Traffic and 85th Percentile Speeds on South Southeast Boulevard at East 27th Avenue

Direction	# Lanes	2026 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
Both	2	16,950	33	30

^a Traffic data collected in May 2018 and projected to 2026 using a 1% annual growth rate.

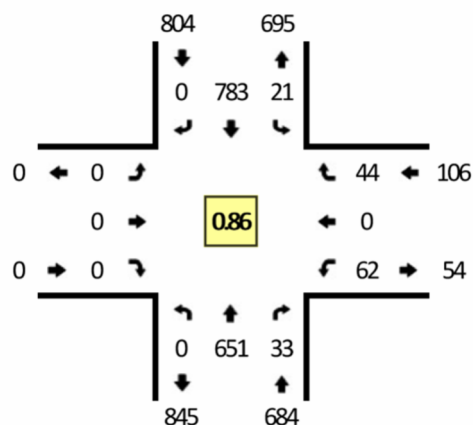
The table below shows the severity and types of crashes occurring on South Southeast Boulevard between East 25th Avenue and East 29th Avenue over the last three years (2023 to 2025).¹ There were a total of 17 crashes along the study corridor, including 12 angle crashes (71% of total crashes). From the recorded crashes, 13 occurred at the South Southeast Boulevard and East 29th Avenue intersection (76% of total crashes). Additionally, there were three pedestrian/bicyclist involved minor injury crashes, including one recorded at the East 27th Avenue crosswalk location.

Crashes on South Southeast Boulevard between East 25th Avenue and East 29th Avenue by Severity

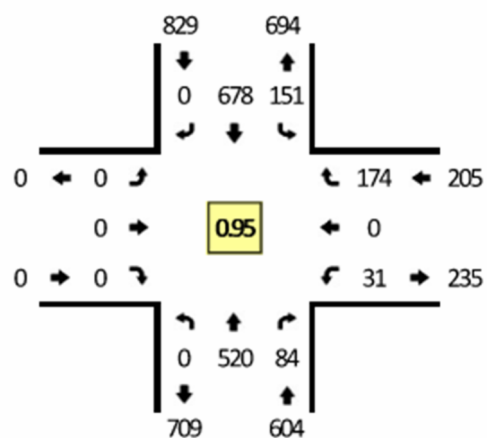
Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Angle	-	3	5	3	1	12
Rear End	-	-	-	2	-	2
Pedestrian	-	-	2	-	-	2
Bicyclist	-	-	1	-	-	1
Total	0	3	8	5	1	17

The figures below show the existing PM peak hour traffic volumes at the intersections of South Southeast Boulevard with East 25th Avenue, East 27th Avenue, and East 29th Avenue, based on a traffic count from June 2, 2026.

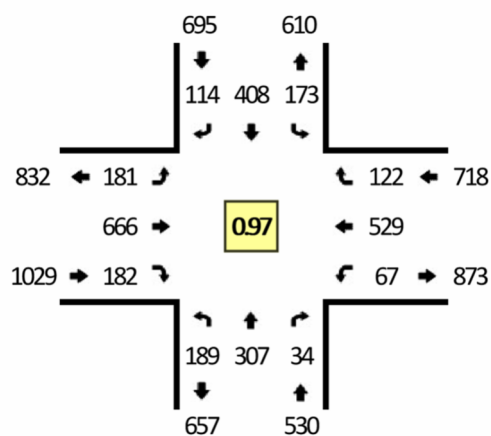
¹ 2025 crash data is preliminary.



PM Peak Hour Traffic at South Southeast Boulevard and East 25th Avenue Intersection



PM Peak Hour Traffic at South Southeast Boulevard and East 27th Avenue Intersection



PM Peak Hour Traffic at South Southeast Boulevard and East 29th Avenue Intersection

Bicyclist connectivity is a key concern for the study corridor, as South Southeast Boulevard, East 27th Avenue, and East 29th Avenue are all included in the City of Spokane Bike Master Plan. To improve connectivity and safety, a northbound bike lane through the study corridor was evaluated to determine whether cross section reconfigurations would both allow for enough space to add the bike lane and maintain existing LOS.

