## District: <br> Neighborhood: <br> Project Extent: <br> 2 <br> West Hills <br> West Drive from Westcliff Place to Azalea Drive Estimate: \$174,000

Problem Statement: Residents of the West Hills neighborhood raised concerns over speeding and pedestrian crossing safety on West Drive - specifically the visibility and frequency of pedestrian crossings.


West Drive from Westcliff Place to Azalea Drive

## Traffic Analysis

West Drive in the study area is classified as an urban minor collector. West Drive provides one lane in each direction and does not have a posted speed limit and does not provide on-street parking or provide sidewalks. The roadway has narrow lanes (approximately 34 -feet wide measures curb to curb) and limited right-of-way (approximately 50 feet wide). Westcliff Place in the study area is classified as an urban minor collector. Westcliff Place provides one lane in each direction, does not have on-street parking, and has sidewalks on both sides of the street south of West Drive. Westcliff Place does not have a posted speed limit, it does have 15 miles per hour turn warning signs in both directions approaching the curve near the golf course frontage. West Drive and Westcliff Place are designated a bike friendly route on the Spokane Bike and Pedestrian Master Plan. Azalea Drive in the study area is classified as an urban local access road, provides one lane in each direction, does not have a posted speed limit, provides on-street parking on both sides of the street, and does not have a sidewalk.

The table below shows daily traffic counts and speed data along West Drive west of Azalea Drive. The daily traffic count was 247 vehicles. The $85^{\text {th }}$ percentile speed along this corridor was 31 miles per hour. Although there is not a posted speed limit, the statutory speed limit is 25 miles per hour which indicates there is a moderate speeding issue.

2022 Daily Traffic and $85^{\text {th }}$ Percentile Speeds on West Drive west of Azalea Drive

| Direction | \# Lanes | $\mathbf{2 0 2 2}$ Estimated Daily Traffic <br> (Vehicles per day) | $\mathbf{8 5}^{\text {th }}$ Percentile Speed <br> (mph) | Posted or <br> Statutory <br> Speed (mph) |
| :---: | :---: | :---: | :---: | :---: |
| A Street | 1 | 147 |  |  |
| EB | 1 | 100 |  |  |
| WB | 247 | 31 | 25 |  |
| Both Dir. | 2 |  |  |  |

${ }^{\text {a }}$ Traffic data collected in March 2018. Traffic volumes were grown at a $1.0 \%$ annual growth rate, to estimate 2022 traffic conditions.

One crash was recorded over the last five years (from 2017 to 2021). The crash occurred on Westcliff Place south of the golf course frontage and was caused by a vehicle hitting a boulder in the roadway. The crash severity was not reported.

There is low demand for walking on West Drive between the golf course frontage and Azalea Drive. There is an informal dirt trail that provide a direct connection from Rimrock Drive in the Sunset Hills neighborhood to Westcliff Place near the golf course frontage. The trail is through City of Spokane property with a large water tank and communication tower. Upgrading the dirt trail to a paved multi-use path would provide a direct connection between the neighborhood and the golf course. Extending the sidewalks on the west side of West Drive along the golf course frontage would support the on-street parking needs.

The need for enhanced pedestrian crossing treatments across Westcliff Place and West Drive was analyzed based on NCHRP Report 562, using collected traffic data. Based on the findings, a marked crosswalk is the preferred treatment if there are 20 or more pedestrian crossings during the peak hour. Although pedestrian data is not available, it is assumed the 20 or more pedestrian crossing threshold is met due to the neighborhood and apartment complex to the east, the existing trail through the City property and the golf course to the west. The crossing location at the golf course frontage has limited sight distance due to the vertical curve. An active advanced warning system may be needed to alert drivers of the pedestrian crossing.

## Recommended Solution

The installation of 25 mile per hour posted speed limit signs on Westcliff Place and West Drive is recommended to provide clear expectations for drivers.

## Spokane Traffic Calming Master Plan

The extension of the existing curb-tight sidewalks on the west side of Westcliff Place is recommended to West Drive along the golf course frontage to support on-street parking needs.

The removal of the low growing vegetation that covers the sidewalk on the east side of Westcliff Place is recommended to improve pedestrian conditions.

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CITY OF SPOKANE, WASHINGTON


SPOKANE TRAFFIC CALMING MASTER PLAN


## Spokane Traffic Calming Master Plan

## District: 2 <br> Neighborhood: <br> Project Extent: <br> West Hills <br> Rosamond Avenue and F Street Estimate: \$286,000

Problem Statement: Residents of the West Hills neighborhood raised concerns over intersection control at Rosamond Avenue and F Street.


