

Appendix G
Project Prospectus Sheets

North Market Street/Haven Street East Farwell Road to Euclid Avenue

Context

The goal is to increase safety for all users in highly disadvantaged communities in the City and County of Spokane by reducing fatal and serious injury (FSI) crashes.

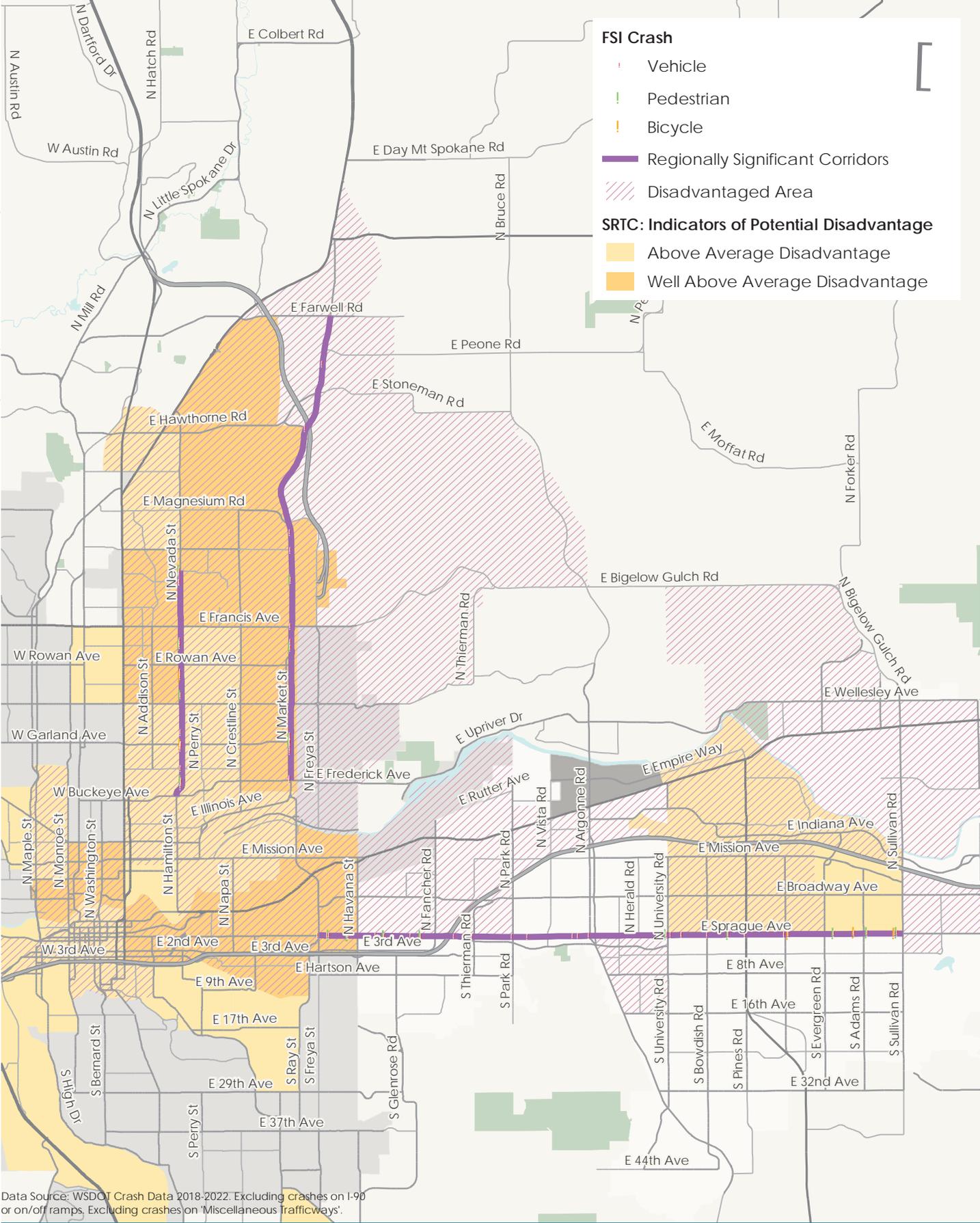
- **Jurisdiction:** Spokane County and City of Spokane
- **Land Use Context:** Land use varies along the corridor and includes Residential, Institutional, Commercial, and Industrial.
- **Equity:** The Market corridor equity score falls into the very disadvantaged category. The equity score for the corridor ranges from 3.03 to 3.36, where -3.5 is very advantaged and 3.5 is very disadvantaged. The equity score is calculated using the ETC Explorer tool and the SRTC's IPD. These are identified through six indicators of potential disadvantage: individuals with low incomes, race, limited English proficiency (LEP), limited vehicle access, age dependency (elderly and youth), and disabilities.

Crash Overview

The 7-mile corridor connects four High Injury Network (HIN) segments and includes two HIN intersections (East Garland Avenue and Euclid Avenue). From 2018 to 2022, there were 142 total crashes, 16 of which were FSI crashes. The following crash types resulted in FSI crashes and are listed in order of highest frequency for the corridor.

1. **Angle:** Involves a driver hitting another driver at an angle, or the "Angle (T)" WSDOT crash classification.¹
2. **Pedestrian:** Any crash involving a pedestrian.
3. **Sideswipe:** Involves at least two drivers where the drivers are traveling in the same or opposite directions, and both are going straight. One driver could be stopped, or both could be moving.
4. **Opposite Direction Left Turn Across Path:** One driver is turning left across the path of a driver traveling straight in the opposite direction. This is a subset of the Angle category.
5. **Fixed Object:** One driver hits a fixed object, usually on the side of the road.
6. **Rear End:** Involves at least two drivers traveling in the same direction.