The existing cross section of South Southeast Boulevard is a three-lane configuration, with the center lane providing storage/acceleration at driveways and intersections. The southbound bike lane ends at East 27th Avenue for the creation of the southbound auxiliary through lane and does not reappear until 140' south of East 31st Avenue. Existing roadway width is around 40', varying slightly along the study corridor. With a three-lane configuration and southbound bike lane there is not enough roadway width remaining to stripe a northbound bike lane without removal of median turning lanes and both the northbound and southbound auxiliary through lanes at East 29th Avenue.

In order to implement a northbound bike lane, a new cross section configuration needs to be examined along the corridor. East 25th Avenue, which provides the only arterial access point to multiple residential areas, has a median at South Southeast Boulevard which allows for the storage and acceleration of westbound left turning vehicles along with a pocket for southbound left turning vehicles. Removal of this median would be required to reclaim enough roadway width for a northbound bike lane. However, intersection operations based on the above traffic counts indicate that a standard two-lane cross section on South Southeast Boulevard with stop control on the minor street of East 25th Avenue would have failing traffic operations for westbound left turning vehicles. If the City wants to maintain the existing LOS for East 25th Avenue residents, additional intersection control will be required, in the form of a new traffic signal or roundabout at the intersection. Due to necessary approach realignments and need for additional ROW, a roundabout would be less feasible than a signal at this intersection. A traffic signal would also allow for southbound platoon coordination with the existing traffic signal at East 29th Avenue, so a signal is recommended if additional intersection control is pursued. With a signal at the South Southeast Boulevard and East 25th Avenue intersection, no additional turning or storage lanes are required to maintain the existing LOS.

East 27th Avenue provides freight access to Safeway and is a designated collector arterial which serves approximately 3,500 vehicles per day. The southbound left turn pocket was constructed during the early 2000's when this portion of South Southeast Boulevard was widened for the construction of the 25th Avenue turn pockets. Preliminary traffic analysis indicates the 27th Avenue intersection would operate at or above the City's LOS standards if the cross section were reduced to two lanes and the southbound left turn pocket is removed. The existing left turns benefit from the platooning effect of the 29th Avenue traffic signal.

Between East 27th Avenue and East 29th Avenue, there is an existing centerline median that provides storage for eastbound left turning vehicles out from 2700 S Southeast Blvd and separates that movement from a turn pocket for southbound lefts from South Southeast Boulevard into the Safeway parking lot. After the southbound left turn pocket, an auxiliary through lane in the northbound and

southbound direction of South Southeast Boulevard are also included in the cross section for the East 29th Avenue signalized intersection.

The current striping requires freight exiting the freight driveway of Safeway to cross two double yellow striped lines, which should be avoided. 2700 S Southeast Blvd has shared access with the parcel to its south, which exits onto South Stone Street. If shared use access agreements can be confirmed, restriction of the South Southeast Boulevard driveway to right-in, right-out operation is recommended. The proposed median would be installed along centerline and extend the left turn pocket for either Safeway or 29th Avenue. Median replacement should maintain freight access out of the Safeway driveway.

Extension of the bike lane south of East 27th Avenue to East 31st Avenue by removal of the northbound and southbound auxiliary through lanes is strongly recommended. Preliminary analysis of the South Southeast Boulevard and East 29th Avenue intersection indicates this removal could be completed while maintaining LOS D operations at the traffic signal, however additional intersection control and signal timing analysis should be performed for the East 29th Avenue corridor to confirm alterations do not adversely impact coordination along East 29th Avenue.

Recommended Solution:

The South Southeast Boulevard cross section can be reduced to two lanes with appropriate turn pockets from 300' north of East 25th Avenue to East 31st Avenue, providing space for the continuous striping of a southbound and northbound bike lane.

The existing median at South Southeast Boulevard and East 25th Avenue is recommended for removal. If City staff wishes to maintain the existing LOS at this intersection, a signal should be installed and coordinated with the South Southeast Boulevard and East 29th Avenue intersection.

The existing median serving 2700 S Southeast Blvd and the Safeway freight access driveway should be replaced with a new centerline median which restricts the 2700 S Southeast Blvd driveway to right-in, right-out operation while maintaining freight access for Safeway.

