Rose Hill Street Temporary Traffic Calming

ROOSEVELT STREET TO VISTA AVENUE

Final Report | September 2022

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Adopted by ACHD Commission September 28, 2022

Rose Hill Street Temporary Traffic Calming, Roosevelt St / Vista Ave Recommended Concept

ACCORDING TO THE PUBLIC SURVEY, PEOPLE ARE CONCERNED ABOUT SAFETY ON ROSE HILL STREET.

72%
People driving too fast (153)

65%
Biking doesn't feel safe (138)

63%
Crossing the street doesn't feel safe (134)

This concept was the #1 choice of Rose Hill corridor residents and the #2 choice of the general public.

Rose Hill Street Temporary Traffic Calming

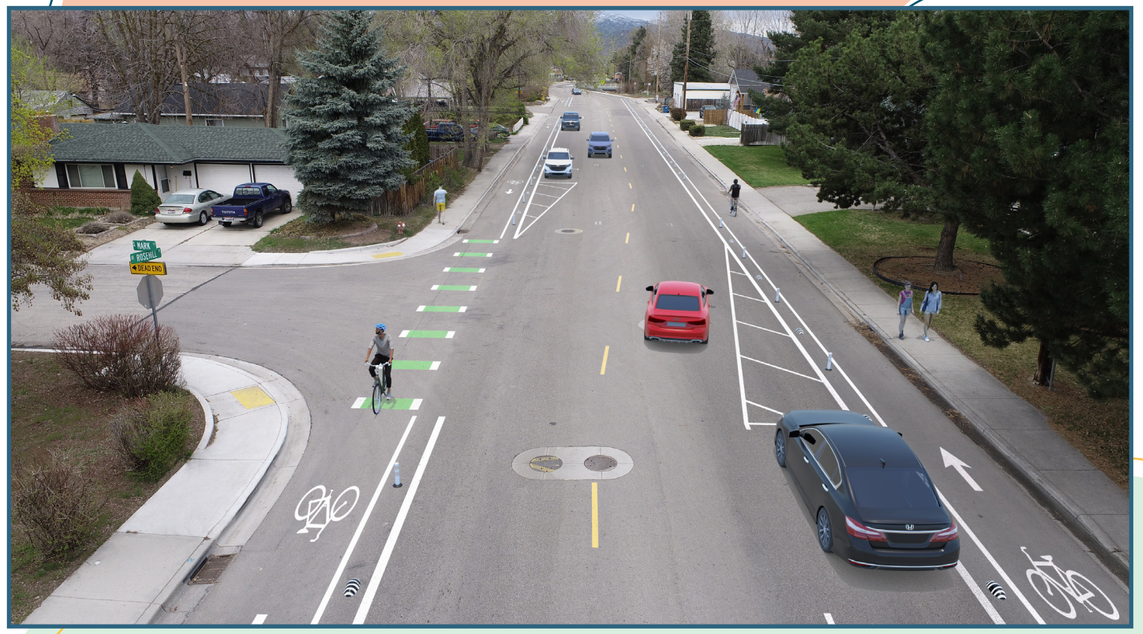
Recommended Concept

SEPARATED BIKE LANES, ONE SIDE PARKING, NO CENTER TURN LANE

Description

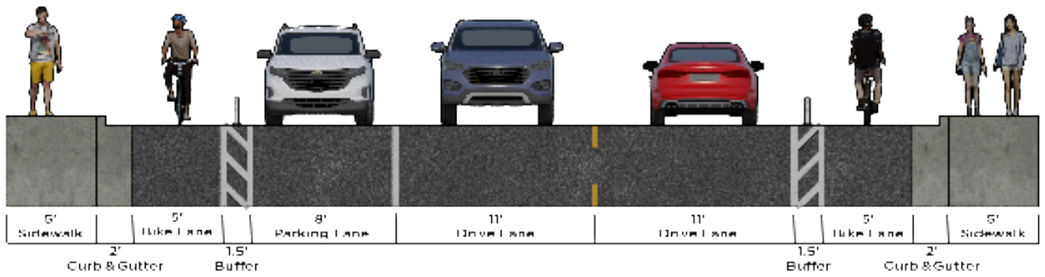
- Addition of on-street bike lanes, separated by a painted buffer with candles, armadillos, or planters
- Removal of the continuous center left-turn lane
- Retains parking on one side of the street
  - Alternates sides of the road to provide shifts in the travel lanes
- Potential to add left-turn lane and remove parking lane in certain areas

Cost Estimate
$390,000



BENEFITS	CONSIDERATIONS
Results in bicycle level of traffic stress 1 or 2, depending on final separation materials	Removes center turn lane, which will add delay to through traffic
Maintains some parking/delivery access	Increases potential for rear-end crashes with no turn lane
Narrows the road and provides horizontal deflection	
Significant speed reduction anticipated (3-6 mph), depending on level of treatments installed	

C



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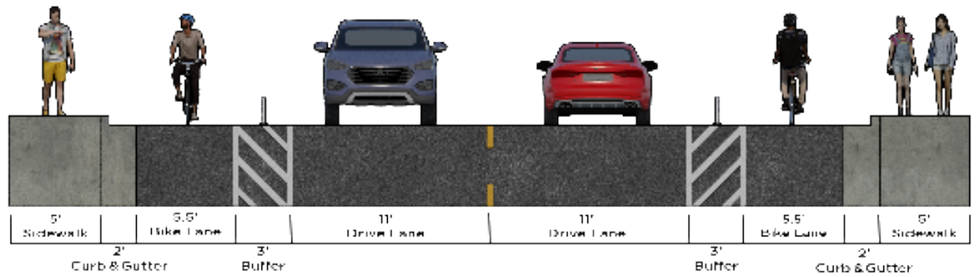
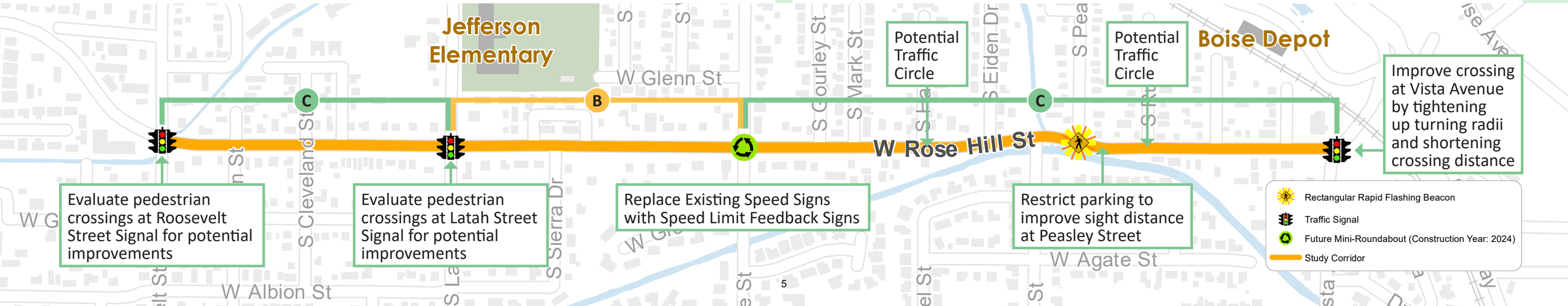




Project Description

During previous outreach efforts, the Ada County Highway District (ACHD) heard from neighborhood residents that there is a desire to calm traffic on Rose Hill Street. Given this feedback, the number of residences that face Rose Hill Street, and measured traffic speeds, ACHD prepared a concept design for temporary traffic calming measures on Rose Hill Street between Roosevelt Street and Vista Avenue. The goal of this project is to enhance the safety of Rose Hill Street for all users. Several alternatives were created through a robust community outreach process and an evaluation of current conditions on the corridor. The recommended concept will:

- Add on-street bike lanes on both sides of the street, separated from the travel lanes by physical separators.
- Retain on-street parking on one side of the street, except between Latah Street and Owyhee Street, where the road is narrower.
- Alternate the on-street parking from one side to the other to help slow traffic.
- Remove the center turn lane.
- Not impact the existing pavement or sidewalks along the corridor.

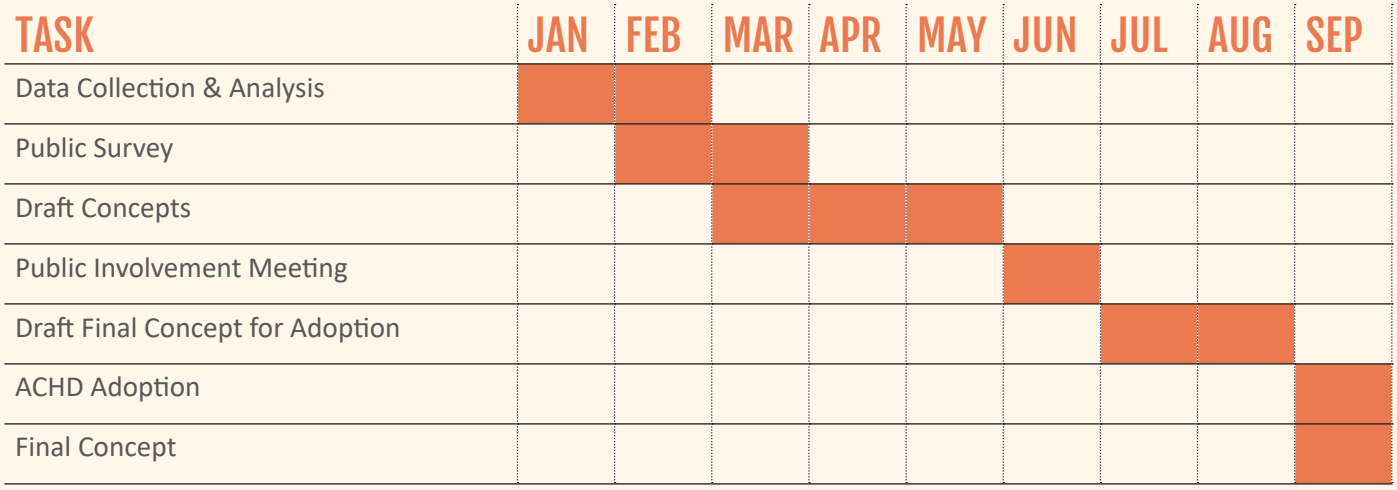
The exact duration of the temporary measures is still to be determined. ACHD will evaluate how effective the treatments are by collecting before and after data. Based on how treatments are performing, and in consultation with the public, ACHD will determine whether to adjust any treatments or make any treatments permanent.

Why This Corridor?

Rose Hill Street is a unique ACHD roadway because it is designated as an arterial street but travels through a residential area with a large amount of homes that directly access Rose Hill Street. The street serves as a key connection in the area and carries relatively high volumes of traffic. Studies have shown that drivers consistently travel over the posted speed limit of 30 mph.

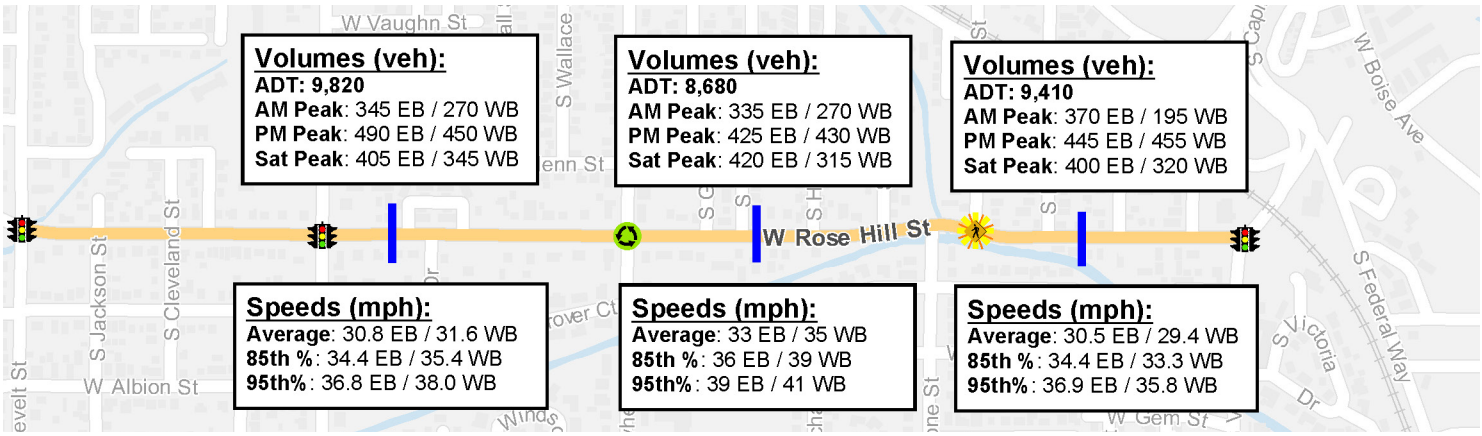
Concept Development Process

The figure below illustrates the concept development process. The project team evaluated multiple alternatives to meet the project's goal of improving safety for all users of Rose Hill Street from Roosevelt Street to Vista Avenue. Three main concepts and several additional options were presented to the public in a second outreach effort. Feedback from the public and stakeholder agencies resulted in the selection of the final concept.