Rosamond Avenue and F Street Intersection

## Traffic Analysis

Rosamond Avenue in the study area is classified as an urban minor collector. Rosamond Avenue provides one lane in each direction, does not have a posted speed limit, provides on-street parking in the residential areas, and is designated a bike friendly route in the Spokane Bike and Pedestrian Master Plan. F Street in the study area is classified as an urban local access road. F Street provides one lane in each direction and on-street parking only north of Rosamond Avenue, does not have a posted speed limit, and is not included in the Spokane Bike and Pedestrian Master Plan.

Rosamond Avenue and F Street have a moderate grade uphill towards the west and north. Rosamond Avenue curves through the intersection which limits driver sight distance for making turn movements. A

## Spokane Traffic Calming Master Plan

single-family driveway connects to the northwest corner of the intersection. There are several large trees and lower vegetation that impedes driver sight.

The F Street/Rosamond Avenue intersection looking to the west is shown below. Rosamond Avenue has a parallel dead-end facility at a lower elevation that intersects F Street just south of the study intersection. The closely spaced intersection configuration increases vehicle conflicts and driver confusion. The lower Rosamond Avenue proves access to two single family homes and planned development. The other fronting homes have access on F Street or Sunset Boulevard to the south. F Street is controlled with stop signs on the north and southbound approaches at Rosamond Avenue.


The table below shows daily traffic counts for the study roadways. Speed data was not available. PM peak hour data showed the intersection serves low volumes with no movements over 20 vehicles per hour. There were 5 pedestrians and one bicyclist recorded during the PM peak hour.

2022 Daily Traffic (Vehicles per day) on Rosamond Avenue and F Street Intersection

| Direction | \# Lanes | 2022 Daily Traffic <br> (Vehicles per day) $^{\text {a }}$ |
| :---: | :---: | :---: |
| Rosamond Avenue |  |  |
| EB | 1 | 330 |
| WB | 1 | 460 |
| Both Dir. | 2 | 790 |
| F Street |  |  |
| NB | 1 | 420 |
| SB | 1 | 230 |
| Both Dir. | 2 | 550 |

a Traffic data collected in November 2022 during PM peak hours. Traffic volumes were multiplied by a factor of 10 to reflect estimated daily traffic conditions.

Based on the turn movement volumes, the current intersection control with stop signs on F Street is appropriate.

No crashes were recorded over the last five years (from 2017 to 2021) near the study intersection.

There is an opportunity to close the lower Rosamond Avenue intersection with F Street if alternate access can be provided to the two homes at the west end. Adding new driveways onto Sunset Boulevard, an urban principal arterial, would not meet the city's access spacing standards. Connecting the lower Rosamond Avenue to the upper Rosamond Avenue is challenging due to the change in grade and close spacing. If alternate access is not available and the connection to lower Rosamond Avenue to F Street must stay open, the intersection could be reconstructed as a separate approach and spaced further south from upper Rosamond Avenue. There is a wide right-of-way available on the west side of $F$ Street.

It would be beneficial to relocate the driveway on the northwest corner of the intersection but the grade difference on the adjacent roadways is challenging. The driveway serves one home, and the vehicle usage is estimated to be very low.

## Recommended Solution

Several modifications to the intersection are recommended to reduce vehicle conflicts and improve overall safety:

- There is an opportunity to close the lower Rosamond Avenue intersection with F Street if alternate access can be provided to the two homes at the west end. However, if this is not feasible, reconstruct the lower Rosamond Avenue connection to F Street as a separate approach. Locate the approach further south, opposite the driveway for 1007 S F Street.
- Expand the southeast corner of the intersection to reduce the radius and move the stop sign further north, closer to Rosamond Avenue to improve driver visibility.
- Add stop bars on the F Street approaches to increase visibility of the intersection.
- Add MUTCD intersection warning signs (e.g., W2-1, W2-3, W2-7L, etc.) on both approaches on Rosamond Avenue


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SPOKANE TRAFFIC CALMING MASTER PLAN ROSAMOND AVENUE AND F STREET
WEST HILLS NEIGHBORHOOD

| District: | 2 |
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| Neighborhood: | West Hills |
| Project Extent: | A Street Corridor from Riverside Avenue to $7^{\text {th }}$ Avenue |
|  | Estimate: $\$ 64,000$ |

Problem Statement: Residents of the West Hills neighborhood raised concerns over speeding on A Street from Riverside Avenue to $7^{\text {th }}$ Avenue.