Preliminary traffic operations analysis of the East 29th Avenue and South Southeast Boulevard intersection indicates the north-south auxiliary through lanes can be removed along South Southeast Boulevard. However, further analysis is recommended for the East 29th Avenue corridor to confirm no adverse impacts are encountered along East 29th Avenue as a result of these modifications.

District:	3
Neighborhood:	Audubon-Downriver
Project Extent:	North Alberta Street from West Northwest Boulevard to North Driscoll Boulevard

Problem Statement: Residents of the Audubon-Downriver neighborhood raised concerns about pedestrian safety along North Alberta Street from West Northwest Boulevard to North Driscoll Boulevard (0.35 miles). Additionally, residents were concerned with the lack of crosswalks across North Alberta Street, allowing connectivity between the residential areas nearby and Audubon Park and Finch Elementary School. North Alberta Street is a one-way southbound urban minor arterial with two travel lanes and a posted speed of 30 mph. There are currently no pedestrian crossings across North Alberta Street through the study extents. An aerial photo of the corridor is provided below.



North Alberta Street Corridor from West Northwest Boulevard to North Driscoll Boulevard

Traffic Analysis

The table below shows projected 2026 daily traffic volumes and 85th percentile speeds on the North Alberta Street corridor. There is an average daily volume of 12,050 vehicles with an average 85th percentile speed of 41 mph (11 mph higher than the 30-mph posted speed limit).

Projected 2026 Daily Traffic and 85th Percentile Speeds on North Alberta Street at West Dalton Avenue

Direction	# Lanes	Projected 2026 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
SB	2	12,050	41	30

^a Traffic data collected in June 2022 and projected to 2026 using a 1% annual growth rate.

The table below shows the severity and types of crashes occurring on North Alberta Street between West Northwest Boulevard and North Driscoll Boulevard over the last three years (2023 to 2025¹). There were a total of ten crashes along the study corridor, including one minor injury fixed object collision. Six of the ten total crashes (60%) occurred at the North Alberta Street and West Northwest Boulevard intersection and three (30%) occurred at the North Alberta Street and West Liberty Avenue intersection.

Crashes on North Alberta Street between West Northwest Boulevard and North Driscoll Boulevard by Severity (2023-2025)^b

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Angle	-	-	-	5	-	5
Sideswipe	-	-	-	4	-	4
Fixed Object	-	-	1	-	-	1
Total	-	-	1	9	-	10

^b 2025 crash data is preliminary.

The intersection of North Alberta Street at West Liberty Avenue was selected for analysis to evaluate crossing improvements to improve connectivity. This intersection was selected based on sight distance availability and proximity to both Audubon Park and Finch Elementary School to the northwest and the commercial areas along West Northwest Boulevard. The West Liberty Avenue route would provide connection between the park and school (northwest of the corridor) to the residential areas east of the corridor and maintain proper spacing in from the corridor termini. Additionally, West Liberty Avenue east of the corridor contains part of a “Bike Friendly Route”, and a crossing at North Albert Street would allow for extension of the route along West Liberty Avenue.

¹ 2025 crash data is preliminary.

The need for enhanced pedestrian crossing treatments (across North Alberta Street) was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562 methodology.² This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed.

No current pedestrian crossing data is available at the intersections due to an absence of a crossing; however, a pedestrian crossing volume of at least 20 is assumed during peak hours if crossing treatments are installed. Based on NCHRP 562, an active/enhanced crossing, using Rectangular Rapid Flashing Beacons (RRFBs), is the preferred treatment due to high vehicle volumes and speeds.

To address vehicles speeds and improve non-motorized accessibility along the corridor, reallocation of the existing roadway width should be considered via the addition of a striped and buffered bike lane. A bike lane along the North Alberta Street corridor also aligns with the City of Spokane Bicycle Master Plan, which designates the corridor through the study extents as “High Traffic (Bike Lane).” The Bicycle Master Plan also includes North Alberta Street north of North Driscoll Boulevard, designated as a “Moderate Traffic (Shared)” route, so extending the bicycle infrastructure down through the study area would help improve corridor continuity. The addition of a buffered bike lane has multiple benefits to the corridor including reducing the travel lane width and providing lateral separation between vehicles and bicyclists. Reducing the travel lane width helps influence driver behavior, leading drivers to perceive a more constrained travel way and adjust speeds accordingly.