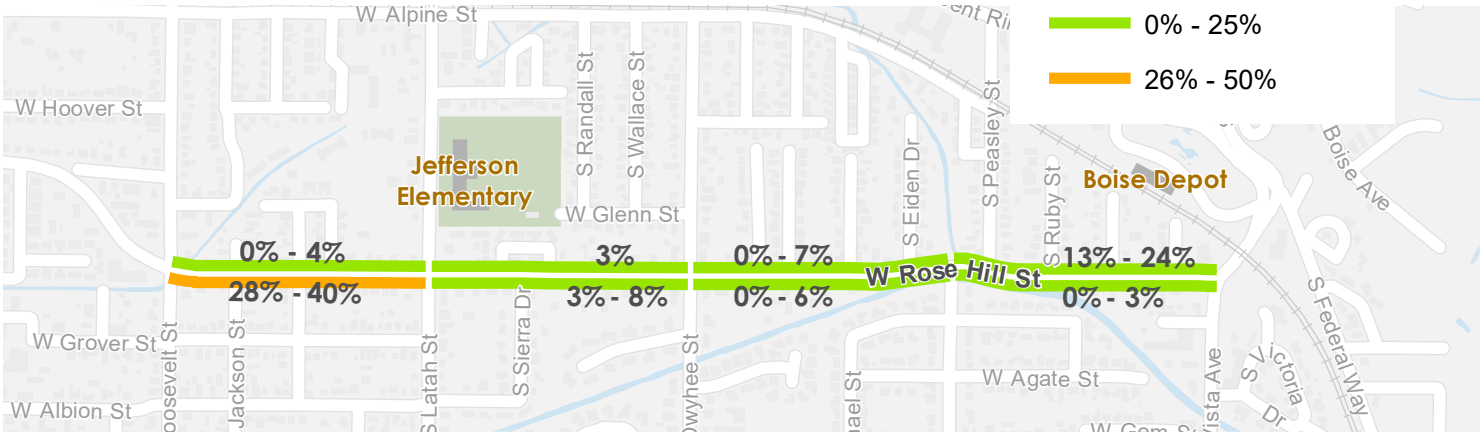


Existing Conditions

TRAFFIC VOLUMES AND SPEEDS:

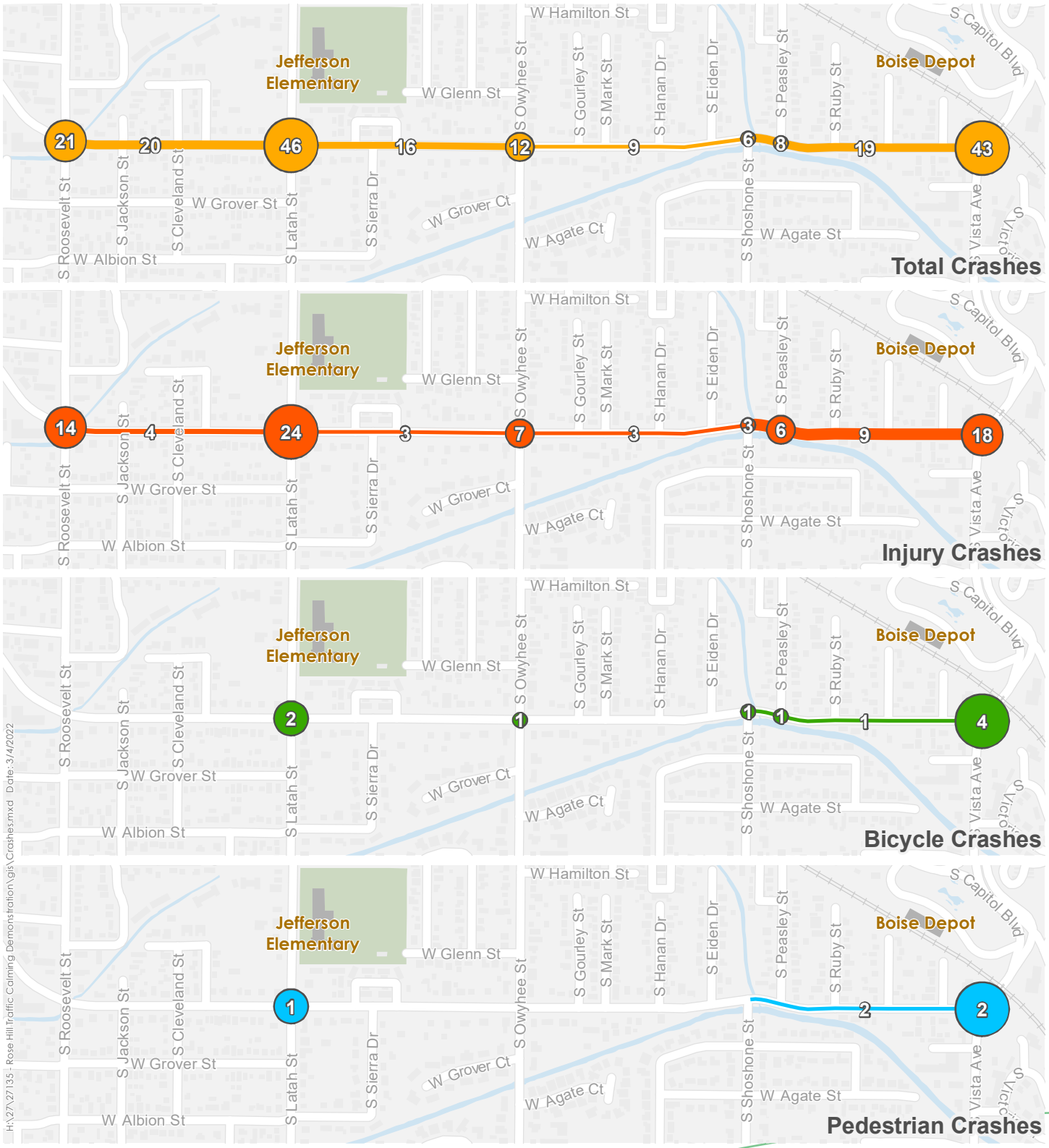


PARKING UTILIZATION:



Please refer to Attachment "C" for more detailed information on existing conditions data.

CRASH HISTORY (10 YEARS):



Intersection Crashes

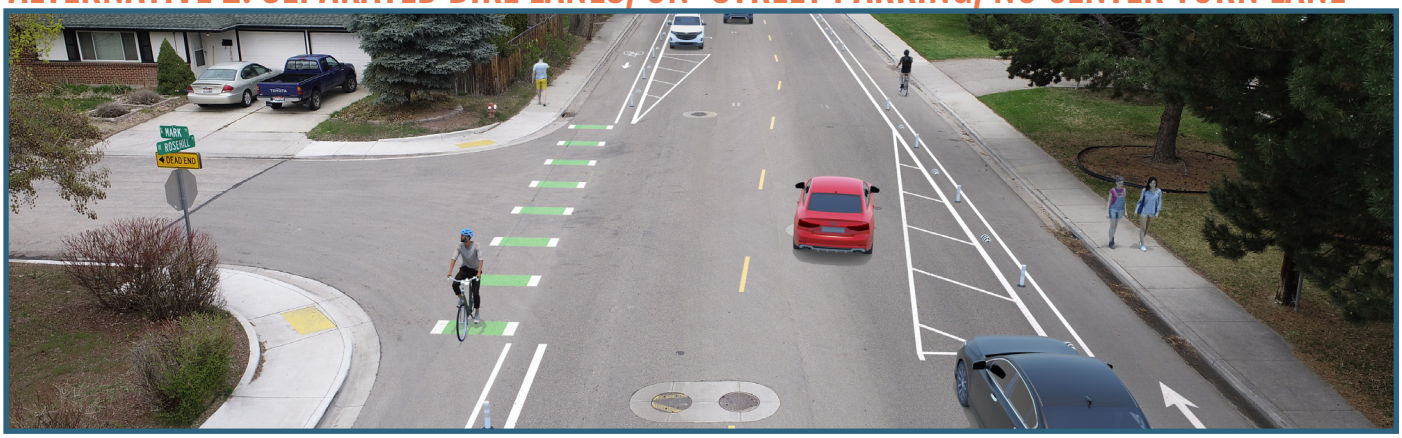
Roadway Segment Crashes

0 900 Feet

Concepts Considered

ALTERNATIVE 1: SEPARATED BIKE LANES, CENTER TURN LANE, NO PARKING

ALTERNATIVE 2: SEPARATED BIKE LANES, ON-STREET PARKING, NO CENTER TURN LANE



ALTERNATIVE 3: CHICANES AND MEDIAN ISLANDS

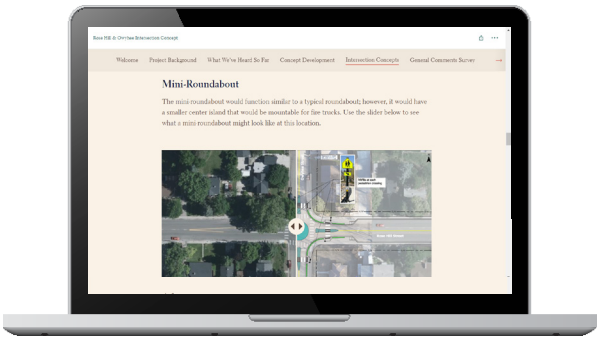
Additional Options:

- Corner treatments at Vista Avenue
- Curb bulb-outs at intersections
- Speed Limit Feedback Signs
- Traffic Circles
- Speed Cushions

Appendix C contains further information on each alternative and the additional options

Outreach

The Rose Hill Street Temporary Traffic Calming concept development process engaged with surrounding property owners and neighborhood residents. The project team conducted two rounds of public outreach. The first sought feedback on existing conditions, challenges, and priorities. The second round obtained feedback on the draft alternatives. ACHD advertised these efforts through mailers (including letters sent to residences along the corridor), social media channels, a regularly maintained project website, and door-to-door outreach. The resulting concept is a direct outcome of the responses we heard from these efforts.



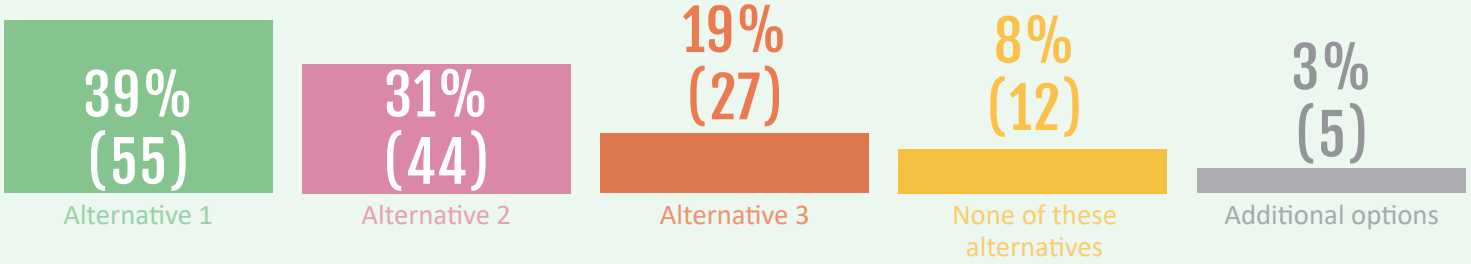
Public comments were collected through the following means:

- Online survey #1 (234 responses) and online comment map (65 comments)
- Online open house with survey #2 (20 attendees, 89 survey responses)
- Door-to-door outreach to Rose Hill Residents (27 responses)
- Over 480 visits to the ACHD project webpage

Appendices A and B contain the full public outreach summaries.

WOULD YOU SUPPORT TRYING THESE CONCEPTS?

Which Alternative would people prefer to see tried out? (all responses)



Which Alternative would Rose Hill residents prefer to see tried out?

Implementation Considerations

The final design will need to address the following considerations:

- Maintain all driveway accesses
- Maintain/enhance sight distance at side streets
- Determine where to provide parking
- Consider whether to provide left-turn lanes at unsignalized intersections
- Replacement strategy for damaged/displaced materials, including organizational responsibility, frequency of replacement. Agencies will sometimes order additional materials to have at the ready for replacement needs.
- Space for trash/recycling/compost pick-up
- If landscaping is provided as part of the materials, coordination with the City and adjacent property owners or citizen groups may be necessary to develop a maintenance strategy for those elements.
- Curbside street sweeping - the concept design provides sufficient width for ACHD's protected bike lane sweeper and the final design will need to maintain sufficient width for this equipment, or include a strategy for removing materials so a standard sweeper can be used.
- Snow plowing - it will need to be determined if and how snowplowing may be conducted during the trial period.

Before and After Considerations

The memo in Attachment C contains additional implementation and maintenance considerations for specific treatments.

The temporary traffic calming measures will be evaluated before and after implementation to determine the success of the project. Data to be collected includes:

- Traffic Speeds
- Traffic Volumes on Rose Hill Street and adjacent routes
- Bike Counts
- Pedestrian Counts
- Public Feedback

Traffic volume and speed data should be collected in the same locations before and after the project is implemented. Ideally, the before and after data is collected over the course of multiple days each time it is collected. After data should be collected at multiple time points throughout the course of the project (i.e., every 2-3 months) to determine if any of the treatments' effects are only temporary (such as upon initial implementation) or influenced by seasonal characteristics. For optimal comparison purposes, at least one round of after data should be conducted in approximately the same week of the year as the before data was collected. Appendix C contains more information on a potential before-after treatment plan.

Estimated Cost

ITEM	COST
Design/Engineering	$50,000
Construction	$250,000
Contingency	$90,000
Total	**$390,000**

Appendix D contains the detailed cost estimate.

APPENDIX A

Public Survey #1 Summary

Rose Hill Street Temporary Traffic Calming

ROOSEVELT STREET TO VISTA AVENUE

Public Feedback Summary | March 10, 2022 – March 24, 2022

Public comments were collected through the following means:

- Online survey (234 responses)
- Online comment map (65 comments and 55 replies to comments)

In total

419 people

viewed the Storymap

What works well for people today on Rose Hill Street

- The left-turn lane is helpful - 53% (109)
- Motor vehicle traffic flows well - 45% (91)

What are your concerns?

72% People driving too fast (153)

65% Biking doesn't feel safe (138)

63% Crossing the street doesn't feel safe (134)

HOW PEOPLE RANKED PRIORITIES FOR ROSE HILL STREET

1. Improving crossings of Rose Hill Street for people walking or biking
2. Slowing motor vehicle speeds
3. Providing bike lanes or paths
4. Maintaining the center left-turn lane
5. Maintaining on-street parking

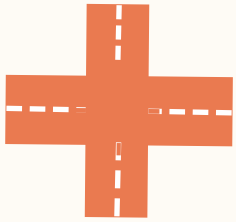
SPECIFIC CONCERNS PEOPLE HAVE

On-street parking limits how far people are able to see down the street

Vehicle Speeds and the crossing distance at Vista Avenue

Vehicles not yielding to people walking and biking in marked crosswalks, especially at Peasley Street and Owyhee Street

People feel it is difficult to turn onto Rose Hill Street from side streets, especially Peasley Street



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APPENDIX B

Public Involvement Meeting & Survey #2 Summary

Rose Hill Street Temporary Traffic Calming

ROOSEVELT STREET TO VISTA AVENUE

Public Feedback Summary | June 9, 2022 – June 23, 2022

Public comments were collected through the following means:

Online Survey
(89 responses)

Two live meetings
(20 total attendees)

Door-to-door outreach to Rose Hill Residents
(27 responses)

In total
481 people
viewed project webpage

Alternative 1: Separated Bike Lanes, Center Turn Lane, No Parking

74% of people would support trying this option

TOP LIKES

- Adds bike lanes (78%/78 responses)
- Keeps center turn lane (69%/69 responses)

TOP CONCERNS

- Not sure it will slow vehicle speeds enough (58%/47 responses)
- Loss of on-street parking (35%/28 responses)

Alternative 2: Separated Bike Lanes, On-Street Parking, No Center Turn Lane

51% of people would support trying this option

TOP LIKES

- Adds bike lanes (78%/67 responses)
- Keeps some on-street parking (41%/35 responses)

TOP CONCERNS

- Loss of center turn lane (62% /50 responses)
- Adds delay for vehicles (58%/37 responses)

Alternative 3: Chicanes and Median Islands

27% of people would support trying this option

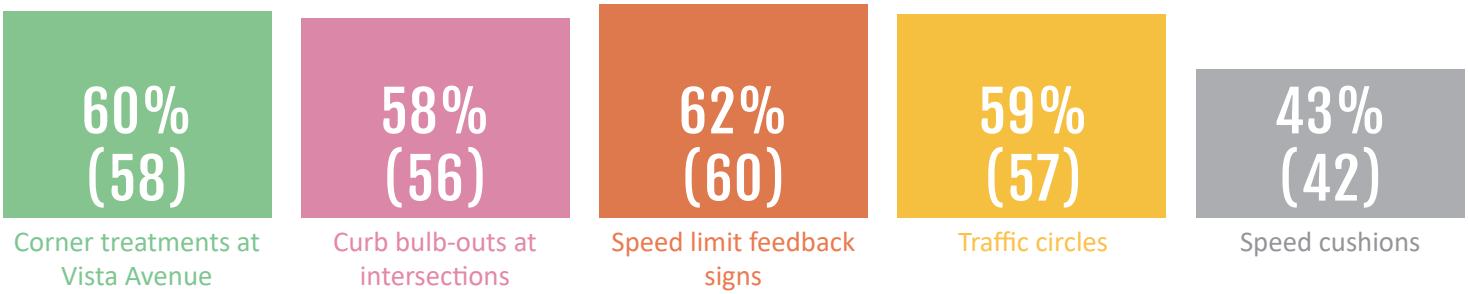
TOP LIKES

- Slows vehicle speeds (63%/50 responses)
- Adds median islands (41%/33 responses)

TOP CONCERNS

- Does not add bike lanes (71%/61 responses)
- Loss of center turn lane (63%/54 responses)

Support for Additional Traffic Calming Options



Which Alternative would people prefer to see tried out?