A Street Corridor from Riverside Avenue to $7^{\text {th }}$ Avenue

## Traffic Analysis

A Street in the study area is classified as an urban local access road. A Street provides one lane in each direction and on-street parking in some sections, does not have a posted speed limit or sidewalks. A Street is designated a bike friendly route on the Spokane Bike and Pedestrian Master Plan. Riverside Avenue in the study area is classified as an urban major collector. Riverside Avenue provides one lane in each direction and does not have a posted speed limit, on-street parking, or sidewalks. The Spokane Bike and Pedestrian Master Plan designates Riverside Avenue as a moderate traffic (shared) facility. $7^{\text {th }}$ Avenue in the study area is classified as an urban local access road. $7^{\text {th }}$ Avenue provides one lane in each direction and does not have a posted speed limit or on-street parking. $7^{\text {th }}$ Avenue has an inadequate sidewalk network on the north side of the street and none on the south side of the street. $7^{\text {th }}$ Avenue is

## Spokane Traffic Calming Master Plan

not included in the Spokane Bike and Pedestrian Master Plan. The city plans to extend the Fish Lake Trail through High Bridge Park with a crossing on A Street south of $3^{\text {rd }}$ Avenue.

The table below shows daily traffic counts and speed data along A Street between High Bridge Park driveway and $3^{\text {rd }}$ Avenue. The 2022 daily traffic count was 215 vehicles. The $85^{\text {th }}$ percentile speed along this corridor was 25 miles per hour, which does not indicate a speed issue.

2022 Daily Traffic and $85^{\text {th }}$ Percentile Speeds on A Street (High Bridge Park to $3^{\text {rd }}$ Avenue)

| Direction | \# Lanes | $\mathbf{2 0 2 2}$ Estimated Daily Traffic <br> (Vehicles per day) $^{\text {a }}$ | $\mathbf{8 5}^{\text {th }}$ Percentile Speed <br> $(\mathbf{m p h})$ | Posted or <br> Statutory <br> Speed (mph) |
| :---: | :---: | :---: | :---: | :---: |
| A Street |  |  |  |  |
| NB | 1 | 110 |  |  |
| SB | 1 | 105 | 25 | 25 |
| Both Dir. | 2 | 215 |  |  |

## Recommended Solution

A Street provides a direct and straight connection between Riverside Avenue and $7^{\text {th }}$ Avenue. The roadway could benefit from the addition of traffic calming elements to manage driver speeds and improve pedestrian crossings. The following improvements are recommended.

- Add speed humps on A Street at the following locations
- South of High Bridge Park access (just south of Riverside Avenue, lowest priority)
- North of Hartson Avenue
- Add a raised pedestrian crossing on A Street to serve the planned Fish Lake Trail and install an RRFB (rectangular rapid flashing beacon)



## Spokane Traffic Calming Master Plan

| District: | 2 |
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| Neighborhood: | West Hills |
| Project Extent: | Sand Ridge Ave (near Government Way and Whistalks <br> Way Intersection) <br>  <br>  <br> Estimate: $\$ 50,000$ |

Problem Statement: Residents of the West Hills neighborhood raised concerns over cut through traffic and speeding on Sand Ridge Avenue due to drivers avoiding congested conditions at the signalized Government Way/Whistalks Way intersection.


Sandridge Avenue near Government Way and Whistalk Way Intersection

## Traffic Analysis

Sand Ridge Avenue in the study area is classified as an urban local access road. Sand Ridge Avenue provides one lane in each direction, does not have a posted speed limit, and provides on-street parking and sidewalks. Government Way is classified as an urban minor arterial roadway. Government Way provides one lane in each direction, has a posted speed limit of 35 miles per hour, does not provide onstreet parking, and has a multi-use path on the east side.

To avoid congested conditions at the signalized Government Way/Whistalks Way intersection, northbound drivers on Government Way would divert their route to Sand Ridge Avenue and River Ridge

## Spokane Traffic Calming Master Plan

Boulevard to access Whistalk Way eastbound. The Government Way/Sandridge Avenue and Whistalk Way/River Ridge Boulevard intersections are stop sign controlled on the side street approaches. The Sand Ridge Avenue/ River Ridge Boulevard intersection is uncontrolled.