Along with the buffered bike lane, additional crossing infrastructure is needed at the North Alberta Street and North Driscoll Boulevard intersection in the form of ramps across the diverter, to connect the two bike routes.

Recommended Solution:

The installation of a RRFB at the North Alberta Street and West Liberty Avenue intersection is recommended to improve pedestrian crossing ability and safety.

Additionally, the installation of a buffered bike lane along the west side of North Alberta Street is recommended to reduce the travel way width along with providing a sheltered route for bicyclists.

² NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

District:	3
Neighborhood:	West Central
Project Extent:	North Ash Street from West Dean Avenue to West Broadway Avenue

Problem Statement: Residents of the West Central neighborhood raised concerns about pedestrian and bicyclist safety along North Ash Street from West Dean Avenue to West Broadway Avenue (0.13 miles). Additionally, residents were concerned with vehicle speeds on North Ash Street, creating unsafe conditions at the pedestrian crossing at West Mallon Avenue by Bryant School.

North Ash Street is an urban major collector with a single lane for each travel direction with a posted speed limit of 30 mph and a school hours reduced speed limit of 20 mph (7:30 AM – 3:30 PM on school days). In 2024, North Ash Street was reconfigured from a southbound one-way to the now existing two-way configuration to address pedestrian safety concerns by The Enrichment Cooperative at Bryant. There is an existing striped crosswalk across the south leg of North Ash Street at West Mallon Avenue. An aerial photo of the corridor is provided below.



North Ash Street Corridor from West Dean Avenue to West Broadway Avenue

Traffic Analysis

The table below shows projected 2026 daily traffic volumes and 85th percentile speeds on the North Ash Street corridor. There is an average daily volume of 3,690 vehicles with an average 85th percentile speed of 28 mph (8 mph higher than the 20-mph school hours posted speed limit).

2026 Daily Traffic and 85th Percentile Speeds on North Ash Street between West Broadway Avenue and West Mallon Avenue

Direction	# Lanes	2026 Daily Traffic (Vehicles per day) ^a	School Hours 85 th Percentile Speed Range (mph)	Non-School Hours 85 th Percentile Speed Range (mph)	Posted Speed (mph) ^b
NB	1	934	26-30	26-30	20/30
SB	1	2,756	26-30	26-30	20/30
Both Dir.	2	3,690	26-30	26-30	20/30

^a Traffic data collected in June 2026.

^b Speed limit varies based on school hours

The table below shows the severity and types of crashes occurring on North Ash Street between West Dean Avenue and West Broadway Avenue over the last three years (2023 to 2025).¹ There were a total of eight crashes along the study corridor, including four angle crashes and a pedestrian-involved crash. Five of the recorded crashes, including the pedestrian-involved crash, occurred before the two-way reconfiguration. The pedestrian-involved minor injury crash occurred at West Dean Avenue due to a right turning vehicle failing to yield the right of way.

Crashes on North Ash Street between West Dean Avenue and West Broadway Avenue by Severity

Crash Type	Crash Severity				Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	
Angle	-	-	3	1	4
Fixed Object	-	-	-	2	2
Sideswipe	-	-	-	1	1
Pedestrian	-	-	1	-	1
Total	0	0	4	4	8

The need for enhanced pedestrian crossing treatment across North Ash Street was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562 methodology.² This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed.

¹ 2025 crash data is preliminary.

² NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

The existing crossing on the south leg of the North Ash Street and West Mallon Avenue intersection was selected for analysis to evaluate crossing upgrades to improve safety. This intersection was selected due to pedestrian safety concerns for Bryant School students using the crosswalk.

No current pedestrian crossing data is available at the North Ash Street and West Mallon Avenue intersection; however, a pedestrian crossing volume of at least 20 is assumed during the peak hour if crossing treatments are installed. Based on NCHRP 562, a signed and striped crosswalk is the preferred treatment due to vehicle volumes, speeds, and crossing distance.