Which Alternative would Rose Hill residents prefer to see tried out?

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APPENDIX C

Alternatives Memorandum

KITTELSON & ASSOCIATES
101 South Capitol Boulevard, Suite 600
Boise, ID 83702
P 208.338.2683

Alternatives Technical Memorandum

May 11, 2022 Project# 27135.0

To: Kristy Inselman, Senior Transportation Planner
Ada County Highway District

From: Sam Mantsch, Nick Foster, AICP, RSP_1, and Sonia Daleiden, PE, PTOE

RE: Rose Hill Street Temporary Traffic Calming – Alternatives Memorandum

INTRODUCTION

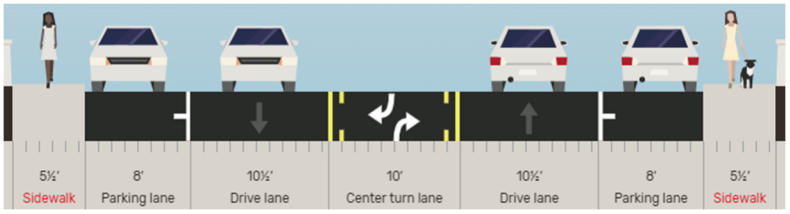
This memorandum describes and evaluates alternative concepts for temporary traffic calming features on Rose Hill Street from Roosevelt Street to Vista Avenue. These alternatives are aimed at providing traffic calming on Rose Hill Street with a temporary design that can be quickly installed, left in place for one year or more, and eventually removed, if desired. The project team developed the alternatives based on existing conditions on the corridor, research of similar projects completed in other areas, conversations with Ada County Highway District (ACHD) staff, and public feedback.

EXISTING CONDITIONS

An analysis of the existing conditions on Rose Hill Street was conducted before determining possible traffic calming measures.

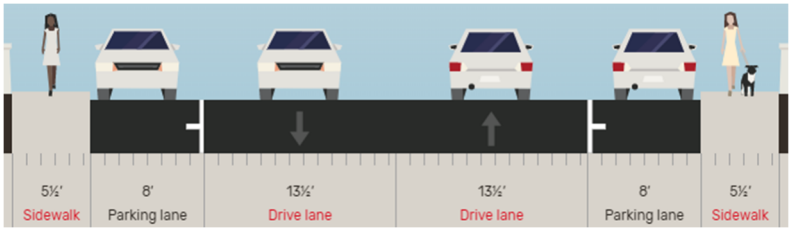
Roadway

The study segment of Rose Hill Street is approximately one mile long and is mostly straight, except for a curve in the area around Shoshone Street and Peasley Street. The current roadway is typically about 47' wide between the curb faces, except for a quarter mile between Latah Street and Owyhee Street, which is about 43' wide. The current cross section includes one travel lane and one parking lane (unstriped) in each direction with a continuous center left-turn lane, except for the narrow section between Latah Street and Owyhee Street, which does not have a center turn lane. There are sidewalks on both sides of the roadway. There are no bike lanes or other designated bicycle facilities. Figure 1 shows the existing roadways cross sections on Rose Hill Street.



Rose Hill Street

- Between Roosevelt Street and Latah Street
- Between Owyhee Street and Vista Avenue



Rose Hill Street

- Between Latah Street and Owyhee Street

Figure 1 Existing Cross Sections

Traffic Volumes and Speeds

ACHD collected motor vehicle volume and speed data at three locations on Rose Hill Street in February and March of 2022. The data showed that traffic volumes range from 8,680 to 9,820 vehicles per day, with an overall average daily traffic volume of 9,300 vehicles per day.

Most vehicles are being driven faster than the current posted speed limit of 30 miles-per-hour (MPH). Drivers are currently traveling on average 39.4 MPH to 35.0 MPH along the corridor, with a corridor-wide average of 31.7 MPH. The 85th percentile speeds range from 33.3 MPH to 39.0 MPH, with a corridor-wide average of 35.4 MPH which is 5 MPH over the posted speed. Figure 2 shows a summary of the speed and volume data collected in February and March of 2022.

Parking

The project team collected on street parking counts along Rose Hill Street in February of 2022. On-street parking data was collected during four time periods:

- Weekday AM (7AM-9AM)
- Weekday midday (11AM-2PM)
- Weekday PM (7PM-9PM)
- Weekend midday (10AM-12PM)

On street parking is currently minimally used and the on-street parking occupancy was found to be less than 25% full during all four time periods on the entire corridor, except for the section between Roosevelt Street and Latah Street on the south side of the road. In this section, the on-street parking occupancy ranged from 28%-40% during the four time periods. Figure 3 shows a summary of parking utilization along the corridor. *Attachment A contains a detailed summary of the parking utilization data*.

Crash History

The Idaho Transportation Department (ITD) provided crash data on Rose Hill Street for the most recent 10 years where data is available (2011 to 2020). The data showed 200 crashes have been reported along the corridor (average of 20 crashes per year) with an injury rate of 46%. There were 10 crashes involving bicycles and 5 crashes involving pedestrians in the 10-year time frame. The majority of crashes were concentrated at the larger intersections with some crashes occurring at smaller intersections and along the segments. Figure 4 shows the summarized crash data on the corridor. *Attachment B contains the raw crash data.*

Planned Projects

A mini-roundabout is being designed for the Rose Hill Street/Owyhee Street intersection. This permanent installation is intended to slow motor vehicle speeds in the vicinity of the intersection. It will complement the proposed temporary traffic calming alternatives.

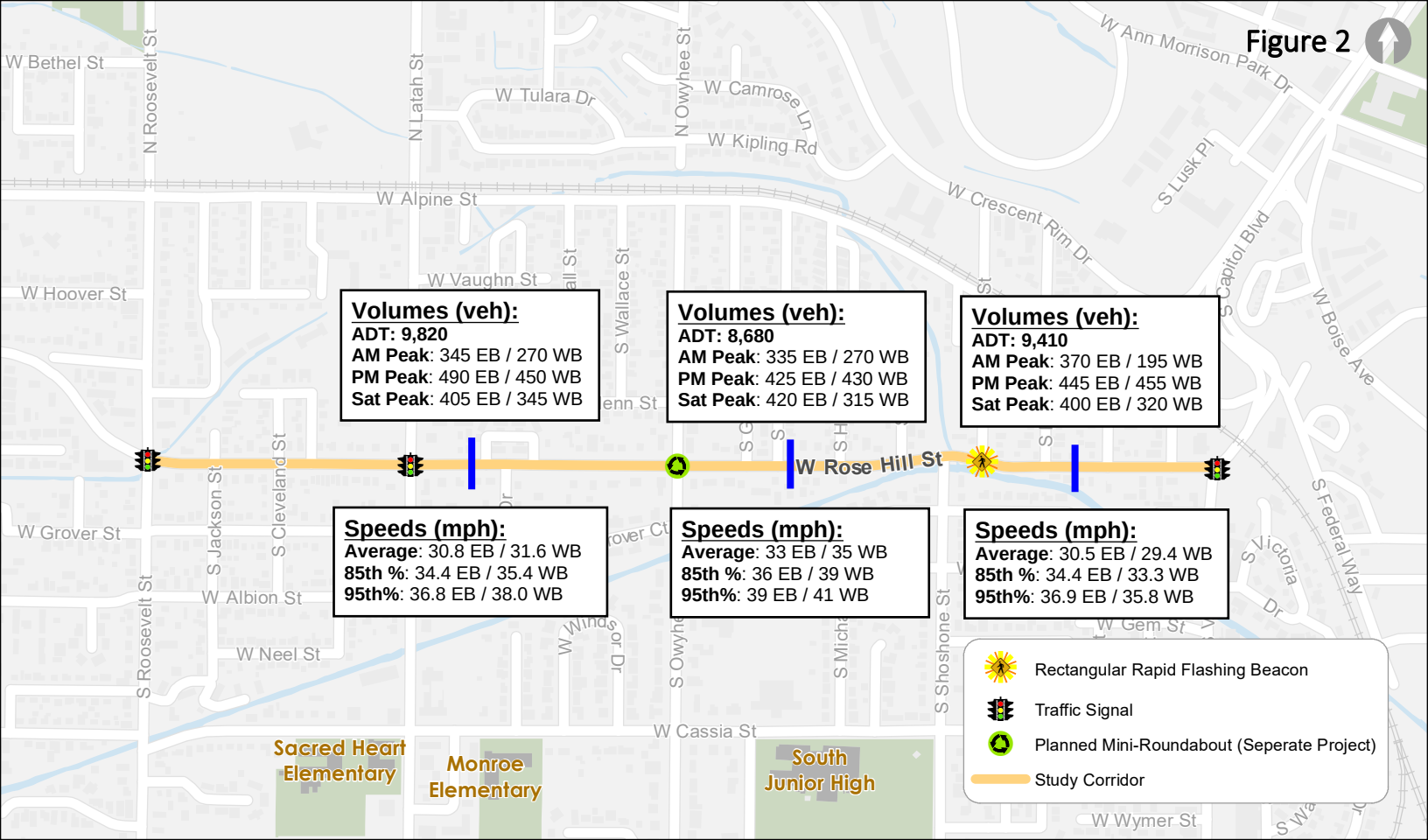
ACHD's *Boise Central Bench Neighborhood Pedestrian and Bicycle Plan* (2012) and *Roadways to Bikeways Plan* (2018) identified a plan for striped bike lanes on Rose Hill Street.

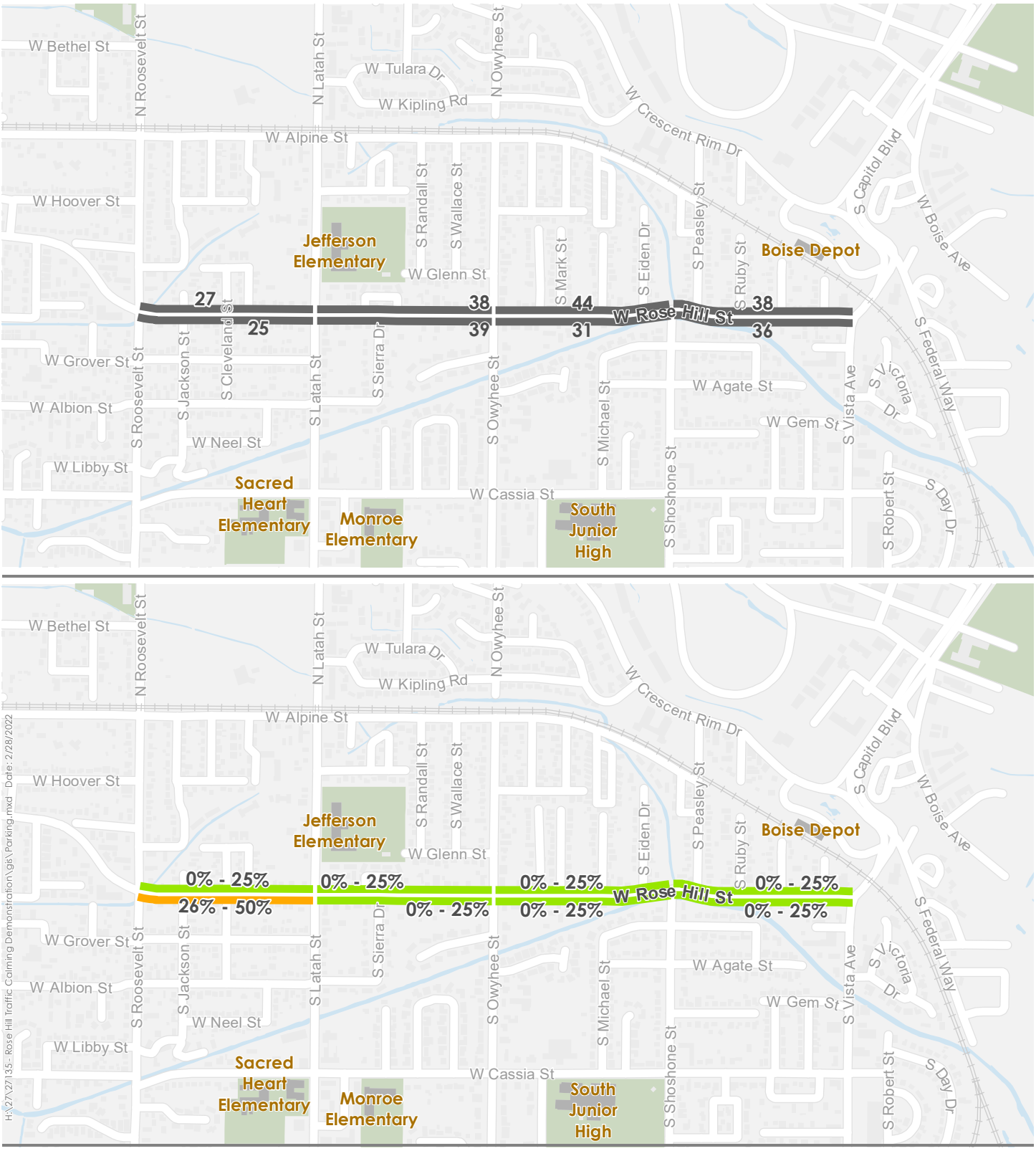
Public Feedback

A public outreach effort was completed in March of 2022 to understand how to public uses Rose Hill Street and to identify any concerns they have about the corridor. *Attachment C contains a summary of the public outreach efforts.* The following key trends were identified:

- People find the center left-turn lane to be helpful
- People drive too fast on the corridor
- Biking does not feel safe on the corridor
- Crossing the street does not feel safe
- Sight distance feels limited in places when cars are parked on the street

Figure 2


W Bethel St
N Roosevelt St
N Latah St
W Tulara Dr
N Owyhee St
W Camrose Ln
W Kipling Rd
W Ann Morrison Park Dr
S Lusk Pl
W Alpine St
W Crescent Rim Dr
S Capitol Blvd
W Boise Ave
W Hoover St
W Vaughn St
S Wallace St
Volumes (veh):
ADT: 9,820
AM Peak: 345 EB / 270 WB
PM Peak: 490 EB / 450 WB
Sat Peak: 405 EB / 345 WB
Volumes (veh):
ADT: 8,680
AM Peak: 335 EB / 270 WB
PM Peak: 425 EB / 430 WB
Sat Peak: 420 EB / 315 WB
Volumes (veh):
ADT: 9,410
AM Peak: 370 EB / 195 WB
PM Peak: 445 EB / 455 WB
Sat Peak: 400 EB / 320 WB
W Rose Hill St
S Jackson St
S Cleveland St
W Grover St
W Albion St
W Neel St
S Roosevelt St
Speeds (mph):
Average: 30.8 EB / 31.6 WB
85th %: 34.4 EB / 35.4 WB
95th%: 36.8 EB / 38.0 WB
Speeds (mph):
Average: 33 EB / 35 WB
85th %: 36 EB / 39 WB
95th%: 39 EB / 41 WB
Speeds (mph):
Average: 30.5 EB / 29.4 WB
85th %: 34.4 EB / 33.3 WB
95th%: 36.9 EB / 35.8 WB
S Victoria Dr
S Federal Way
W Gem St
S Shoshone St
W Cassia St
Sacred Heart Elementary
Monroe Elementary
South Junior High
W Wymer St
Rectangular Rapid Flashing Beacon
Traffic Signal
Planned Mini-Roundabout (Seperate Project)
Study Corridor