¹ <https://wsdot.wa.gov/sites/default/files/2022-01/NHFP-crash-data-dictionary.pdf>



Data Source: WSDOT Crash Data 2018-2022. Excluding crashes on I-90 or on/off ramps, Excluding crashes on 'Miscellaneous Trafficways'.



Figure 1
Regionally Significant Corridors

Proposed Countermeasures: Countermeasures were selected after an evaluation of the corridor’s context to determine the tools that would be most effective at reducing most common FSI crash types and through input from the City of Spokane and Spokane County. Effectiveness is presented as a crash reduction factor (CRF), which is the estimated percent reduction in crashes. Table 1 lists the countermeasures selected their level of effectiveness, relative cost, and potential funding opportunities.

Table 1: Summary of Proposed Countermeasures

Proposed Countermeasure	Effectiveness	Cost*	Funding Opportunity**
Systemic			
Accessible Pedestrian Signals	9-70%	\$	D
Automated Enforcement Cameras	23-90%	\$\$\$	D
High Visibility Crosswalks	40%	\$	D
Leading Pedestrian Intervals (LPIs)	9-59%	\$\$	
Sidewalks	65-89%	\$\$\$\$	
Curb Extensions and Bulb Outs	N/A	\$\$	Q, D
Raised Refuge Islands	46-56%	\$\$	Q
Pedestrian Lighting	42%	\$\$	
Rectangular Rapid Flashing Beacons (RRFBs)	47-73%	\$\$	D
Protective Phasing	31-100%	\$	
Access Management	5-31%	\$\$	
Appropriate Speed Limits for All Road Users	N/A	\$	D
Edge Lines	22-37%	\$	D

*Key for the planning-level cost estimate:

\$	Low – typically \$5,000 or less
\$\$	Medium – typically \$5,000 to \$100,000
\$\$\$	Moderate – typically \$100,000 to \$300,000
\$\$\$\$	High – typically \$300,000 or more

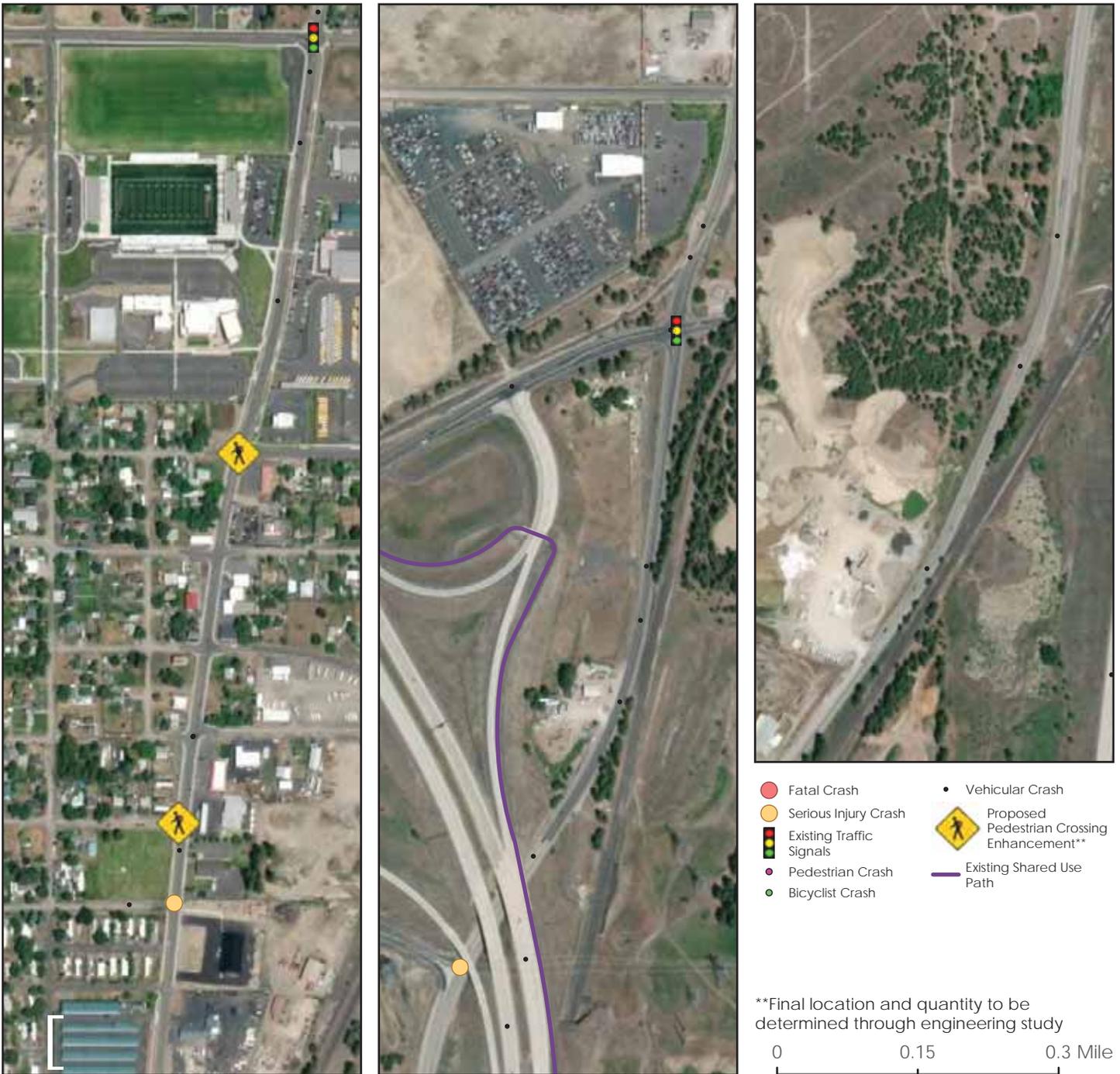
** D - SS4A Demonstration Grants

Q- SS4A Quick Build

The following should be considered when selecting final countermeasures:

- Gateway treatments, including speed reduction strategies, are recommended where North Market Street acts as a main street for the Hillyard neighborhood, beginning at East Columbia Avenue and ending at North Haven Place.
- Confirm appropriate speed limits for all road users after the implementation of the recommended countermeasures. This can be done in the form of a before-and-after speed study during implementation of recommended countermeasures. The Washington State Injury Minimization and Speed Management Policy Elements and Implementations Recommendations is a resource for streets where additional engineering changes or evaluations may be needed to reduce the posted speed limit.²
- Final selection of countermeasures are dependent on additional engineering studies.