To reduce vehicle speeds on North Ash Street, curb bulb outs should be considered at the south leg of the North Ash Street and West Mallon Avenue intersection, at the existing crossing. Curb bulb outs would narrow the travel lanes and decrease the pedestrian crossing distance, and would be expected to decrease the 85th percentile speed by 4 mph.³

An additional countermeasure to reduce vehicle speeds on North Ash Street is implementing a raised crosswalk for the school crossing. This would have a traffic calming impact, while also alerting drivers to the school crossing.

Recommended Solution:

It is recommended that the existing striped crossing at the North Ash Street and West Mallon Avenue intersection be maintained with the current crossing treatment.

Curb bulb outs should be considered at the south leg North Ash Street and West Mallon Avenue intersection at the pedestrian crossing to reduce vehicle speed along North Ash Street and improve pedestrian safety by Bryant School.

The existing school crossing should be converted to a raised crosswalk consistent with the traffic calming objective, and school safety.

³ *Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Speed. Federal Highway Administration, July 2014.*

District:	3
Neighborhood:	Northwest
Project Extent:	North Belt Street from West Wellesley Avenue to West Francis Avenue

Problem Statement: City of Spokane staff raised concerns about bicyclist safety along North Belt Street from West Wellesley Avenue to West Francis Avenue (1.02 miles) since the recent installation of a new cycle track and bike lanes along North Belt Street from West Garland Avenue to West Wellesley Avenue. Additionally, there are concerns about bicycle connectivity and treatment, especially at the North Belt Street and West Francis Avenue intersection.

North Belt Street is an urban major collector with a single lane for each travel direction and posted speed limit of 30 mph. As mentioned, a two-way cycle track now extends from West Garland Avenue to West Wellesley Avenue. At this location, the bicycle network transitions to buffered bike lanes. An aerial photo of the corridor is provided below.



North Belt Street Corridor from West Wellesley Avenue to West Francis Avenue

Traffic Analysis

The table below shows projected 2026 daily traffic volumes and 85th percentile speeds on the North Belt Street corridor. There is an average daily volume of 3,650 vehicles with an average 85th percentile speed of 36 mph (6 mph higher than the 30-mph posted speed limit) by West Everett Avenue, and an average daily volume of 2,730 vehicles with an average 85th percentile speed of 35 mph (5 mph higher than the 30-mph posted speed limit) by West Rowan Avenue.

Projected 2026 Daily Traffic and 85th Percentile Speeds on North Belt Street by Location

Location on North Belt Street	Direction	# Lanes	Projected 2026 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
West Everett Avenue	NB	1	2,020	33	30
	SB	1	1,630	38	30
	Both Dir.	2	3,650	36	30
West Rowan Avenue	NB	1	1,390	34	30
	SB	1	1,340	37	30
	Both Dir.	2	2,730	35	30

^a Traffic data collected in May 2022 and projected to 2026 using a 1% annual growth rate.

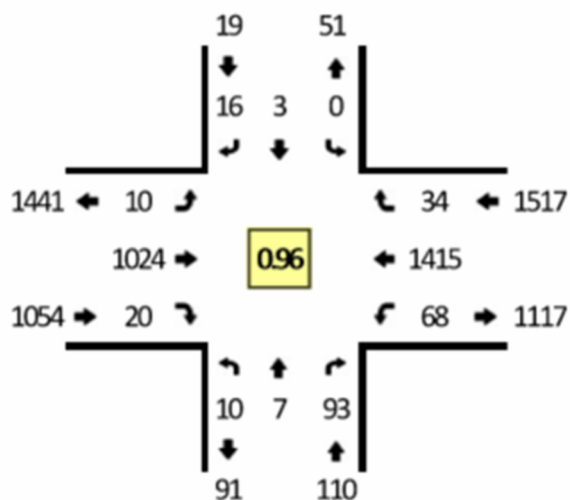
The table below shows the severity and types of crashes occurring on North Belt Street between West Wellesley Avenue and West Francis Avenue over the last three years (2023 to 2025).¹ There were a total of 33 crashes along the study corridor, including 11 angle crashes (33% of total crashes), 11 left-turn/opposing crashes (33% of total crashes), and five pedestrian-involved injury crashes. The pedestrian involved minor injury crashes all occurred at the North Belt Street and West Wellesley Avenue intersection and involved turning vehicles failing to yield the right of way.