Parking Utilization

- 0% - 25%
- 26% - 50%
- Parking Spaces

0 1,080 Feet

Figure 3

KITTELSON & ASSOCIATES

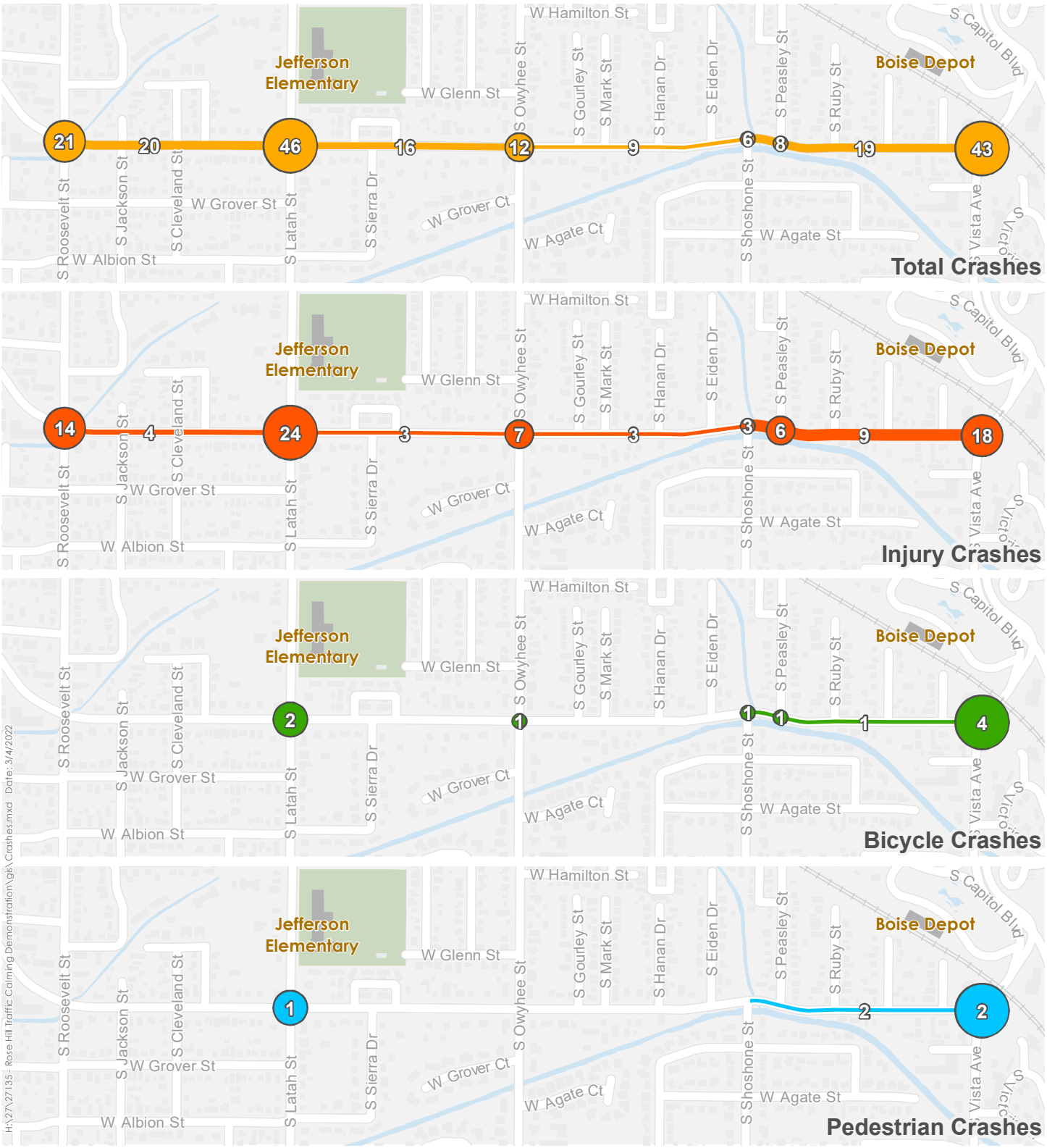


Figure 4

KITTELSON & ASSOCIATES

TEMPORARY TRAFFIC CALMING ALTERNATIVES

All alternatives considered for this project will retain the current roadway width, curbing, and sidewalks. The alternatives reallocate space on the roadway between the existing curbs by removing the current striping and adding new striping and other temporary materials. The alternatives seek to achieve the project's traffic calming objectives, respond to public feedback, and maintain compatibility with existing plans through the following means:

- *Traffic calming techniques* – including horizontal deflection (e.g., chicanes, traffic circles, roadway alignment shifts), vertical deflection (e.g., speed humps), narrowing the roadway, and tightening turning radii at intersections.
- *Providing dedicated space for bikes* – bike lanes are planned for Rose Hill Street, can be used to narrow the roadway, and were a top priority of the public in the March outreach conducted for this plan.
- *Improving crossing conditions* – the top ranked priority in the March public outreach was to improve conditions for people walking or biking across Rose Hill Street

The four alternatives presented here are:

- Alternative 1: Separated Bike Lanes – No On-Street Parking
- Alternative 2: Separated Bike Lakes – On-Street Parking One Side, No Center Turn Lane
- Alternative 3: Chicanes/Median Islands
- Alternative 4: Cycle Track

These four alternatives, along with additional spot treatments that could be applied along with any of the alternatives are described in the following sections.

Alternative 1: Separated Bike Lanes – No Parking

This alternative proposes to restripe the pavement on Rose Hill Street to provide dedicated bike lanes separated from the vehicle travel lanes with a painted buffer and candles, armadillos, and/or planter boxes. It removes the on-street parking from both sides of the street but retains the continuous center left-turn lane. The narrow section between Latah Street and Owyhee Street does not retain the center turn lane. Figure 5 shows a detailed description, considerations, cross sections, and example photos of Alternative 1.

Alternative 2: Separated Bike Lanes – On-Steet Parking One Side, No Center Turn Lane

This alternative proposes to restripe the pavement of Rose Hill Street to provide dedicated bike lanes separated from the vehicle travel lanes with a painted buffer and candles, armadillos, and/or planter boxes. It removes the continuous center left-turn lane but retains on-street parking on one side of the street which could be alternated along the corridor to provide horizontal deflection and increased traffic calming. The narrow section between Latah Street and Owyhee Street does not retain on-street parking on one side of the street. Figure 6 shows a detailed description, considerations, cross sections, and example photos of Alternative 2.

Alternative 3: Chicanes/Median Islands

This alternative proposes to add chicanes and median islands along the corridor to provide horizontal deflection for vehicles. This alternative does not include bike lanes on Rose Hill Street. It could be accomplished by either removing both on street parking lanes or by removing the center turn lane and one on-street parking lane throughout the corridor. The narrow section between Latah Street and Owyhee Street includes a smaller median island or chicanes. Figure 7 shows a detailed description, considerations, cross sections, and example photos of Alternative 3.

Alternative 4: Cycle Track

This alternative proposes a two-way cycle track on the north side of Rose Hill Street. It is accomplished by either removing both on-street parking lanes or by removing the center turn lane and one on-street parking lane. The narrow section between Latah Street and Owyhee Street does not retain the center turn lane or any on-street parking. Figure 8 shows a detailed description, considerations, cross sections, and example photos of Alternative 4.

Spot treatments

There are several other options for traffic calming on Rose Hill Street that could be implemented with any of the above alternatives. These treatments would further enhance the basic features described above for each alternative. Figure 9 describes the potential spot treatments listed below.

- Pedestrian Crossing at Cleveland Street
- Corner Treatments at Vista Avenue
- Increase Sight Distance at Peasley Street
- Speed Limit Feedback Signs
- Speed Humps/Cushions
- Traffic Circles
- Reduce Speed Limit to 25 MPH

Rose Hill Street Temporary Traffic Calming

Figure 5

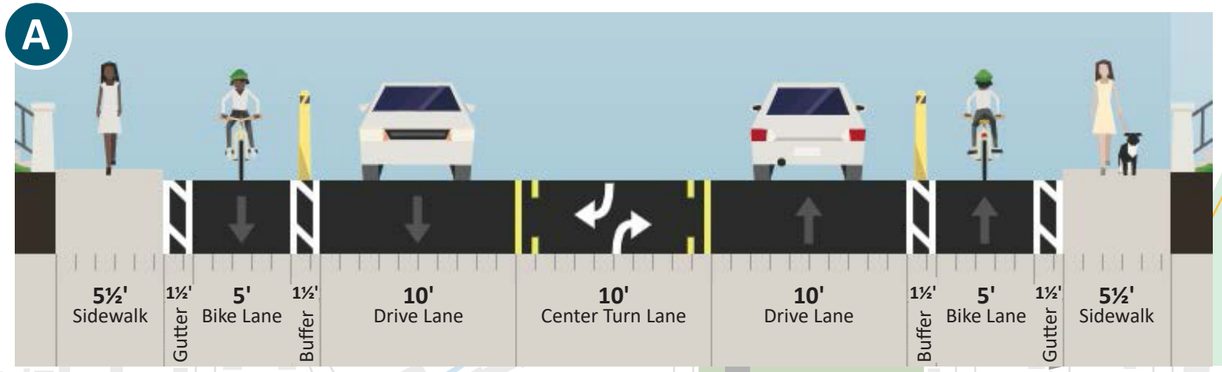
Alternative 1
SEPARATED BIKE LANES – NO PARKING

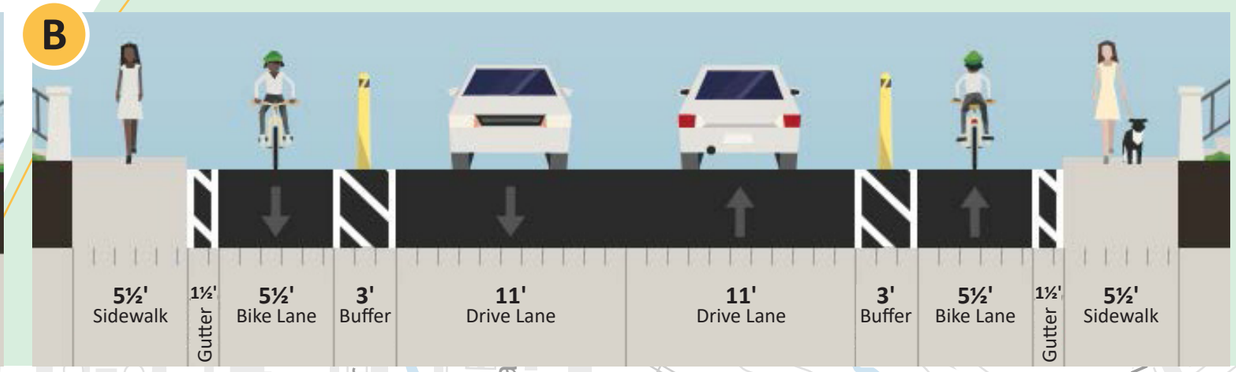
Description

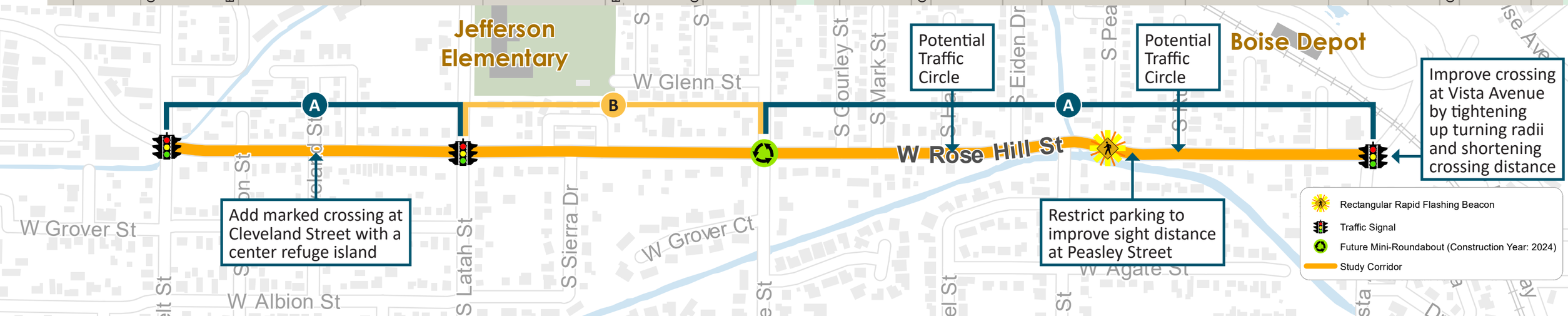
- Addition of on-street bike lanes, separated by a painted buffer with candles, armadillos, or planters
- Removal of parking on both sides of the street
- Retains the continuous center left-turn lane
  - Potential to add parking lane and remove left-turn lane in certain areas
- Potential to remove center turn lane and add chicanes in sections

Cost Estimate
TBD

BENEFITS	CONSIDERATIONS
Results in bicycle level of traffic stress 1 or 2, depending on final separation materials	Potentially removes all parking, limiting opportunities for delivery and maintenance vehicle parking to side streets and driveways
Maintains center turn lane	Maintains long, straight sections of road, unless the center turn lane is removed and chicanes are added for sections
10’ drive and turn lanes may help slow motor vehicle speeds	
Moderate speed reduction anticipated (1-6 mph), depending on level of treatments installed	