² <https://wsdot.wa.gov/sites/default/files/2021-10/InjuryMinimization-SpeedManagement-PolicyElements-Recommendations.pdf>



North Market Street/Haven Street - East Farwell Road to Euclid Avenue

The seven-mile corridor connects four HIN segments and includes two HIN intersections (E. Garland Avenue and Euclid Avenue). Within the corridor, there were 142 total crashes, 16 of which were FSI crashes, between 2018 and 2022.

Corridor-Wide Countermeasures for Consideration

- High Visibility Crosswalks
- Accessible Pedestrian Signals
- Appropriate Speed Limits for All Road Users
- Protective Phasing
- Leading Pedestrian Intervals (LPIs)
- Automated Enforcement
- Access Management Strategies
- Lighting



- Fatal Crash
- Serious Injury Crash
- Existing Traffic Signals
- Pedestrian Crash
- Bicyclist Crash
- Vehicular Crash
- Proposed Pedestrian Crossing Enhancement**
- Existing Shared Use Path

**Final location and quantity to be determined through engineering study





- Fatal Crash
- Serious Injury Crash
- Transit Stops
- Existing Traffic Signals
- Pedestrian Crash
- Bicyclist Crash
- Vehicular Crash
- Existing/Funded Pedestrian Crossing Enhancement
- Existing Shared Use Path
- Proposed Sidewalk***

*** Pending engineering study to assess if this improvement fits into overall plan for the area and if it is technically feasible to build with current space constraints.



North Nevada Street East Sharpsburg Avenue to East North Foothills Drive

Context

The goal is to increase safety for all users in highly disadvantaged communities in the City of Spokane by reducing fatal and serious injury (FSI) crashes along North Nevada Street.

- **Jurisdiction:** City of Spokane
- **Land Use Context:** Residential, Institutional, Commercial, Parkland
- **Equity:** The corridor equity score falls into the disadvantaged category. The equity score for the corridor ranges from 2.05 to 3.36, where -3.5 is very advantaged and 3.5 is very disadvantaged. The equity score is calculated using the ETC Explorer tool and the SRTC's IPD. These are identified through six indicators of potential disadvantage: individuals with low incomes, race, limited English proficiency (LEP), limited vehicle access, age dependency (elderly and youth), and disabilities.

Crash Overview

The three mile corridor connects four High Injury Network (HIN) segments and one HIN intersection (Empire street). From 2018 to 2022, there were 241 total crashes, 23 of which were FSI crashes. The following crash types resulted in FSI crashes and are listed in order of highest frequency for the corridor.

1. **Angle:** Involves a driver hitting another driver at an angle, or the "Angle (T)" WSDOT crash classification.¹
2. **Opposite Direction Left Turn Across Path:** One driver is turning left across the path of a driver traveling straight in the opposite direction. This is a subset of the Angle category.
3. **Bicyclist:** Any crash involving a cyclist.
4. **Pedestrian:** Any crash involving a pedestrian.
5. **Sideswipe:** Involves at least two drivers where the drivers are traveling in the same or opposite directions, and both are going straight. One driver could be stopped, or both could be moving.
6. **Head On:** Involves at least two drivers traveling in opposite directions where one driver hits the other head-on, while the other driver is moving or stopped.

¹ <https://wsdot.wa.gov/sites/default/files/2022-01/NHFP-crash-data-dictionary.pdf>

Proposed Countermeasures: Countermeasures were selected after an evaluation of the corridor’s context to determine the tools that would be most effective at reducing most common FSI crash types and through input from the City of Spokane. Effectiveness is presented as a crash reduction factor (CRF), which is the estimated percent reduction in crashes. Table 1 lists the countermeasures selected their level of effectiveness, relative cost, and potential funding opportunities.

Table 1: Summary of Proposed Countermeasures

Proposed Countermeasure	Effectiveness	Cost*	Funding Opportunity**
Systemic			
Accessible Pedestrian Signals	9-70%	\$	D
Automated Enforcement Cameras	23-90%	\$\$\$	D
High Visibility Crosswalks	40%	\$	D
Leading Pedestrian Intervals (LPIs)	9-59%	\$\$	
Sidewalks	65-89%	\$\$\$\$	
Curb Extensions and Bulb Outs	N/A	\$\$	Q, D
Raised Refuge Islands	46-56%	\$\$	Q
Pedestrian Lighting	42%	\$\$	
Rectangular Rapid Flashing Beacons (RRFBs)	47-73%	\$\$	D
Protective Phasing	31-100%	\$	
Access Management	5-31%	\$\$	
Appropriate Speed Limits for All Road Users	N/A	\$	D
Edge Lines	22-37%	\$	D

*Key for the planning-level cost estimate:

\$	Low – typically \$5,000 or less
\$\$	Medium – typically \$5,000 to \$100,000
\$\$\$	Moderate – typically \$100,000 to \$300,000
\$\$\$\$	High – typically \$300,000 or more

** D - SS4A Demonstration Grants

Q- SS4A Quick Build

The following should be considered when selecting final countermeasures:

- The north end of the corridor has an access control diverter, which are recommended in other locations along the corridor, in conjunction with high visibility crosswalks, enhanced crossings like RRFBs, and/or openings for bicyclists to access neighborhood streets.
- Confirm appropriate speed limits for all road users after the implementation of the recommended countermeasures. This can be done in the form of a before-and-after speed study during implementation of recommended countermeasures. The Washington State Injury Minimization and Speed Management Policy Elements and Implementations Recommendations is a resource for streets where additional engineering changes or evaluations may be needed to reduce the posted speed limit.²
- Final selection of countermeasures are dependent on additional engineering studies.