Crashes on North Belt Street between West Wellesley Avenue and West Francis Avenue by Severity

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Angle	-	-	5	6	-	11
Left-Turn/Opposing	-	-	5	6	-	11
Pedestrian	-	-	5	-	-	5
Fixed Object	-	-	1	1	1	3
Rear End	-	-	-	2	-	2
Sideswipe	-	-	-	1	-	1
Total	0	0	16	16	1	33

¹ 2025 crash data is preliminary.

The figure below shows the existing PM peak hour traffic volumes at the North Belt Street and West Francis Avenue intersection based on a traffic count from June 2, 2026.



PM Peak Hour Traffic at North Belt Street and West Francis Avenue Intersection

The buffered bike lanes along both sides of North Belt Street should be extended north to West Francis Avenue to improve bicyclist safety, narrow the roadway width, and improve the overall bike network. Bike lane installation should be paired with parking restrictions for both travel directions through the study area. Extension of the cycle track was considered during this evaluation, but rejected due to the width constraints at the West Wellesley Avenue traffic signal. A cycle track at a traffic signal benefits from a protected left turn phase in the primary direction of travel, so there are no conflicting lefts when the cycle track is green. North Belt Street does not have left turn pockets at this intersection, and cannot prevent the permitted lefts from conflicting with a cycle track configuration.

In addition, the lack of alleys from West Rowan Boulevard north to West Francis Boulevard forces waste pickup to occur curbside. While these operations impact the bike lane (depending on where the waste bin is returned), the total effect is relatively minor. A similar bike lane design can be found on West 29th Avenue from South High Drive to South Tekoa Street, establishing a precedent for this design. A cycle track in a similar situation could encounter bi-directional bike traffic within a narrow available width.

A review of non-motorized facilities and routes through the study area was performed to evaluate crossing improvements to increase connectivity. The east leg of the North Belt Street and West Francis Avenue intersection was selected for crossing analysis based on proximity to the bus stop on the northwest corner of the intersection and to the commercial zoning east of the intersection. As the bike route continues on North Belt Street north of West Francis Avenue, a crossing would provide connectivity across the currently unprotected crossing at West Francis Avenue.

The need for enhanced pedestrian crossing treatments (across West Francis Avenue) was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562 methodology.² This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed.

No current pedestrian crossing data is available at the intersection; however, a pedestrian crossing volume of at least 20 is assumed during peak hours if crossing treatments are installed. Based on NCHRP 562, a PHB signal is the preferred treatment due to vehicle volumes, speeds, and crossing distance.

This is consistent with the 2022 Spokane Traffic Calming analysis at the West Francis Avenue and North Cannon Street intersection which also indicated a PHB was recommended for pedestrians crossing West Francis Avenue.

Multiple concurrent PHBs along a corridor are not uncommon in the United States, but this would be among the first in Spokane. During design development, additional consideration should be given to the need for a full traffic signal at the West Francis Avenue and North Belt Street intersection. The North Belt Street location would retain signal spacing (>0.25 mi) recommendations on West Francis Avenue, which could improve signal coordination efforts along the corridor, while also providing the recommended pedestrian connectivity.

Additionally, speed feedback signs should be considered along North Belt Street through the study extents to help reinforce the speed limit. Speed feedback signs have an expected reduction on 85th percentile vehicle speeds of 5 mph.³

Recommended Solution:

It is recommended that bike lane striping be implemented along North Belt Street to improve bicyclist safety and connectivity through the study area. Additionally, speed feedback signs should be considered along North Belt Street to reduce 85th percentile vehicle speeds.

The installation of a PHB at the east leg of the North Belt Street and West Francis Avenue intersection is recommended to enhance bicyclist safety and connectivity. Multiple concurrent PHBs along a corridor are not uncommon in the United States, but this would be among the first in Spokane. During design development, additional consideration should be given to the need for a full traffic signal at the West Francis Avenue and North Belt Street intersection.

² NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

³ *Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Speed*. Federal Highway Administration. July 2014.

District:	3
Neighborhood:	Audubon-Downriver
Project Extent:	West Northwest Boulevard from North Royal Court to North Assembly Street

Problem Statement: Residents of the Audubon-Downriver neighborhood raised concerns about pedestrian and bicyclist safety along West Northwest Boulevard from North Royal Court to North Assembly Street (0.15 miles). Additionally, residents were concerned with excessive vehicle speeds on West Northwest Boulevard through the study extents.