Rose Hill Street Temporary Traffic Calming

Alternative 2

SEPARATED BIKE LANES, ONE SIDE PARKING, NO CENTER TURN LANE

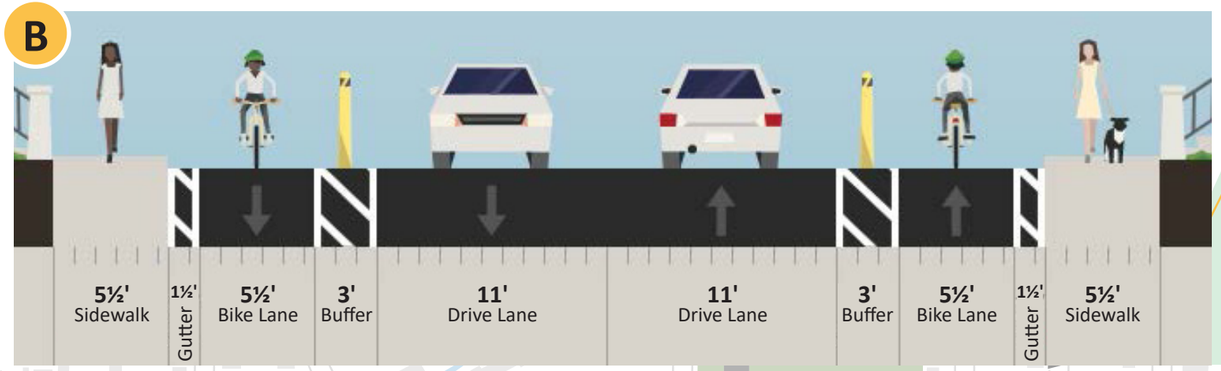
Description

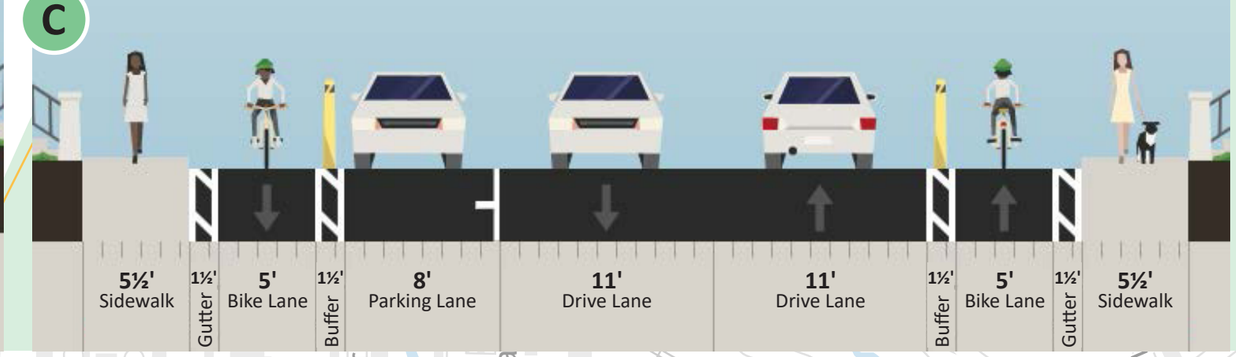
- Addition of on-street bike lanes, separated by a painted buffer with candles, armadillos, or planters
- Removal of the continuous center left-turn lane
- Retains parking on one side of the street
  - Alternates sides of the road to provide shifts in the travel lanes
- Potential to add left-turn lane and remove parking lane in certain areas

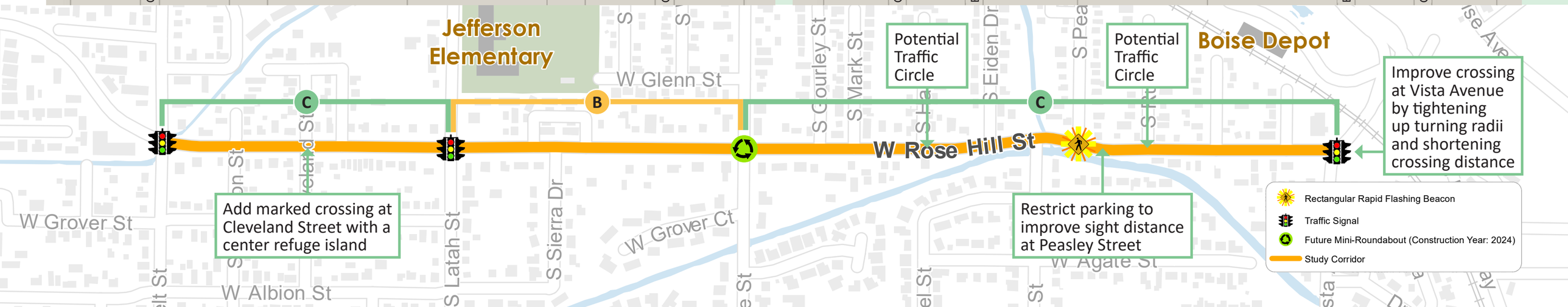
Cost Estimate
TBD

BENEFITS	CONSIDERATIONS
Results in bicycle level of traffic stress 1 or 2, depending on final separation materials	Removes center turn lane, which will add delay to through traffic
Maintains some parking/delivery access	Increases potential for rear-end crashes with no turn lane
Narrows the road and provides horizontal deflection	
Significant speed reduction anticipated (3-6 mph), depending on level of treatments installed	

Figure 6







Rose Hill Street Temporary Traffic Calming

Figure 7

Alternative 3

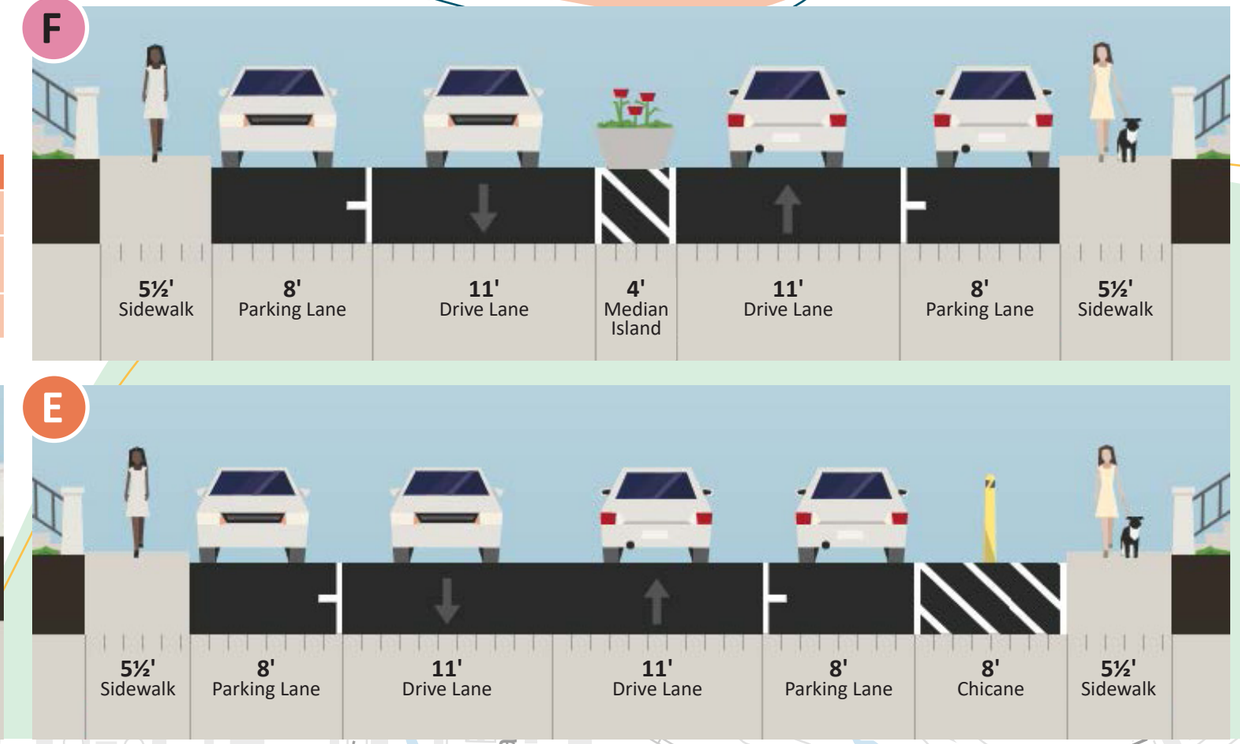
CHICANES/MEDIAN ISLANDS

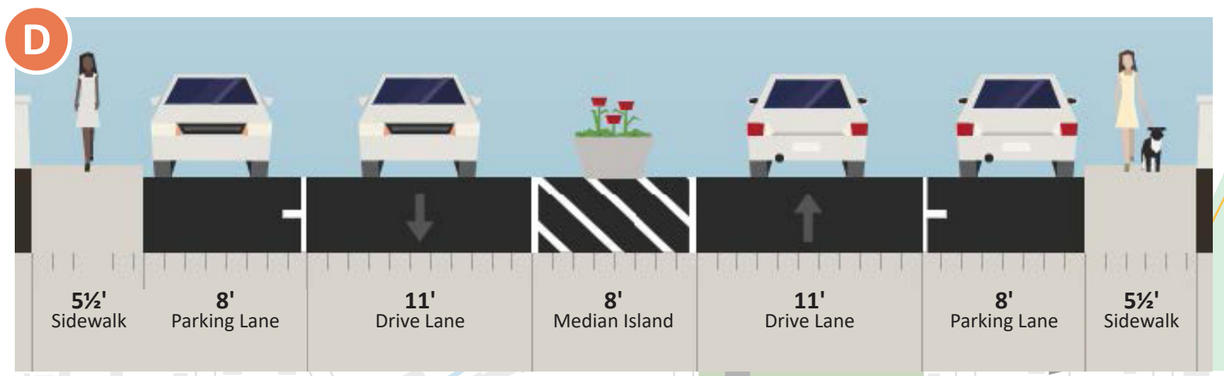
Description

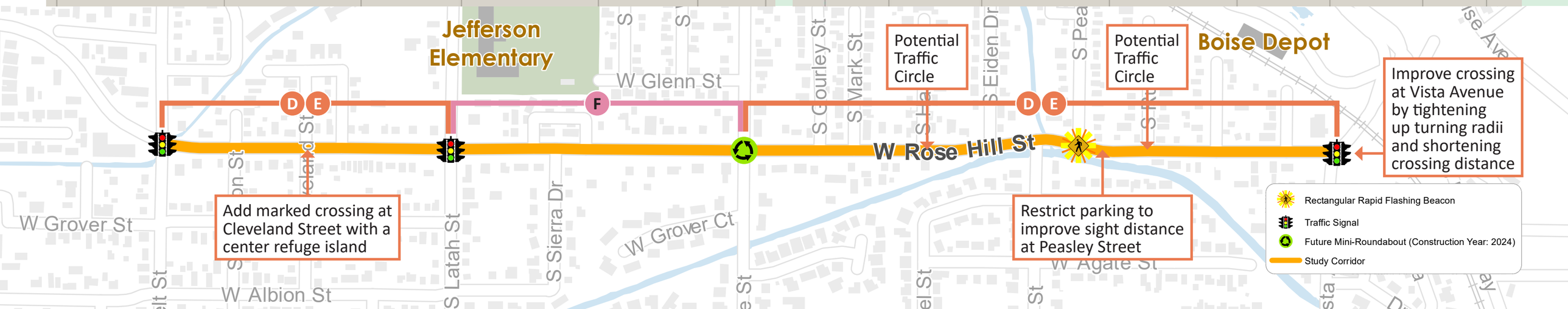
- Removal of the continuous center left-turn lane and/or parking lane
- Introduces horizontal deflection with the addition of median islands and chicanes
- Median Islands and chicanes created with semi-permanent materials
- Bike lanes are not added to the street

Cost Estimate
TBD

BENEFITS	CONSIDERATIONS
Potentially maintains the most parking of all alternatives	Does not add bikes lanes to Rose Hill Street
Introduces horizontal deflection with the addition of median islands and chicanes	If removing center turn lane, there will be added delay to through traffic and increased potential for rear-end crashes
Significant speed reduction anticipated (3-6 mph)	







Rose Hill Street Temporary Traffic Calming

Figure 8

Alternative 4

CYCLE TRACK

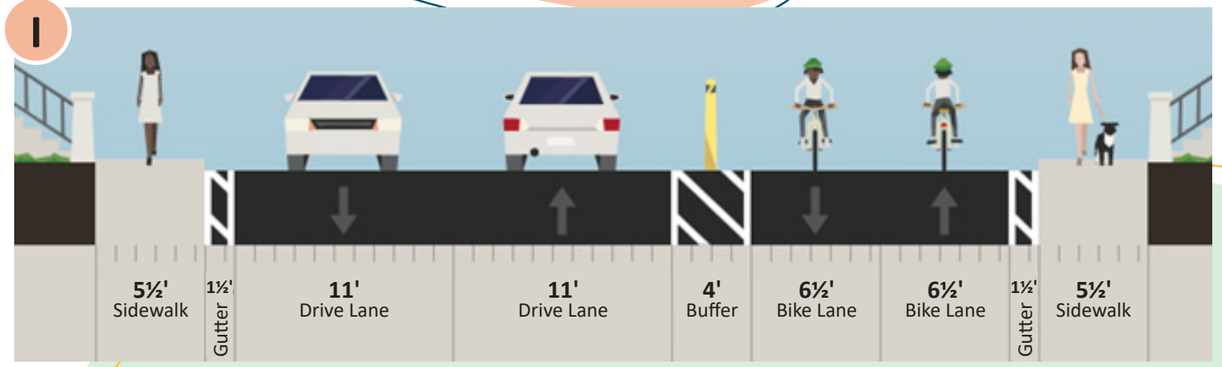
Description

- Addition of on-street two-way cycle track on the north side of the road, separated by a painted buffer with candles, armadillos, or planters
- Options for retaining the continuous center left-turn lane or one parking lane on either side of the street
- Would require modifying the current mini-roundabout design at Owyhee Street to accommodate the cycle track

Cost Estimate
TBD

BENEFITS	CONSIDERATIONS
Results in bicycle level of traffic stress 1 or 2 depending on final separation materials	Mini-Roundabout at Owyhee (permanent improvement) would need to be redesigned accommodate the cycle track (temporary improvement)
Maintains either one parking lane or the center turn lane	Requires transition from two-way cycle track to no bike facilities west of Roosevelt Street
Moderate speed reduction anticipated (1-6 mph)	Removes either the center turn lane or both parking lanes
	Maintains long, straight sections of road, unless chicanes are added for sections
	Buffer will have several gaps for residential driveways, which could make contraflow biking uncomfortable given the traffic volumes

I



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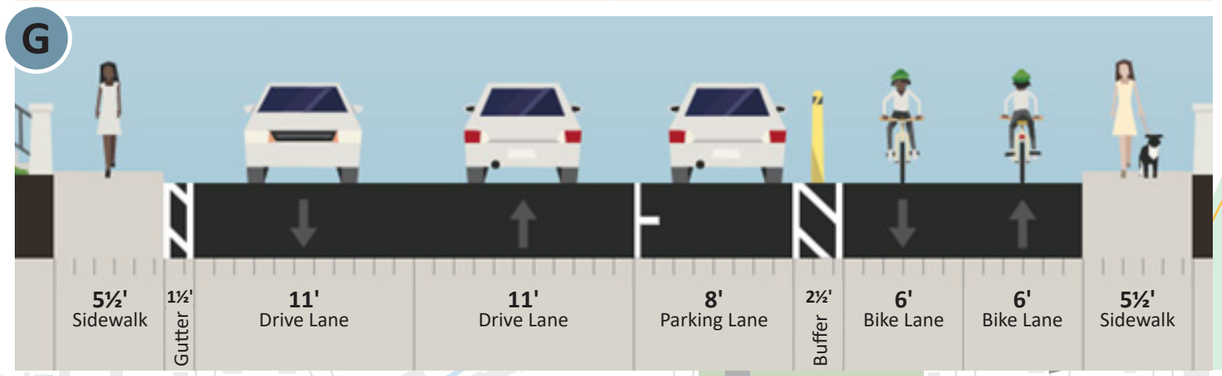