² <https://wsdot.wa.gov/sites/default/files/2021-10/InjuryMinimization-SpeedManagement-PolicyElements-Recommendations.pdf>



North Nevada Street - East Sharpsburg Avenue to East North Foothills Drive

The three-mile corridor connects four HIN segments and includes two HIN intersections (E. Garland Avenue, and Euclid Avenue). Within the corridor, there were 241 total crashes, 19 of which were FSI crashes, between 2018 and 2022.

Corridor-Wide Countermeasures for Consideration

- High Visibility Crosswalks
- Accessible Pedestrian Signals
- Appropriate Speed Limits for All Road Users
- Protective Phasing
- Leading Pedestrian Intervals (LPIs)
- Automated Enforcement
- Lighting
- Access Management Strategies



- Fatal Crash
- Serious Injury Crash
- Transit Stops
- Proposed Pedestrian Crossing Enhancement**
- Existing Traffic Signals
- Pedestrian Crash
- Bicyclist Crash
- Vehicular Crash

**Final location and quantity to be determined through engineering study



Sprague Avenue North Freya Street to Sullivan Road

Context

The goal is to increase safety for all users in highly disadvantaged communities in the City of Spokane Valley and City of Spokane by reducing fatal and serious injury (FSI) crashes.

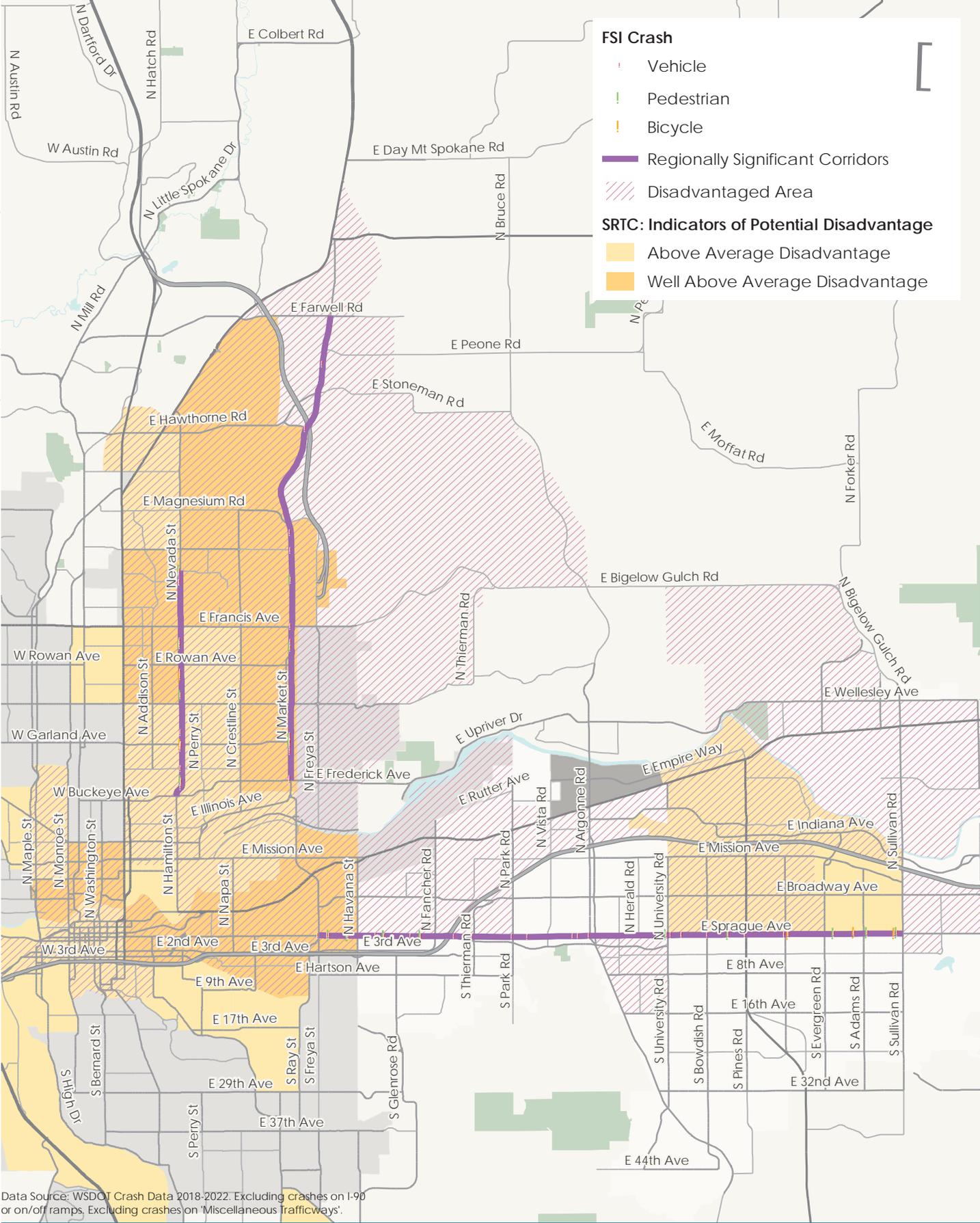
- **Jurisdiction:** City of Spokane Valley and City of Spokane
- **Land Use Context:** Land use varies along the corridor and includes Commercial, Mixed Use, and Parks, Recreation, and Open Space.
- **Equity:** The equity score for the corridor falls into the disadvantage category. The equity score ranges from 0.72 to 1.0, where -3.5 is very advantaged and 3.5 is very disadvantaged. The equity score is calculated using the ETC Explorer tool and the SRTC's IPD. These are identified through six indicators of potential disadvantage: individuals with low incomes, race, limited English proficiency (LEP), limited vehicle access, age dependency (elderly and youth), and disabilities.