West Northwest Boulevard is a local road with a single travel lane for each direction and a posted speed of 25 mph.¹ The frontage along West Northwest Boulevard is primarily residential, with a shopping center north of the study corridor.



West Northwest Boulevard Corridor from North Royal Court to North Assembly Street

¹ West Northwest Boulevard is classified as an urban principal arterial as it continues east of North Assembly Street intersection.

Traffic Analysis

The table below shows 2026 daily traffic volumes and 85th percentile speeds on the West Northwest Boulevard corridor. There is an average daily volume of 1,068 vehicles with an average 85th percentile speed of 28 mph (3 mph higher than the 25-mph posted speed limit).

2026 Daily Traffic and 85th Percentile Speeds on West Northwest Boulevard at North King Court

Direction	# Lanes	2026 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
WB	1	542	27	25
EB	1	526	29	25
Both	2	1,068	28	25

^a Traffic data collected in June 2026.

The table below shows the severity and types of crashes occurring on West Northwest Boulevard between North Royal Court and North Assembly Street over the last three years (2023 to 2025).² There were two recorded crashes along the study corridor, one minor injury sideswipe crash at North King Court and one fixed object fatal motorcycle crash at North Assembly Street.

Crashes on West Northwest Boulevard between North Royal Court and North Assembly Street by Severity

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Sideswipe	-	-	1	-	-	1
Fixed Object	1	-	-	-	-	1
Total	1	0	1	0	0	2

A review of Origin-Destination data on West Northwest Boulevard indicated that the route is used as a cut-through to avoid the North Assembly Street and Wellesley Avenue signal via North King Court for north-south travel.³

To address northbound cut-through traffic originating on West Northwest Boulevard east of North Assembly Street, the installation of a raised median island should be considered on North Assembly Street before/after West Northwest Boulevard, restricting turning movements onto/from West Northwest Boulevard to right-in/right-out operations. This countermeasure prevents the northbound left cut-through at the West Northwest Boulevard and North Assembly Street intersection, instead routing vehicles to the existing signal at North Assembly Street and Wellesley Avenue.

To address southbound cut-through traffic and vehicle speeds on West Northwest Boulevard, curb bulb outs and speed humps at key locations should be considered. Curb bulb outs can help decrease turning vehicle speeds, narrow the roadway cross section, and remove intersection skew, and have an expected

² 2025 crash data is preliminary.

³ Data from Replica-HQ Origin Destination website, replicahq.com

reduction in the 85th percentile speed of 4 mph.⁴ Speed humps were evaluated using the FHWA Traffic Calming ePrimer, which identifies speed humps as an effective vertical deflection measure on local streets where speeding is a concern. Speed humps require drivers to reduce speed to comfortably traverse the roadway, creating a self-enforcing traffic calming treatment. Based on FHWA guidance, speed humps are appropriate on low-volume residential streets and typically reduce 85th percentile speeds by approximately 5 to 7 mph, depending on spacing and design.⁵

Recommended Solution:

It is recommended that curb bulbouts are considered for installation at the following location:

- West Northwest Boulevard and North Assembly Street: Northwest and southwest Corners

Additionally, it is recommended that speed humps are considered for installation at the following locations:

- West Northwest Boulevard midblock between North Assembly Street and North King Court
- West Northwest Boulevard midblock between North King Court and North Royal Court
- North King Court midblock between West Northwest Boulevard and Wellesley Avenue
- North Royal Court midblock between West Princeton Place and West Hoffman Place

An optional addition would be the installation of a raised median island on North Assembly Street before/after West Northwest Boulevard to restrict the west leg of the West Northwest Boulevard and North Assembly Street intersection to right-in/right-out operations.