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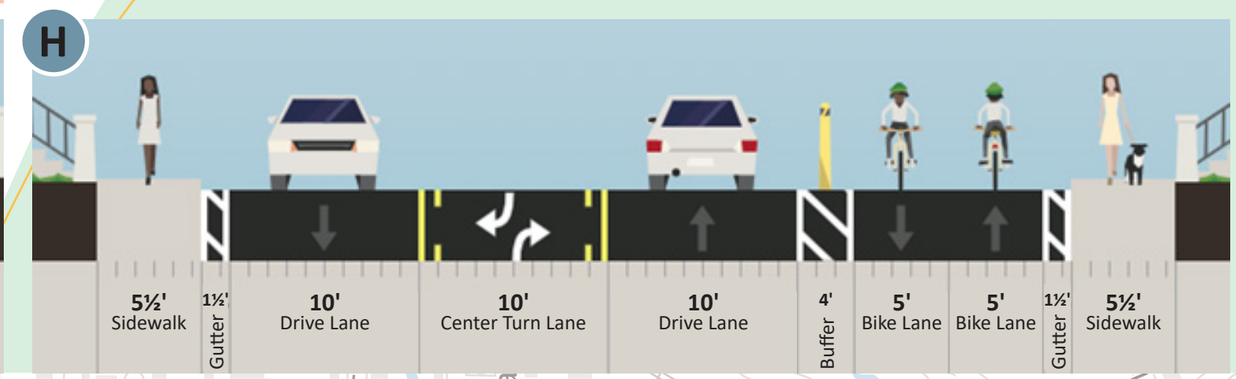
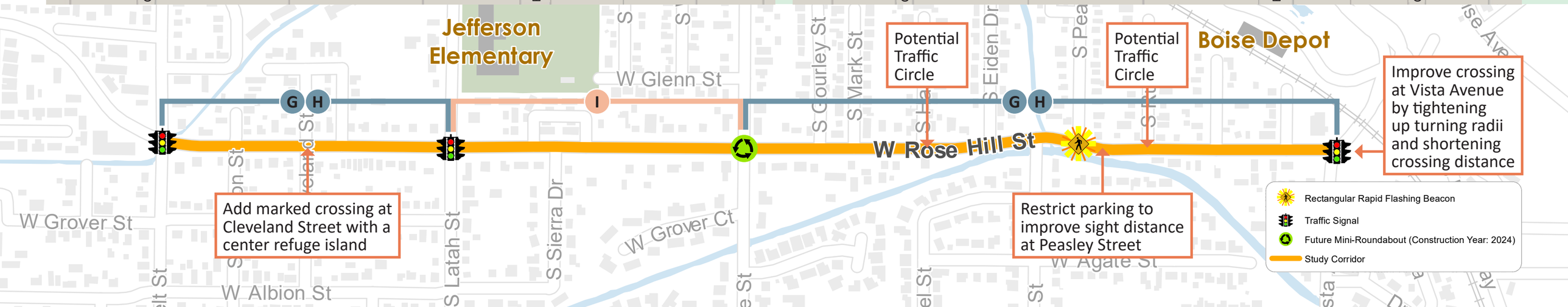




Rose Hill Street Temporary Traffic Calming

Spot Treatments

Figure 9

Add Pedestrian Crossing at Cleveland Street

- Includes a median refuge island with temporary materials
- Would remove the left-turn lane at the intersection

Add Corner Treatments at Vista Avenue

- Candles and/or armadillos and paint create buffer zone to tighten turning radius and shorten crossing distance at northwest corner and southwest corners
- Move stop bar back

Increase Sight Distance at Peasley Street

- Narrow roadway with temporary buffer and remove parking east of Peasley Street
- Leave dedicated parking spaces for home with no driveway

Add Speed Limit Feedback Signs

- Provides real time speed feedback to vehicles
- Drivers who are unintentionally speeding may slow down

Add Speed Humps/Cushions

- Provides vertical deflection to slow vehicles
- ACHD policy does not allow for speed humps/cushions on arterials, so it would require a design exemption

Add Traffic Circles

- Constructed with semi-permanent materials
- Potential locations include at Hanan Drive and Ruby Street

IMPLEMENTATION & MAINTENANCE CONSIDERATIONS

Each of the alternatives use a variety of means to create traffic calming on the corridor. This section describes the implementation and maintenance considerations for each of the potential temporary infrastructure options.

Candles

Also known as tubular markers, they are installed by bolting directly into the pavement. They are designed to be flexible when hit but are prone to damage when hit repeatedly by vehicles. Replacement is necessary if they become broken. Candles are generally around 3' tall and are easy for drivers, cyclists, and plows to see, even with snow cover. Removal at the end of this project involves removing the bolts from the pavement.

Figure 10 Example of Candles

Armadillos

Also known as zebra markers, they are installed by bolting directly into the pavement. They are designed to be rigid and are less prone to damage when hit by vehicles compared to some of the other materials presented here. The need for replacement is unlikely. Armadillos are generally around 6" tall, so they are not as visible as taller materials (e.g., candles). Reflective striping can help with nighttime visibility. The alternatives all recommend pairing armadillos with candles since the armadillos can provide a level of rigidity against motor vehicle strikes that candles cannot, while candles provide a level of visibility, especially on snow covered roads, that the armadillos do not. Removal at the end of this project involves removing the bolts from the pavement. One example of these products, called the Zebra Zero Cycle Lane Separator, can be found here: ZICLA | Zebra Family®.

Figure 11 Example of Armadillos

Planter Boxes

These can be installed in painted buffer spaces to provide a physical vertical separator between a bike lane and a motor vehicle travel or on-street parking lane. Permanent installations may use concrete planters, while a temporary installation may use plastic or wooden boxes filled with soil and one or more plants. A key consideration with planter boxes is their maintenance. Planting and maintenance would likely need to be completed on a regular basis. For instance, if struck by a vehicle, the planter would need to be returned to the correct location or replaced. Regular watering or other plant-related maintenance may also be needed. Other jurisdictions have implemented agreements with neighborhood associations or other community organizations to be responsible for all planting and maintenance. They have also utilized high schools and trade schools for planter box construction. Alternatively, plastic and wood planter boxes can be purchased. Removal at the end of this project involves picking up the planters with potential for repurposing elsewhere or donation to a community organization.

Figure 12 Example of Planters

Striping

Striping for a temporary installation would likely be completed using paint only, and not thermoplastic. It is an efficient way to demarcate space and separate uses or define travel paths, but it does not provide a vertical element or protection, which limits its effectiveness for traffic calming or providing a comfortable biking experience. Therefore, vertical elements are typically recommended in conjunction with striping when used for traffic calming or separating uses. Removal at the end of the project would involve completing pavement marking obliteration if changing the cross section is desired.

Figure 13 Example of Striping

Painted areas

Large buffer areas with paint can be used to help demarcate a pavement space and restrict vehicle travel. They can be installed by painting an area one single color (e.g., like a bike box) or local artists or neighborhood groups have been used in other jurisdictions to create a more unique buffer space. Though these areas would not be driven on by vehicle traffic, they still would likely fade with time and require upkeep. Removal at the end of this project involves large scale pavement marking obliteration. A seal coat or roadway mill and overlay could be more efficient for completing this removal.

Figure 14 Example of Painted Areas

Rubber medians/curbs

These temporary vertical installations are used to create median islands, traffic circles, and define turning radii, and are installed by bolting directly into the pavement. They are designed to be rigid and hold up better to being hit by vehicles compared to some of the other materials presented here. The need for replacement is unlikely. Curbing is generally around 6" tall and painted yellow, however, they are not as visible as taller materials (e.g., candles). The alternatives recommend pairing rubber medians/curbs with candles since they can provide a level of rigidity against motor vehicle strikes that candles cannot, while candles provide a level of visibility, especially on snow covered roads, that the rubber medians/curbs do not. Removal at the end of this project involves removing the bolts from the pavement. One example of these products can be found here: TreeTopProducts.

Figure 15 Example of Rubber Medians/Curb

Speed humps/Cushions

Vertical deflection is not currently allowed on arterial roads according to ACHD policy. In order to install speed humps or cushions on Rose Hill Street, a design exception would be required. These products are usually rubber and are installed by bolting directly into the pavement. They are designed to be driven over and are unlikely to see any major damage unless hit by sharp edges, like snowplows. Removal at the end of this project involves removing the bolts from the pavement.

Figure 16 Example of Speed Humps/Cushions

Speed feedback signs

These are currently being installed across Ada County by ACHD. Implementation would be similar to other areas they are installed in. One key consideration for them is the need to provide a power source, either hardwire or solar. They can be added directly to existing speed limit signs or added in new locations.

Figure 17 Example of Speed Feedback Signs

BEFORE-AFTER DATA COLLECTION PLAN

To determine the effectiveness of the chosen alternative, data should be collected before and after the installation of the traffic calming measures. The data collected for this alternatives analysis can be a starting point for some of the before data. The data that should be collected and desired outcomes are listed below.

Traffic Volume and Speed Data

Traffic volume and speed data should be collected in the same locations before and after the project is implemented. Ideally, the before and after data is collected over the course of multiple days each time it is collected. After data should be collected at multiple time points throughout the course of the project to determine if any of the treatments' effects are only temporary (such as upon initial implementation) or influenced by seasonal characteristics. For optimal comparison purposes, at least one round of after data should be conducted in approximately the same week of the year as the before data was collected.

- Traffic Volumes – Desired no change in traffic volumes. Any decrease could mean traffic is dispersing to alternate routes to avoid the traffic calming measures. This added volume to other area roads in not desired, particularly traffic diverting off the arterial to neighborhood streets. Traffic volumes should also be collected on Cassia Street, the nearest east/west collector, to determine if there is any change in traffic patterns.
- Traffic Speeds – Desired decrease in 85th percentile and average speed. Any reduction will be considered successful, however 85th percentile speeds close to the posted speed limit of 30 mph (or 25 MPH if it is re-posted) is desired.
- Bike Counts – Desired increase in bike traffic. An increase in bike traffic likely means people are more comfortable riding on the corridor and are choosing to either bike more often or change routes to now use Rose Hill Street.
- Pedestrian Counts – Desired increase in pedestrian traffic. An increase in pedestrian traffic likely means people are more comfortable walking on the corridor and are choosing to either walk more often or change routes.

Public Perception

Gauging public perception of the treatments can help ACHD plan for future similar projects, determine whether the project has been successful in the eyes of the public, and identify opportunities to improve the installation on Rose Hill Street or future projects. The public feedback can also be used to refine an effective strategy if a permanent installation is desired in the future.

- Public Feedback – The general public and residents along Rose Hill Street should be surveyed at the midpoint and the end of the project about its perceived effectiveness and what elements they would like to see retained or removed.

ATTACHMENT A:

PARKING UTILIZATION

Parking Utilization on Rose Hill Street

	AM	Midday	PM	Saturday
Roosevelt Street to Latah Street	North Side: 4% South Side: 40%	North Side: 4% South Side: 32%	North Side: 4% South Side: 28%	North Side: 0% South Side: 32%
Latah Street to Owyhee Street	North Side: 3% South Side: 5%	North Side: 3% South Side: 3%	North Side: 3% South Side: 8%	North Side: 3% South Side: 3%
Owyhee Street to Shoshone Street	North Side: 5% South Side: 3%	North Side: 0% South Side: 0%	North Side: 7% South Side: 0%	North Side: 3% South Side: 6%
Shoshone Street to Vista Avenue	North Side: 21% South Side: 3%	North Side: 13% South Side: 3%	North Side: 24% South Side: 3%	North Side: 21% South Side: 0%

ATTACHMENT B:

CRASH DATA

Crash History on Rose Hill Street between Roosevelt Street and Vista Avenue (2011-2020)