Crash Overview

The 7.5 mile corridor connects four High Injury Network (HIN) segments and includes three HIN intersections (University Road, McDonald Road, and North Gillis Road). From 2018 to 2022, there were 263 total crashes, 16 of which were FSI crashes. The following crash types resulted in FSI crashes and are listed in order of highest frequency for the corridor.

1. **Pedestrian:** Any crash involving a pedestrian.
2. **Rear End:** Involves at least two drivers traveling in the same direction.
3. **Sideswipe:** Involves at least two drivers where the drivers are traveling in the same or opposite directions, and both are going straight. One driver could be stopped, or both could be moving.
4. **Angle:** Involves a driver hitting another driver at an angle, or the "Angle (T)" WSDOT crash classification.¹
5. **Bicyclist:** Any crash involving a bicyclist.
6. **Opposite Direction Left Turn Across Path:** One driver is turning left across the path of a driver traveling straight in the opposite direction. This is a subset of the Angle category.

¹ <https://wsdot.wa.gov/sites/default/files/2022-01/NHFP-crash-data-dictionary.pdf>



Data Source: WSDOT Crash Data 2018-2022. Excluding crashes on I-90 or on/off ramps, Excluding crashes on 'Miscellaneous Trafficways'.



Figure 1
Regionally Significant Corridors

Proposed Countermeasures: Countermeasures were selected after an evaluation of the corridor’s context to determine the tools that would be most effective at reducing most common FSI crash types and through input from the City of Spokane Valley and City of Spokane. Effectiveness is presented as a crash reduction factor (CRF), which is the estimated percent reduction in crashes. Table 1 lists the countermeasures selected their level of effectiveness, relative cost, and potential funding opportunities.

Table 1: Summary of Proposed Countermeasures

Proposed Countermeasure	Effectiveness	Cost*	Funding Opportunity**
Systemic			
Accessible Pedestrian Signals	9-70%	\$	D
Automated Enforcement Cameras	23-90%	\$\$\$	D
High Visibility Crosswalks	40%	\$	D
Leading Pedestrian Intervals (LPIs)	9-59%	\$\$	
Sidewalks	65-89%	\$\$\$\$	
Curb Extensions and Bulb Outs	N/A	\$\$	Q, D
Raised Refuge Islands	46-56%	\$\$	Q
Pedestrian Lighting	42%	\$\$	
Rectangular Rapid Flashing Beacons (RRFBs)	47-73%	\$\$	D
Protective Phasing	31-100%	\$	
Access Management	5-31%	\$\$	
Appropriate Speed Limits for All Road Users	N/A	\$	D
Edge Lines	22-37%	\$	D

*Key for the planning-level cost estimate:

\$	Low – typically \$5,000 or less
\$\$	Medium – typically \$5,000 to \$100,000
\$\$\$	Moderate – typically \$100,000 to \$300,000
\$\$\$\$	High – typically \$300,000 or more

** D - SS4A Demonstration Grants

Q- SS4A Quick Build

The following should be considered when selecting final countermeasures:

- Confirm appropriate speed limits for all road users after the implementation of the recommended countermeasures. This can be done in the form of a before-and-after speed study during implementation of recommended countermeasures. The Washington State Injury Minimization and Speed Management Policy Elements and Implementations Recommendations is a resource for streets where additional engineering changes or evaluations may be needed to reduce the posted speed limit.²
- Final selection of countermeasures are dependent on additional engineering studies.

² <https://wsdot.wa.gov/sites/default/files/2021-10/InjuryMinimization-SpeedManagement-PolicyElements-Recommendations.pdf>



- Fatal Crash
- Serious Injury Crash
- Proposed Automated Enforcement
- Transit Stops
- Proposed Pedestrian Crossing Enhancement**
- Existing Traffic Signals
- Pedestrian Crash
- Bicyclist Crash
- Vehicular Crash

**Final location and quantity to be determined through engineering study



Sprague Avenue - Freya Street to Sullivan Road

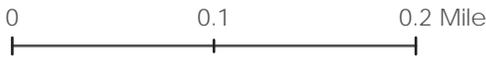
The 7.5 mile long corridor connects six HIN segments and includes five HIN intersections (University Road, McDonald Road, and N Gillis Road, Freya Street, and Pines Road). Within the corridor, there were 263 total crashes, 33 of which resulted in a fatal or serious injury, between 2018 and 2022.

Corridor-Wide Countermeasures for Consideration

- High Visibility Crosswalks
- Accessible Pedestrian Signals
- Appropriate Speed Limits for All Road Users
- Protective Phasing
- Leading Pedestrian Intervals (LPIs)
- Automated Enforcement
- Access Management Strategies
- Lighting
- Lane reallocation, multi-use pathway, or bike lanes



- Fatal Crash
- Serious Injury Crash
- Proposed Automated Enforcement
- Transit Stops
- Proposed Pedestrian Crossing Enhancement**
- Existing Traffic Signals
- Existing Bike Lane
- Pedestrian Crash
- Vehicular Crash



**Final location and quantity to be determined through engineering study



- Fatal Crash
- Serious Injury Crash
-  Proposed Automated Enforcement
-  Transit Stops
-  Proposed Pedestrian Crossing Enhancement**
-  Existing Traffic Signals
-  Existing Bike Lane
- Bicyclist Crash
- Vehicular Crash
- Pedestrian Crash

*Pending engineering study of adequate ROW or lane reallocation
 **Final location and quantity to be determined through engineering study