⁴ *Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Speed. Federal Highway Administration, July 2014.*

⁵ ⁵ *FHWA Traffic Calming ePrimer Module 3: Toolbox of Individual Traffic Calming Measures, 2017.*
<https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer/module-3-part-1#3.6>

District:	3
Neighborhood:	Emerson-Garfield
Project Extent:	West Northwest Boulevard from North TJ Meenach Drive to North Elm Street

Problem Statement: Residents of the Emerson-Garfield neighborhood raised concerns about pedestrian and bicyclist safety along West Northwest Boulevard from North TJ Meenach Drive to North Elm Street (0.51 miles). A main reason for this concern is the lack of pedestrian and bicycle connectivity across West Northwest Boulevard between North TJ Meenach Drive and North Elm Street. West Northwest Boulevard is a five-lane (two travel lanes for each direction with a two-way center turn lane) urban principal arterial with a posted speed of 35 mph. There is a school zone speed limit of 20 mph implemented on West Northwest Boulevard from West York Avenue to West Jackson Ave/N Elm Street, to reduce vehicle speeds in advance of the pedestrian hybrid beacon (PHB) crossing between the two intersections. An aerial photo of the study corridor is provided below, with the PHB crossing marked.



West Northwest Boulevard Corridor from North TJ Meenach Drive to North Elm Street

Traffic Analysis

The table below shows projected 2026 PM peak hour traffic volumes and 85th percentile speeds on West Northwest Boulevard at North Belt Street. There are 30,080 vehicles per day with an 85th percentile speed of 41 miles per hour (6 mph higher than the 35-mph posted speed limit). This daily volume is approaching the upper planning-level capacity for a principal arterial.

Projected 2026 Daily Traffic and 85th Percentile Speeds on West Northwest Boulevard at North Belt Street

Direction	# Lanes	Projected 2026 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
WB	1	14,850	40	35
EB	1	15,230	42	35
Both Dir.	2	30,080	41	35

^a Traffic data collected in June 2022 and projected to 2026 using a 1% annual growth rate.

The table below shows the severity and types of crashes occurring on West Northwest Boulevard between North TJ Meenach Drive and North Elm Street over the last three years (2023 to 2025).¹ There were a total of 12 crashes along the study corridor, including two bicyclist involved crashes and one pedestrian involved crash. The pedestrian crash and one of the bicyclist crashes occurred at the West Northwest Boulevard and North TJ Meenach Drive intersection, with the other bicyclist crash occurring midblock on West Northwest Boulevard by the PHB crossing at North Elm Street.

Crashes on West Northwest Boulevard between North TJ Meenach Drive and North Elm Street by Severity

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Property Damage Only	Unknown	
Angle	-	1	1	1	-	3
Rear End	-	-	-	3	-	3
Sideswipe	-	-	-	2	-	2
Bicyclist	-	-	2	-	-	2
Pedestrian	-	-	-	1	-	1
Fixed Object	-	-	-	-	1	1
Total	0	1	3	7	1	12

¹ 2025 crash data is preliminary.

Existing pedestrian routes and infrastructure was reviewed for the study area. Besides the previously mentioned PHB crossing at North Elm Street, the nearest option for crossing north across West Northwest Boulevard is at North TJ Meenach Drive, around 0.5 miles west of the North Elm Street PHB. Preferred spacing for crosswalks is around 0.25 miles to reduce out of direction travel for pedestrians.² As such, the east leg of the West Northwest Boulevard and North Hemlock Street intersection was chosen to be analyzed based on the proximity to the existing PHB crossing at North Elm Street and to avoid higher signal density along the corridor.

The need for enhanced pedestrian crossing treatments (across West Northwest Boulevard) was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562 methodology.³ This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed.

No current pedestrian crossing data is available at the West Northwest Boulevard and North Hemlock Street intersection; however, a pedestrian crossing volume of at least 20 is assumed during peak hours if crossing treatments are installed. Based on NCHRP 562, a PHB signal is the preferred treatment due to vehicle volumes, speeds, and crossing distance.

With the installation of the PHB, a median refuge island should be installed in the center lane to provide shelter and enhance safety for crossing pedestrians. A median refuge island can also have minor traffic calming benefits on West Northwest Boulevard by reducing the travel lane width, which leads drivers to perceive a more constrained travel way and adjust speeds accordingly.

Recommended Solution:

The installation of a PHB at the east leg of the West Northwest Boulevard and North Hemlock Street intersection as well as a median refuge island in the center turn lane is recommended to enhance pedestrian safety and bicycle route connectivity around the neighborhood.

² AASTHO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004

³ NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>