The table below shows daily traffic counts and speed data on Sand Ridge Avenue between Government Way and River Ridge Boulevard. The 2022 daily traffic count was 391 vehicles per day. The $85^{\text {th }}$ percentile speed along this corridor was 30 miles per hour which does indicate a moderate speeding issue.

2022 Daily Traffic and $85^{\text {th }}$ Percentile Speeds on Sand Ridge Avenue at River Ridge Boulevard

| Direction | \# Lanes | $\mathbf{2 0 2 2}$ Estimated Daily Traffic <br> (Vehicles per day) $^{\text {a }}$ | $\mathbf{8 5}^{\text {th }}$ Percentile Speed <br> (mph) | Posted or <br> Statutory <br> Speed (mph) |
| :---: | :---: | :---: | :---: | :---: |
| Sandridge Avenue |  |  |  |  |
| EB | 1 | 184 | 29 |  |
| WB | 1 | 207 | 30 | 25 |
| Both Dir. | 2 | 391 | 30 | 20 |

## Recommended Solution

Sand Ridge Avenue provides a direct connection between Government Way and River Ridge Road. The roadway could benefit from the addition of traffic calming elements to manage driver speeds. The following improvements are recommended.

- Add speed humps at the following locations along Sand Ridge Avenue to slow drivers and discourage cut through traffic:
- Two evenly spaced locations between Rogue River Street and River Ridge Boulevard
- Add a MUTCD speed limit sign along Sand Ridge Avenue for eastbound traffic entering the neighborhood from Government Way



## Spokane Traffic Calming Master Plan

## District: 2 <br> Neighborhood: <br> Project Extent: <br> West Hills <br> F Street at Whittier Park <br> Estimate: \$725,000

Problem Statement: Residents of the West Hills neighborhood raised concerns over speeding on F Street at Whittier Park.


F Street at Whittier Park between Hartson Avenue and $7^{\text {th }}$ Avenue

## Traffic Analysis

F Street, Hartson Avenue and $7^{\text {th }}$ Avenue in the study area are all classified as urban local access roads. All three streets provide one lane in each direction and on-street parking on both sides, do not have a posted speed limit, and are not included in the Spokane Bike and Pedestrian Master Plan. F Street provides sidewalks. Hartson Avenue has a sidewalk on the north side of the street in the 3400 block but lacks sidewalks everywhere else. $7^{\text {th }}$ Avenue does not have sidewalks. Marked crosswalks are provided on F Street at the Hartson Avenue and $7^{\text {th }}$ Avenue intersections.

The table below shows daily traffic counts and speed data along F Street between Hartson Avenue and $7^{\text {th }}$ Avenue. The 2022 daily traffic count was 231 vehicles. The $85^{\text {th }}$ percentile speed along this corridor was 27 miles per hour which does not indicate a speeding issue.

## Spokane Traffic Calming Master Plan

2022 Daily Traffic and $85^{\text {th }}$ Percentile Speeds on F Street between Hartson Ave and $7^{\text {th }}$ Ave

| Direction | \# Lanes | $\mathbf{2 0 2 2}$ Estimated Daily Traffic <br> (Vehicles per day) $^{\text {a }}$ | $\mathbf{8 5}^{\text {th }}$ Percentile Speed <br> (mph) | Posted or <br> Statutory <br> Speed (mph) |
| :---: | :---: | :---: | :---: | :---: |
| F Street |  |  |  |  |
| NB | 1 | 129 | 28 |  |
| SB | 1 | 102 | 26 | 25 |
| Both Dir. | 2 | 231 | 27 | 25 |

## Recommended Solution:

F Street provides a direct connection through the neighborhood to Sunset Boulevard. The roadway could benefit from the addition of traffic calming elements to manage driver speeds, especially along the park frontage. The following improvements are recommended.

- Designate a 20 mile per hour speed zone on F Street along the park frontage. A 20 mile per hour speed zone will require Council action.
- Install a midblock speed hump on F Street between Hartson Avenue and $7^{\text {th }}$ Avenue.
- Install curb extensions at the existing marked crosswalks on F Street at Hartson Avenue and $7^{\text {th }}$ Avenue.
- Relocate the northbound MUTCD park sign (W15-1) on F Street to an area without as much vegetation growing around it. Overgrowth has resulted in low visibility of the sign.





ROPOSED SPEED LIMT SIGN

Citt of spokane, washington


SPOKANE TRAFFIC CALMING MASTER PLAN F STREET
TTH AVENUE TO HARTSON AVENUE
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