- Fatal Crash
- Serious Injury Crash
- Transit Stops
- Proposed Pedestrian Crossing Enhancement**
- Existing Traffic Signals
- Pedestrian Crash
- Bicyclist Crash
- Vehicular Crash

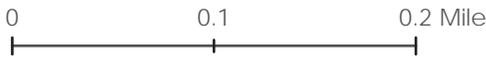
*Pending engineering study of adequate ROW or lane reallocation
 **Final location and quantity to be determined through engineering study





- Fatal Crash
 - Serious Injury Crash
 - Proposed Automated Enforcement
- Transit Stops
 - Existing Traffic Signals
 - Pedestrian Crash
- Bicyclist Crash
 - Vehicular Crash

*Pending engineering study of adequate ROW or lane reallocation



Sullivan Road Sprague Avenue to East Mission Avenue

Context

The goal is to increase safety for all users in the City of Spokane Valley by reducing fatal and serious injury (FSI) crashes.

- **Jurisdiction:** City of Spokane Valley
- **Land Use Context:** Land use varies along the corridor and is primarily commercial and mixed use.
- **Equity:** The equity score for the corridor is 0.72. The minimum and maximum equity scores range from -3.5 (very advantaged) to 3.5 (very disadvantaged). The Sullivan corridor equity score is in a slightly advantaged category, meaning the score is above 0. The equity score is calculated using the ETC Explorer tool and the SRTC's IPD. SRTC identified disadvantaged populations in its Public Participation Plan. These are identified through six indicators of potential disadvantage: individuals with low incomes, race, limited English proficiency (LEP), limited vehicle access, age dependency (elderly and youth), and disabilities.

Crash Overview

The 0.7-mile corridor connects one High Injury Network (HIN) segment and includes one HIN intersection (East Mission Avenue). From 2018 to 2022, there were 96 total crashes, 4 of which were FSI crashes. The following crash types resulted in FSI crashes and are listed in order of highest frequency for the corridor.

1. **Pedestrian:** Any crash involving a pedestrian.
2. **Rear End:** Involves at least two drivers traveling in the same direction.
3. **Angle:** Involves a driver hitting another driver at an angle, or the "Angle (T)" WSDOT crash classification.¹

¹ <https://wsdot.wa.gov/sites/default/files/2022-01/NHFP-crash-data-dictionary.pdf>

Proposed Countermeasures: Countermeasures were selected after an evaluation of the corridor’s context to determine the tools that would be most effective at reducing most common FSI crash types and through input from the City of Spokane Valley. Effectiveness is presented as a crash reduction factor (CRF), which is the estimated percent reduction in crashes. Table 1 lists the countermeasures selected their level of effectiveness, relative cost, and potential funding opportunities.

Table 1: Summary of Proposed Countermeasures

Proposed Countermeasure	Effectiveness	Cost*	Funding Opportunity**
Systemic			
Accessible Pedestrian Signals	9-70%	\$	D
Automated Enforcement Cameras	23-90%	\$\$\$	D
High Visibility Crosswalks	40%	\$	D
Leading Pedestrian Intervals (LPIs)	9-59%	\$\$	
Sidewalks	65-89%	\$\$\$\$	
Raised Refuge Islands	46-56%	\$\$	Q
Pedestrian Lighting	42%	\$\$	
Rectangular Rapid Flashing Beacons (RRFBs)	47-73%	\$\$	D
Protective Phasing	31-100%	\$	
Access Management	5-31%	\$\$	
Appropriate Speed Limits for All Road Users	N/A	\$	D

*Key for the planning-level cost estimate:

\$	Low – typically \$5,000 or less
\$\$	Medium – typically \$5,000 to \$100,000
\$\$\$	Moderate – typically \$100,000 to \$300,000
\$\$\$\$	High – typically \$300,000 or more

** D - SS4A Demonstration Grants

Q- SS4A Quick Build

The following should be considered when selecting final countermeasures:

- An access management study should be conducted to evaluate opportunities to increase safety for turning movements into and out of commercial driveways. Access management solutions may include closing unnecessary commercial driveways, installing c-curb to channelize turning movements into or out of commercial driveways, and implementing right-in-right-out restrictions (median treatments).
- Confirm appropriate speed limits for all road users after the implementation of the recommended countermeasures. This can be done in the form of a before-and-after speed study during implementation of recommended countermeasures. The Washington State Injury Minimization and Speed Management Policy Elements and Implementations Recommendations is a resource for streets where additional engineering changes or evaluations may be needed to reduce the posted speed limit.²
- Final selection of countermeasures are dependent on additional engineering studies.

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- Fatal Crash
- Serious Injury Crash
- Transit Stops
- Proposed Pedestrian Crossing Enhancement**
- Existing Traffic Signals
- Pedestrian Crash
- Bicyclist Crash
- Vehicular Crash

*Pending engineering study of adequate ROW or lane reallocation

**Final location and quantity to be determined through engineering study



Sullivan Road - Sprague Avenue to East Mission Avenue

The 0.7 mile long corridor connects one HIN segment and one HIN intersection (E Mission Ave). Within the corridor, there were 96 total crashes, four of which were FSI crashes, between 2018 and 2022.

Corridor-Wide Countermeasures for Consideration

- High Visibility Crosswalks
- Accessible Pedestrian Signals
- Appropriate Speed Limits for All Road Users
- Protective Phasing
- Leading Pedestrian Intervals (LPIs)
- Automated Enforcement
- Access Management Strategies
- Lighting

East Upriver Drive Boulder Beach Parking Lot to North Argonne Road

Context

The goal is to increase safety for all users with an emphasis on improving the Centennial Trail connections in Spokane County by reducing fatal and serious injury (FSI) crashes.