Accident #	Vehicle Type	Driver Action	Unit Travel Direction	Most Harmful Event	Event Relation to Junction	Contributing Circumstance 1	Contributing Circumstance 2	Contributing Circumstance 3	Weather	Surface	Light	Fatalities	Injuries	Serial Number	AccidentDate	Severity
1	Car	Going Straight	N	Angle	In Intersection	Failed to Obey Signal	None	None	Clear	Dry	Day	0	1	17C466892	9/10/2017	C Injury Accident
	Car	Going Straight	W	Angle	In Intersection	None	None	None				0	0	17C466892	9/10/2017	C Injury Accident
2	Car	Turning Left	E	Head-On Turning	In Intersection	Failed to Yield	None	None	Clear	Dry	Day	0	1	19C516684	5/10/2019	C Injury Accident
	Car	Going Straight	W	Head-On Turning	In Intersection	None	None	None				0	0	19C516684	5/10/2019	C Injury Accident
3	SUV/Crossover	Starting in Traffic	W	Rear-End	Intersection Related	Inattention	None	None	Clear	Dry	Day	0	1	12C325063	8/17/2012	C Injury Accident
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	12C325063	8/17/2012	C Injury Accident
4	Pickup	Going Straight	N	Angle	In Intersection	Failed to Obey Signal	None	None	Clear	Dry	Day	0	0	20CS49627	7/6/2020	Property Dmg Report
	Car	Going Straight	W	Angle	In Intersection	None	None	None				0	0	20CS49627	7/6/2020	Property Dmg Report
5	Car	Going Straight	W	Rear-End	Intersection Related	Distracted IN or ON Vehicle	Following Too Close	None	Cloudy	Dry	Day	0	0	15C401503	6/29/2015	Property Dmg Report
	SUV/Crossover	Going Straight	W	Rear-End	Intersection Related	None	None	None				0	0	15C401503	6/29/2015	Property Dmg Report
6	Pickup	Turning Left	W	Head-On Turning	At Driveway/Alley/Parking Lot	Light Defect	Failed to Yield	Drove Left of Center	Clear	Dry	Day	1	0	12C325408	8/28/2012	Fatal Accident
	Motorcycle	Going Straight	E	Head-On Turning	At Driveway/Alley/Parking Lot	None	None	None				0	0	12C325408	8/28/2012	Fatal Accident
7	Car	Going Straight	W	Rear-End	Intersection Related	Inattention	Following Too Close	None	Clear	Dry	Day	0	0	11C303427	9/22/2011	Property Dmg Report
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	11C303427	9/22/2011	Property Dmg Report
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	11C303427	9/22/2011	Property Dmg Report
8	Car	Going Straight	W	Rear-End	Intersection Related	Inattention	Following Too Close	None	Clear	Dry	Day	0	1	19C525559	8/22/2019	C Injury Accident
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	19C525559	8/22/2019	C Injury Accident
9	Car	Merging	W	Side Swipe Same	Intersection Related	Improper Lane Change	Inattention	None	Clear	Dry	Day	0	0	20C561945	12/5/2020	Property Dmg Report
	SUV/Crossover	Going Straight	W	Side Swipe Same	Intersection Related	None	None	None				0	0	20C561945	12/5/2020	Property Dmg Report
10	Pickup	Turning Left	W	Head-On Turning	Nonjunction	Failed to Yield	Improper Turn	None	Clear	Dry	Dark, Street Lights On	0	1	13C352799	9/7/2013	A Injury Accident
	Motorcycle	Going Straight	E	Head-On Turning	Nonjunction	None	None	None				0	0	13C352799	9/7/2013	A Injury Accident
11	Pickup	Going Straight	E	Rear-End	Nonjunction	Sick	None	None	Clear	Dry	Day	0	2	19C512552	3/8/2019	B Injury Accident
	Car	Going Straight	E	Rear-End	Nonjunction	None	None	None				0	0	19C512552	3/8/2019	B Injury Accident
12	SUV/Crossover	Changing Lanes	W	Side Swipe Same	Nonjunction	None	None	Improper Lane Change	Clear	Dry	Day	0	0	16C441232	11/11/2016	Property Dmg Report
	Car	Going Straight	W	Side Swipe Same	Nonjunction	None	None	None				0	0	16C441232	11/11/2016	Property Dmg Report
13	Car	Going Straight	W	Rear-End	Intersection Related	Distracted IN or ON Vehicle	Inattention	Following Too Close	Clear	Dry	Day	0	2	17C457337	5/9/2017	C Injury Accident
	SUV/Crossover	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	17C457337	5/9/2017	C Injury Accident
14	Car	Turning Left	N	Angle Turning	In Intersection	Inattention	None	None	Cloudy	Wet	Day	0	0	19C528660	9/8/2019	Property Dmg Report
	Car	Turning Left	W	Angle Turning	In Intersection	None	None	None				0	0	19C528660	9/8/2019	Property Dmg Report
15	Car	Going Straight	W	Parked Car	Nonjunction	Alcohol Impaired	Failed to Maintain Lane	None	Clear	Dry	Dark, No Street Lights	0	0	14C378264	8/14/2014	Property Dmg Report
	Car	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	14C378264	8/14/2014	Property Dmg Report
16	SUV/Crossover	Going Straight	W	Rear-End	Nonjunction	Speed Too Fast For Conditions	None	None	Clear	Dry	Day	0	0	19CS09903	2/12/2019	Property Dmg Report
	SUV/Crossover	Stopped in Traffic	W	Rear-End	Nonjunction	None	None	None				0	0	19CS09903	2/12/2019	Property Dmg Report
	SUV/Crossover	Stopped in Traffic	W	Rear-End	Nonjunction	None	None	None				0	0	19CS09903	2/12/2019	Property Dmg Report
	SUV/Crossover	Stopped in Traffic	W	Rear-End	Nonjunction	None	None	None				0	0	19CS09903	2/12/2019	Property Dmg Report
17	Car	Going Straight	E	Parked Car	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	14C381126	10/5/2014	Property Dmg Report
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	14C381126	10/5/2014	Property Dmg Report
18	SUV/Crossover	Going Straight	E	Rear-End	Nonjunction	Drug Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	20CS48415	5/5/2020	Property Dmg Report
	SUV/Crossover	Parked Vehicle	E	Rear-End	Nonjunction	None	None	None				0	0	20CS48415	5/5/2020	Property Dmg Report
	Car	Parked Vehicle	E	Rear-End	Other	None	None	None				0	0	20CS48415	5/5/2020	Property Dmg Report
19	Car	Going Straight	W	Parked Car	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	12C313470	2/13/2012	Property Dmg Report
	SUV/Crossover	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	12C313470	2/13/2012	Property Dmg Report
20	Car	Going Straight	E	Parked Car	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	20CS64587	11/29/2020	Property Dmg Report
	Pickup	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	20CS64587	11/29/2020	Property Dmg Report
21	Car	Going Straight	E	Parked Car	Nonjunction	Failed to Maintain Lane	None	None	Cloudy	Dry	Dark, Street Lights On	0	2	16C444884	12/12/2016	B Injury Accident
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	16C444884	12/12/2016	B Injury Accident
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	16C444884	12/12/2016	B Injury Accident
22	Van - 1 to 8 seats	Going Straight	E	Rear-End	Intersection Related	Inattention	Distracted IN or ON Vehicle	None	Clear	Dry	Day	0	1	18CS02124	11/7/2018	C Injury Accident
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	18CS02124	11/7/2018	C Injury Accident
23	SUV/Crossover	Going Straight	E	Rear-End	Nonjunction	None	None	None	Clear	Dry	Day	0	1	17C465725	8/28/2017	B Injury Accident
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Nonjunction	None	None	None				0	0	17C465725	8/28/2017	B Injury Accident
24	Car	Going Straight	W	Parked Car	Nonjunction	Inattention	Failed to Maintain Lane	None	Clear	Dry	Dark, Street Lights On	0	0	14C367423	3/20/2014	Property Dmg Report
	Car	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	14C367423	3/20/2014	Property Dmg Report
25	Car	Going Straight	E	Rear-End	Intersection Related	Inattention	None	None	Rain	Wet	Day	0	0	16C438137	9/21/2016	Property Dmg Report
	Car	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	16C438137	9/21/2016	Property Dmg Report
26	Car	Going Straight	W	Parked Car	Nonjunction	Failed to Maintain Lane	None	None	Cloudy	Dry	Day	0	0	13C348664	7/3/2013	Property Dmg Report
	Car	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	13C348664	7/3/2013	Property Dmg Report
27	Pickup	Going Straight	E	Rear-End	Intersection Related	Following Too Close	None	None	Clear	Dry	Day	0	1	12C325730	8/30/2012	C Injury Accident
	Car	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	12C325730	8/30/2012	C Injury Accident
28	SUV/Crossover	Going Straight	E	Rear-End	Nonjunction	Inattention	None	None	Smoke/Smog	Dry	Day	0	0	15C405782	8/19/2015	Property Dmg Report
	SUV/Crossover	Going Straight	E	Rear-End	Nonjunction	None	None	None				0	0	15C405782	8/19/2015	Property Dmg Report
	SUV/Crossover	Going Straight	E	Rear-End	Nonjunction	None	None	None				0	0	15C405782	8/19/2015	Property Dmg Report
	Pickup	Going Straight	E	Rear-End	Nonjunction	None	None	None				0	0	15C405782	8/19/2015	Property Dmg Report
29	Car	Going Straight	E	Rear-End	Intersection Related	Following Too Close	None	None	Clear	Dry	Day	0	1	12C314460	3/2/2012	C Injury Accident
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	12C314460	3/2/2012	C Injury Accident
30	SUV/Crossover	Going Straight	E	Rear-End	Intersection Related	Inattention	Distracted IN or ON Vehicle	None	Clear	Dry	Day	0	0	12C325420	8/17/2012	Property Dmg Report
	Car	Slowing in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	12C325420	8/17/2012	Property Dmg Report
31	Pickup	Going Straight	E	Rear-End	Intersection Related	Following Too Close	Inattention	None	Clear	Dry	Dark, Street Lights Off	0	2	15C390226	1/15/2015	C Injury Accident
	Car	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	15C390226	1/15/2015	C Injury Accident
32	Car	Going Straight	E	Rear-End	Intersection Related	Following Too Close	None	None	Clear	Dry	Day	0	0	15C400744	6/6/2015	Property Dmg Report
	Car	Going Straight	E	Rear-End	Intersection Related	None	None	None				0	0	15C400744	6/6/2015	Property Dmg Report
33	Pickup	Going Straight	N	Angle	In Intersection	Failed to Signal	None	None	Clear	Dry	Day	0	0	18C496058	9/2/2018	Property Dmg Report
	SUV/Crossover	Going Straight	W	Angle	In Intersection	None	None	None				0	0	18C496058	9/2/2018	Property Dmg Report
	Car	Stopped in Traffic	S	Side Swipe Opposite	Intersection Related	None	None	None				0	0	18C496058	9/2/2018	Property Dmg Report
34	Car	Right Turn on Red	W	Pedalcycle	In Intersection	Failed to Yield	None	None	Cloudy	Dry	Day	0	1	16C442547	11/29/2016	C Injury Accident
	Pedalcycle	Crossing at Intersection, Crosswalk	S	Pedalcycle	In Intersection	None	None	None				0	0	16C442547	11/29/2016	C Injury Accident
35	Pickup	Going Straight	N	Angle	In Intersection	Failed to Obey Signal	None	None	Clear	Dry	Day	0	1	20CS51011	8/2/2020	C Injury Accident
	SUV/Crossover	Going Straight	E	Angle	In Intersection	None	None	None				0	0	20CS51011	8/2/2020	C Injury Accident
36	Car	Going Straight	N	Angle	In Intersection	Inattention	None	None	Clear	Dry	Day	0	0	19CS32242	11/13/2019	Property Dmg Report
	SUV/Crossover	Going Straight	E	Angle	In Intersection	None	None	None				0	0	19CS32242	11/13/2019	Property Dmg Report

37	SUV/Crossover	Going Straight	W	Rear-End	Intersection Related	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	14C367446	3/8/2014	Property Dmg Report
	Pickup	Going Straight	W	Rear-End	Intersection Related	None	None	None				0	0	14C367446	3/8/2014	Property Dmg Report
38	SUV/Crossover	Going Straight	W	Rear-End	Intersection Related	Following Too Close	None	None	Clear	Dry	Dark, Street Lights On	0	0	18C501720	10/25/2018	Property Dmg Report
	SUV/Crossover	Going Straight	W	Rear-End	Intersection Related	None	None	None				0	0	18C501720	10/25/2018	Property Dmg Report
39	Car	Starting in Traffic	W	Rear-End	Intersection Related	Inattention	None	None	Clear	Dry	Day	0	1	19C508557	1/13/2019	C Injury Accident
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	19C508557	1/13/2019	C Injury Accident
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	19C508557	1/13/2019	C Injury Accident
40	Pickup	Stopped in Traffic	E	Rear-End	Nonjunction	None	None	None	Clear	Dry	Day	0	3	11C301752	9/10/2011	B Injury Accident
	Car	Stopped in Traffic	E	Rear-End	Nonjunction	None	None	None				0	0	11C301752	9/10/2011	B Injury Accident
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Nonjunction	None	None	None				0	0	11C301752	9/10/2011	B Injury Accident
	Car	Going Straight	E	Rear-End	Nonjunction	Emotional â€" Depressed, Angry, Disturbed	Exceeded Posted Speed	None				0	0	11C301752	9/10/2011	B Injury Accident
41	Car	Starting in Traffic	W	Rear-End	Intersection Related	Inattention	Other	None	Clear	Dry	Day	0	1	19C533375	11/4/2019	C Injury Accident
	SUV/Crossover	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	19C533375	11/4/2019	C Injury Accident
42	SUV/Crossover	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None	Clear	Dry	Day	0	0	18C484401	4/3/2018	Property Dmg Report
	Car	Going Straight	W	Rear-End	Intersection Related	Following Too Close	None	None				0	0	18C484401	4/3/2018	Property Dmg Report
43	SUV/Crossover	Going Straight	E	Rear-End	Intersection Related	Following Too Close	None	None	Clear	Dry	Day	0	0	15C406738	9/10/2015	Property Dmg Report
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	15C406738	9/10/2015	Property Dmg Report
44	Car	Going Straight	W	Rear-End	Intersection Related	Inattention	Distracted IN or ON Vehicle	None	Clear	Dry	Day	0	0	19C507841	1/12/2019	Property Dmg Report
	SUV/Crossover	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	19C507841	1/12/2019	Property Dmg Report
45	Car	Passing	E	Same Direction Turning	At Driveway/Alley/Parking Lot	Inattention	Improper Overtaking	None	Clear	Dry	Day	0	0	13C349207	7/18/2013	Property Dmg Report
	Car	Turning Left	E	Same Direction Turning	At Driveway/Alley/Parking Lot	None	None	None				0	0	13C349207	7/18/2013	Property Dmg Report
46	Van - 1 to 8 seats	Slowing in Traffic	W	Rear-End	Nonjunction	Inattention	None	None	Clear	Dry	Day	0	0	15C401348	6/30/2015	Property Dmg Report
	Car	Stopped in Traffic	W	Rear-End	Nonjunction	None	None	None				0	0	15C401348	6/30/2015	Property Dmg Report
	SUV/Crossover	Stopped in Traffic	W	Rear-End	Nonjunction	None	None	None				0	0	15C401348	6/30/2015	Property Dmg Report
47	Car	Going Straight	E	Parked Car	Nonjunction	Failed to Maintain Lane	None	None	Clear	Dry	Dark, Street Lights On	0	0	18C480841	2/13/2018	Property Dmg Report
	SUV/Crossover	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	18C480841	2/13/2018	Property Dmg Report
	Car	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	18C480841	2/13/2018	Property Dmg Report
48	Pickup	Going Straight	E	Parked Car	Nonjunction	None	None	None	Rain	Wet	Day	0	0	20C549783	6/29/2020	Property Dmg Report
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	20C549783	6/29/2020	Property Dmg Report
49	Car	Going Straight	E	Non-Contact Unit	Nonjunction	Drove Left of Center	Distracted IN or ON Vehicle	None	Clear	Dry	Day	0	0	15C402918	7/15/2015	Property Dmg Report
	Pickup	Avoiding Vehicle, Pedestrian, Pedalcycle	W	Parked Car	Nonjunction	None	None	None				0	0	15C402918	7/15/2015	Property Dmg Report
	Pickup	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	15C402918	7/15/2015	Property Dmg Report
50	Car	Going Straight	W	Rear-End	Intersection Related	Inattention	None	None	Clear	Dry	Day	0	0	19C508548	1/14/2019	Property Dmg Report
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	19C508548	1/14/2019	Property Dmg Report
51	SUV/Crossover	Going Straight	W	Rear-End	Intersection Related	Following Too Close	None	None	Cloudy	Dry	Day	0	1	13C341509	3/12/2013	B Injury Accident
	SUV/Crossover	Going Straight	W	Rear-End	Intersection Related	None	None	None				0	0	13C341509	3/12/2013	B Injury Accident
52	Pickup	Turning Left	E	Angle Turning	At Driveway/Alley/Parking Lot	Failed to Yield	None	None	Clear	Dry	Day	0	0	18C493089	7/23/2018	Property Dmg Report
	Car	Going Straight	W	Angle Turning	At Driveway/Alley/Parking Lot	None	None	None				0	0	18C493089	7/23/2018	Property Dmg Report
53	Car	Going Straight	E	Rear-End	Nonjunction	Inattention	None	None	Clear	Dry	Dark, No Street Lights	0	2	11C295521	6/13/2011	B Injury Accident
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Nonjunction	None	None	None				0	0	11C295521	6/13/2011	B Injury Accident
	Car	Stopped in Traffic	E	Rear-End	Nonjunction	None	None	None				0	0	11C295521	6/13/2011	B Injury Accident
54	SUV/Crossover	Going Straight	W	Rear-End	Nonjunction	Following Too Close	Inattention	None	Clear	Dry	Day	0	0	15C407452	9/18/2015	Property Dmg Report
	Pickup	Going Straight	W	Rear-End	Nonjunction	None	None	None				0	0	15C407452	9/18/2015	Property Dmg Report
55	SUV/Crossover	Going Straight	E	Utility/Light Support	Nonjunction	Speed Too Fast For Conditions	Failed to Maintain Lane	None	Clear	Ice	Dark, Street Lights On	0	0	14C384964	11/16/2014	Property Dmg Report
56	Car	Going Straight	W	Rear-End	Nonjunction	Following Too Close	Distracted IN or ON Vehicle	None	Clear	Dry	Day	0	0	14C371768	6/7/2014	Property Dmg Report
	Car	Slowing in Traffic	W	Rear-End	Nonjunction	None	None	None				0	0	14C371768	6/7/2014	Property Dmg Report
57	Car	Going Straight	W	Parked Car	At Driveway/Alley/Parking Lot	Inattention	None	None	Clear	Dry	Dark, Street Lights On	0	0	19C534915	12/7/2019	Property Dmg Report
	Pickup	Parked Vehicle	W	Parked Car	At Driveway/Alley/Parking Lot	None	None	None				0	0	19C534915	12/7/2019	Property Dmg Report
58	Car	Going Straight	W	Rear-End	Nonjunction	Following Too Close	None	None	Clear	Dry	Day	0	0	16C430868	6/22/2016	Property Dmg Report
	SUV/Crossover	Slowing in Traffic	W	Rear-End	Nonjunction	None	None	None				0	0	16C430868	6/22/2016	Property Dmg Report
59	Car	Going Straight	E	Rear-End	Nonjunction	Speed Too Fast For Conditions	None	None	Snow	Snow	Day	0	0	17C448303	1/7/2017	Property Dmg Report
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Nonjunction	None	None	None				0	0	17C448303	1/7/2017	Property Dmg Report
60	Pickup	Going Straight	N	Angle	In Intersection	Failed to Obey Stop Sign	None	None	Clear	Dry	Day	0	2	17C458951	6/18/2017	B Injury Accident
	Car	Going Straight	W	Angle	In Intersection	None	None	None				0	0	17C458951	6/18/2017	B Injury Accident
61	Van - 1 to 8 seats	Going Straight	N	Angle	In Intersection	Failed to Yield	None	None	Cloudy	Dry	Day	0	0	20C546408	5/21/2020	Property Dmg Report
	Van - 1 to 8 seats	Going Straight	E	Angle	In Intersection	None	None	None				0	0	20C546408	5/21/2020	Property Dmg Report
62	Car	Going Straight	N	Angle	In Intersection	Failed to Yield	None	None	Clear	Dry	Day	0	0	19C520102	6/29/2019	Property Dmg Report
	Car	Going Straight	W	Angle	In Intersection	None	None	None				0	0	19C520102	6/29/2019	Property Dmg Report
63	Car	Going Straight	S	Angle	In Intersection	Failed to Yield	Inattention	None	Clear	Dry	Dark, Street Lights On	0	0	20C542090	3/4/2020	Property Dmg Report
	Car	Going Straight	E	Angle	In Intersection	None	None	None				0	0	20C542090	3/4/2020	Property Dmg Report
	Car	Going Straight	W	Side Swipe Opposite	In Intersection	None	None	None				0	0	20C542090	3/4/2020	Property Dmg Report
64	Car	Going Straight	N	Angle	In Intersection	Failed to Yield	None	None	Cloudy	Dry	Day	0	0	19C508579	1/22/2019	Property Dmg Report
	Car	Going Straight	W	Angle	In Intersection	None	None	None				0	0	19C508579	1/22/2019	Property Dmg Report
65	Car	Going Straight	W	Rear-End	Intersection Related	Inattention	Following Too Close	None	Clear	Dry	Dark, No Street Lights	0	1	17C455638	5/2/2017	A Injury Accident
	Pickup	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	17C455638	5/2/2017	A Injury Accident
66	Car	Going Straight	W	Parked Car	Nonjunction	Distracted IN or ON Vehicle	None	None	Clear	Dry	Day	0	1	17C463271	8/7/2017	C Injury Accident
	Car	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	17C463271	8/7/2017	C Injury Accident
67	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None	Clear	Dry	Day	0	1	15C395875	4/20/2015	B Injury Accident
	SUV/Crossover	Slowing in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	15C395875	4/20/2015	B Injury Accident
68	Car	Going Straight	E	Parked Car	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	17C474897	12/9/2017	Property Dmg Report
	Other	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	17C474897	12/9/2017	Property Dmg Report
69	SUV/Crossover	U-Turn	W	Same Direction Turning	Intersection Related	Failed to Yield	None	None	Clear	Dry	Day	0	1	16C432208	7/8/2016	B Injury Accident
	Car	Going Straight	W	Same Direction Turning	Intersection Related	None	None	None				0	0	16C432208	7/8/2016	B Injury Accident
70	Pickup	Going Straight	W	Rear-End	In Intersection	Following Too Close	None	None	Clear	Dry	Day	0	0	20C554055	9/14/2020	Property Dmg Report
	Van - 1 to 8 seats	Turning Right	W	Rear-End	In Intersection	None	None	None				0	0	20C554055	9/14/2020	Property Dmg Report
71	Car	Turning Left	E	Angle Turning	In Intersection	None	None	None	Clear	Dry	Dark, Street Lights On	0	0	14C362854	1/21/2014	Property Dmg Report
	Van - 1 to 8 seats	Going Straight	W	Angle Turning	In Intersection	Failed to Maintain Lane	None	None				0	0	14C362854	1/21/2014	Property Dmg Report
72	Pickup	Going Straight	W	Parked Car	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	19C508645	1/21/2019	Property Dmg Report
	Car	Parked Vehicle		Parked Car	Nonjunction	None	None	None				0	0	19C508645	1/21/2019	Property Dmg Report
73	SUV/Crossover	Going Straight	W	Rear-End	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	17C454825	4/14/2017	Property Dmg Report
	Pickup	Parked Vehicle	W	Rear-End	Nonjunction	None	None	None				0	0	17C454825	4/14/2017	Property Dmg Report
74	Pickup	Changing Lanes	E	Side Swipe Same	Nonjunction	Improper Lane Change	None	None	Clear	Dry	Day	0	0	17C460006	6/19/2017	Property Dmg Report