- **Jurisdiction:** Spokane County
- **Land Use Context:** Land use varies along the corridor is residential in nature with access to schools. This section serves as an important part of the Centennial Trail with access to recreational areas.
- **Equity:** The Upriver corridor equity score is in a neutral disadvantaged category, meaning it is exactly between very advantaged and very disadvantaged. The equity score is calculated using the ETC Explorer tool and the SRTC's IPD. SRTC identified disadvantaged populations in its Public Participation Plan. These are identified through six indicators of potential disadvantage: individuals with low incomes, race, limited English proficiency (LEP), limited vehicle access, age dependency (elderly and youth), and disabilities.

Crash Overview

The one-mile corridor is part of a High Injury Network (HIN) that extends from the Camp Sekani gravel parking lot to Plante's Ferry Sports Complex. From 2018 to 2022, there were 88 total crashes, 6 of which were FSI crashes. The following crash types resulted in FSI crashes and are listed in order of highest frequency for the corridor.

1. **Pedestrian:** Any crash involving a pedestrian.
2. **Angle:** Involves a driver hitting another driver at an angle, or the "Angle (T)" WSDOT crash classification.¹
3. **Run Off Road:** Typically, single-vehicle crashes that involve the vehicle departing from the roadway and colliding with a roadside object. Also known as Road Departure crashes.

¹ <https://wsdot.wa.gov/sites/default/files/2022-01/NHFP-crash-data-dictionary.pdf>

Boulder Beach Parking Lot to North Argonne Road

Proposed Countermeasures: Countermeasures were selected after an evaluation of the corridor’s context to determine the tools that would be most effective at reducing most common FSI crash types and through input from Spokane County. Effectiveness is presented as a crash reduction factor (CRF), which is the estimated percent reduction in crashes. Table 1 lists the countermeasures selected their level of effectiveness, relative cost, and potential funding opportunities.

Table 1: Summary of Proposed Countermeasures

Proposed Countermeasure	Effectiveness	Cost*	Funding Opportunity**
Systemic			
Accessible Pedestrian Signals	9-70%	\$	D
Automated Enforcement Cameras	23-90%	\$\$\$	D
High Visibility Crosswalks	40%	\$	D
Leading Pedestrian Intervals (LPIs)	9-59%	\$\$	
Sidewalks	65-89%	\$\$\$\$	
Separated Bicycle Facilities	40-66%	\$\$\$	Q, D
Raised Refuge Islands	46-56%	\$\$	Q
Pedestrian Lighting	42%	\$\$	
Rectangular Rapid Flashing Beacons (RRFBs)	47-73%	\$\$	D
Protective Phasing	31-100%	\$	
Access Management	5-31%	\$\$	
Appropriate Speed Limits for All Road Users	N/A	\$	D
Edge Lines	22-37%	\$	D

*Key for the planning-level cost estimate:

\$	Low – typically \$5,000 or less
\$\$	Medium – typically \$5,000 to \$100,000
\$\$\$	Moderate – typically \$100,000 to \$300,000
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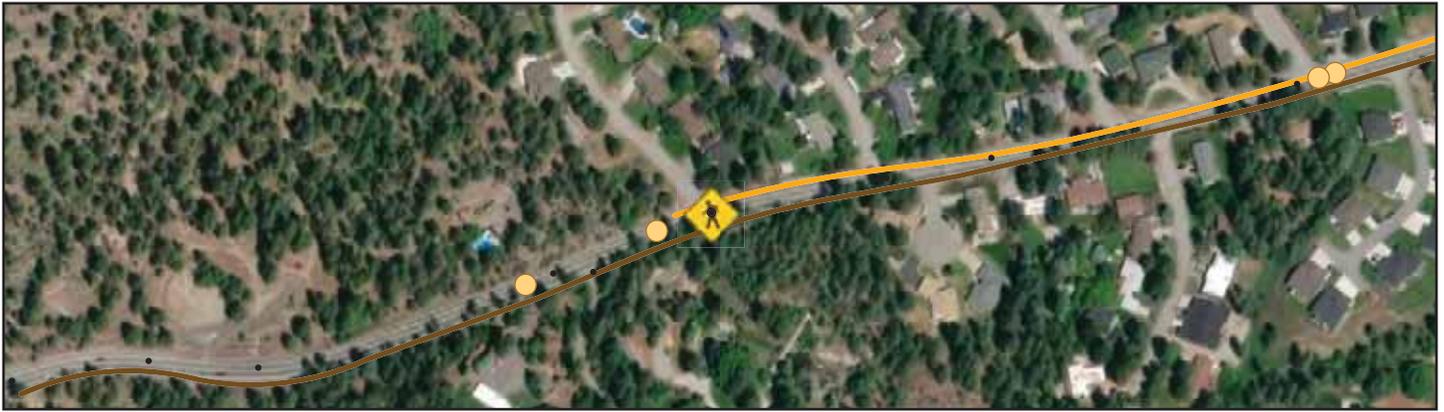
** D - SS4A Demonstration Grants

Q- SS4A Quick Build

The following should be considered when selecting final countermeasures:

- The existing 20 mph school zone sign for westbound drivers should be moved closer to North Marguerite Road, so students walking or bicycling to school are adequately protected. The existing 20 mph school zone sign for westbound drivers is located past two school driveways, which students may use to access the school.
- Confirm appropriate speed limits for all road users after the implementation of the recommended countermeasures. This can be done in the form of a before-and-after speed study during implementation of recommended countermeasures. The Washington State Injury Minimization and Speed Management Policy Elements and Implementations Recommendations is a resource for streets where additional engineering changes or evaluations may be needed to reduce the posted speed limit.²
- Final selection of countermeasures are dependent on additional engineering studies.

² <https://wsdot.wa.gov/sites/default/files/2021-10/InjuryMinimization-SpeedManagement-PolicyElements-Recommendations.pdf>



- | | | |
|----------------------------|---|----------------------------|
| ● Fatal Crash | ● Vehicular Crash | — Existing Sidewalk |
| ● Serious Injury Crash | ◆ Existing/Funded Pedestrian Crossing Enhancement | — Proposed Sidewalk*** |
| ● Existing Traffic Signals | ◆ Proposed Pedestrian Crossing Enhancement** | — Proposed Shared Use Path |
| ● Pedestrian Crash | | — Existing Bike Lane |
| ● Bicyclist Crash | | |

*Pending engineering study of adequate ROW or lane reallocation

**Final location and quantity to be determined through engineering study

*** Pending engineering study to assess if this improvement fits into overall plan for the area and if it is technically feasible to build with current space constraints.



East Upriver Drive - Boulder Beach Parking Lot to North Argonne Road

The one-mile long corridor is part of a longer HIN segment that extends from Camp Sekani Gravel Lot to Plante's Ferry Sports Complex. There were 88 total crashes, six of which were FSI crashes along the full length of the HIN, between 2018 and 2022.

Corridor-Wide Countermeasures for Consideration

- Lighting
- Traffic Calming Measures such as Narrowing Lanes, Chicanes, etc.
- High Visibility Crosswalks
- Appropriate Speed Limits for All Road Users
- Leading Pedestrian Intervals (LPIs)
- Automated Enforcement
- Access Management Strategies
- Provide separation between pedestrian facilities and vehicular traffic

Hayford Road Sprague Avenue to East Mission Avenue

Context

The goal is to increase safety for all users by reducing fatal and serious injury (FSI) crashes.

- **Jurisdiction:** City of Airway Heights
- **Land Use Context:** Land use varies along the corridor and is primarily commercial and residential.
- **Equity:** The corridor is not within a disadvantaged area but Airway Heights in general is in the 69th percentile for transportation insecurity. The equity score is calculated using the ETC Explorer tool and the SRTC's IPD. SRTC identified disadvantaged populations in its Public Participation Plan. These are identified through six indicators of potential disadvantage: individuals with low incomes, race, limited English proficiency (LEP), limited vehicle access, age dependency (elderly and youth), and disabilities.

Crash Overview

The 0.45-mile corridor is on the High Injury Network (HIN) and connects to the HIN intersection of US Highway 2 and Hayford Road. From 2018 to 2022, there were 57 total crashes, 5 of which were FSI crashes. The following crash types resulted in FSI crashes and are listed in order of highest frequency for the corridor.

1. **Pedestrian:** Any crash involving a pedestrian.
 2. **Angle:** Involves a driver hitting another driver at an angle, or the "Angle (T)" WSDOT crash classification.¹
- **Run off the Road. Run Off Road:** Typically, single-vehicle crashes that involve the vehicle departing from the roadway and colliding with a roadside object. Also known as Road Departure crashes.

¹ <https://wsdot.wa.gov/sites/default/files/2022-01/NHFP-crash-data-dictionary.pdf>

Hayford Road

Proposed Countermeasures: Countermeasures were selected after an evaluation of the corridor’s context to determine the tools that would be most effective at reducing most common FSI crash types and through input from the City of Airway Heights. Effectiveness is presented as a crash reduction factor (CRF), which is the estimated percent reduction in crashes. Table 1 lists the countermeasures selected their level of effectiveness, relative cost, and potential funding opportunities.

Table 1: Summary of Proposed Countermeasures

Proposed Countermeasure	Effectiveness	Cost*	Funding Opportunity**
Systemic			
Accessible Pedestrian Signals	9-70%	\$	D
High Visibility Crosswalks	40%	\$	D
Leading Pedestrian Intervals (LPIs)	9-59%	\$\$	
Sidewalks	65-89%	\$\$\$\$	
Separated Bicycle Facilities	40-66%	\$\$\$	Q, D
Raised Refuge Islands	46-56%	\$\$	Q
Pedestrian Lighting	42%	\$\$	
Rectangular Rapid Flashing Beacons (RRFBs)	47-73%	\$\$	D
Access Management	5-31%	\$\$	
Appropriate Speed Limits for All Road Users	N/A	\$	D

*Key for the planning-level cost estimate:

\$	Low – typically \$5,000 or less
\$\$	Medium – typically \$5,000 to \$100,000
\$\$\$	Moderate – typically \$100,000 to \$300,000
\$\$\$\$	High – typically \$300,000 or more

** D - SS4A Demonstration Grants

Q- SS4A Quick Build

The following should be considered when selecting final countermeasures:

- Confirm appropriate speed limits for all road users after the implementation of the recommended countermeasures. This can be done in the form of a before-and-after speed study during implementation of recommended countermeasures. The Washington State Injury Minimization and Speed Management Policy Elements and Implementations Recommendations is a resource for streets where additional engineering changes or evaluations may be needed to reduce the posted speed limit.²
- Final selection of countermeasures are dependent on additional engineering studies.

² <https://wsdot.wa.gov/sites/default/files/2021-10/InjuryMinimization-SpeedManagement-PolicyElements-Recommendations.pdf>



- Fatal Crash
- Serious Injury Crash
- Transit Stops
- Existing/Funded Pedestrian Crossing Enhancement
- Proposed Pedestrian Crossing Enhancement**
- Existing Traffic Signals
- Proposed Shared Use Path
- Pedestrian Crash
- Bicyclist Crash
- Vehicular Crash

**Final location and quantity to be determined through engineering study



South Hayford Road - US Highway 2 to City Limits

The 0.45 mile long corridor had 57 total crashes, five of which were FSI crashes, between 2018 and 2022. It connects to the HIN intersection of US Highway 2 and Hayford Road.

Corridor-Wide Countermeasures for Consideration

- High Visibility Crosswalks
- Accessible Pedestrian Signals
- Appropriate Speed Limits for All Road Users
- Protective Phasing
- Leading Pedestrian Intervals (LPIs)
- Automated Enforcement
- Access Management Strategies
- Lighting