	Car	Going Straight	E	Side Swipe Same	Nonjunction	None	None	None				0	0	17C460006	6/19/2017	Property Dmg Report
75	Car	Negotiating Curve	E	Rear-End	Intersection Related	Following Too Close	None	None	Cloudy	Wet	Day	0	0	12C318005	5/4/2012	Property Dmg Report
	Car	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	12C318005	5/4/2012	Property Dmg Report
76	SUV/Crossover	Turning Left	N	Angle Turning	In Intersection	Inattention	Failed to Yield	Alcohol Impaired	Snow	Dry	Day	0	1	19C511267	2/26/2019	C Injury Accident
	Van - 1 to 8 seats	Going Straight	E	Angle Turning	In Intersection	None	None	None				0	0	19C511267	2/26/2019	C Injury Accident
77	Car	Going Straight	W	Rear-End	Intersection Related	Following Too Close	None	None	Clear	Dry	Day	0	1	13C341687	3/21/2013	C Injury Accident
	Car	Stopped in Traffic	W	Rear-End	Intersection Related	None	None	None				0	0	13C341687	3/21/2013	C Injury Accident
78	SUV/Crossover	Turning Left	S	Angle Turning	In Intersection	Failed to Yield	None	None	Smoke/Smog	Dry	Day	0	1	15C405865	8/20/2015	C Injury Accident
	SUV/Crossover	Going Straight	W	Angle Turning	In Intersection	Distracted IN or ON Vehicle	None	None				0	0	15C405865	8/20/2015	C Injury Accident
79	Car	Turning Left	S	Angle Turning	In Intersection	Failed to Yield	None	None	Clear	Dry	Day	0	1	20C540570	2/12/2020	B Injury Accident
	Van - 1 to 8 seats	Going Straight	W	Angle Turning	In Intersection	None	None	None				0	0	20C540570	2/12/2020	B Injury Accident
80	Pedalcycle	Crossing at Mid-block, NO Crosswalk	E	Pedalcycle	In Intersection	Other	None	None	Clear	Dry	Day	0	1	17C468630	8/30/2017	B Injury Accident
	Car	Turning Right	N	Pedalcycle	In Intersection	None	None	None				0	0	17C468630	8/30/2017	B Injury Accident
81	Car	Going Straight	E	Parked Car	Nonjunction	Inattention	None	None	Clear	Dry	Day	0	0	19C524266	7/31/2019	Property Dmg Report
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	19C524266	7/31/2019	Property Dmg Report
82	Car	Going Straight	W	Parked Car	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, Street Lights On	0	0	16C432148	7/23/2016	Property Dmg Report
	Car	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	16C432148	7/23/2016	Property Dmg Report
	SUV/Crossover	Parked Vehicle	W	Parked Car	Nonjunction	None	None	None				0	0	16C432148	7/23/2016	Property Dmg Report
83	SUV/Crossover	Going Straight	E	Head-On	Nonjunction	Failed to Maintain Lane	Speed Too Fast For Conditions	None	Clear	Ice	Day	0	0	14C384971	11/19/2014	Property Dmg Report
	Pickup	Going Straight	W	Head-On	Nonjunction	None	None	None				0	0	14C384971	11/19/2014	Property Dmg Report
84	Car	Turning Left	E	Side Swipe Opposite	Intersection Related	Failed to Yield	None	None	Clear	Dry	Day	0	0	19C515778	4/28/2019	Property Dmg Report
	Car	Going Straight	W	Side Swipe Opposite	Intersection Related	None	None	None				0	0	19C515778	4/28/2019	Property Dmg Report
85	Car	Turning Left	E	Head-On Turning	In Intersection	Alcohol Impaired	None	None	Clear	Dry	Day	0	3	11C300925	8/1/2011	C Injury Accident
	Car	Going Straight	W	Head-On Turning	In Intersection	None	None	None				0	0	11C300925	8/1/2011	C Injury Accident
	Car	Stopped in Traffic	S	Angle	In Intersection	None	None	None				0	0	11C300925	8/1/2011	C Injury Accident
86	Pedestrian	Crossing at Mid-block, Crosswalk	N	Pedestrian	Nonjunction	Alcohol Impaired	None	None	Cloudy	Dry	Dawn or Dusk	0	1	16C438236	9/20/2016	A Injury Accident
	Car	Going Straight	W	Pedestrian	Nonjunction	None	None	None				0	0	16C438236	9/20/2016	A Injury Accident
87	Pickup	Going Straight	E	Pedalcycle	Nonjunction	Alcohol Impaired	Inattention	None	Clear	Dry	Dark, Street Lights On	0	1	20C564118	8/15/2020	A Injury Accident
	Pedalcycle	Walk/Ride with Traffic NO Bike	E	Pedalcycle	Nonjunction	Alcohol Impaired	None	None				0	0	20C564118	8/15/2020	A Injury Accident
88	Car	Going Straight	E	Parked Car - on Private Property	Nonjunction	Inattention	None	None	Clear	Dry	Day	0	1	20C545225	5/5/2020	B Injury Accident
89	Car	Going Straight	E	Parked Car	Nonjunction	Vision Obstruction	Distracted IN or ON Vehicle	None	Clear	Dry	Dark, Street Lights On	0	1	19C514490	4/6/2019	C Injury Accident
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	19C514490	4/6/2019	C Injury Accident
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	19C514490	4/6/2019	C Injury Accident
	Car	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	19C514490	4/6/2019	C Injury Accident
90	SUV/Crossover	Going Straight	E	Side Swipe Opposite	Nonjunction	Speed Too Fast For Conditions	None	None	Snow	Ice	Day	0	0	16C445860	12/27/2016	Property Dmg Report
	SUV/Crossover	Going Straight	W	Side Swipe Opposite	Nonjunction	None	None	None				0	0	16C445860	12/27/2016	Property Dmg Report
91	Car	Going Straight	W	Parked Car	Nonjunction	Alcohol Impaired	None	None	Cloudy	Dry	Dark, Street Lights On	0	3	17C453561	1/28/2017	B Injury Accident
	SUV/Crossover	Parked Vehicle	E	Parked Car	Nonjunction	None	None	None				0	0	17C453561	1/28/2017	B Injury Accident
92	Car	U-Turn	E	Side Swipe Same	Nonjunction	Improper Turn	None	None	Clear	Dry	Day	0	0	19C512481	3/6/2019	Property Dmg Report
	Car	Passing	E	Side Swipe Same	Nonjunction	None	None	None				0	0	19C512481	3/6/2019	Property Dmg Report
93	Pickup	Going Straight	W	Utility/Light Support	Intersection Related	Alcohol Impaired	None	None	Cloudy	Dry	Dark, Street Lights On	0	1	11C303221	10/5/2011	B Injury Accident
94	Car	Turning Left	N	Angle Turning	Driveway/Alley/Parking Lot Rel	Failed to Yield	None	None	Clear	Dry	Day	0	0	19C533275	11/12/2019	Property Dmg Report
	Car	Going Straight	W	Angle Turning	At Driveway/Alley/Parking Lot	None	None	None				0	0	19C533275	11/12/2019	Property Dmg Report
95	Car	Turning Left	N	Angle	At Driveway/Alley/Parking Lot	Failed to Yield	None	None	Clear		Day	0	0	18C496774	9/7/2018	Property Dmg Report
	SUV/Crossover	Going Straight	E	Angle	Nonjunction	None	None	None				0	0	18C496774	9/7/2018	Property Dmg Report
96	Pickup	Turning Left	W	Angle Turning	Driveway/Alley/Parking Lot Rel	Failed to Yield	None	None	Clear	Dry	Day	0	1	18C501988	11/10/2018	C Injury Accident
	Car	Going Straight	E	Angle Turning	Driveway/Alley/Parking Lot Rel	None	None	None				0	0	18C501988	11/10/2018	C Injury Accident
97	Car	Entering/Leaving Parking Lot, Driveway, Alley	E	Angle Turning	Intersection Related	Failed to Yield	None	None	Clear	Dry	Day	0	0	12C318512	4/6/2012	Property Dmg Report
	SUV/Crossover	Going Straight	E	Angle Turning	Intersection Related	None	None	None				0	0	12C318512	4/6/2012	Property Dmg Report
98	Pickup	Going Straight	E	Rear-End	Intersection Related	Following Too Close	None	None	Clear	Dry	Dark, Street Lights On	0	0	11C309548	12/13/2011	Property Dmg Report
	Pickup	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	11C309548	12/13/2011	Property Dmg Report
	Car	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	11C309548	12/13/2011	Property Dmg Report
99	Pickup	Turning Left	S	Angle Turning	Nonjunction	Alcohol Impaired	None	None	Clear	Dry	Dark, No Street Lights	0	0	19C516534	4/22/2019	Property Dmg Report
100	Car	Stopped in Traffic	E	Rear-End	Intersection Related	Speed Too Fast For Conditions	None	None	Snow	Ice	Dark, Street Lights On	0	1	14C365053	2/5/2014	C Injury Accident
	SUV/Crossover	Stopped in Traffic	E	Rear-End	Intersection Related	None	None	None				0	0	14C365053	2/5/2014	C Injury Accident
101	Car	Turning Left	W	Angle Turning	Nonjunction	Failed to Yield	None	None	Cloudy	Dry	Day	0	0	15C410698	10/28/2015	Property Dmg Report
	Car	Going Straight	E	Angle Turning	At Driveway/Alley/Parking Lot	None	None	None				0	0	15C410698	10/28/2015	Property Dmg Report
102	Pickup	Turning Left	N	Angle Turning	In Intersection	Failed to Yield	None	None	Rain	Wet	Day	0	0	16C422604	3/15/2016	Property Dmg Report
	SUV/Crossover	Going Straight	S	Angle Turning	In Intersection	None	None	None				0	0	16C422604	3/15/2016	Property Dmg Report
103	Car	Turning Left	E	Angle Turning	In Intersection	None	None	None	Clear	Dry	Day	0	3	16C433018	7/28/2016	C Injury Accident
	Pickup	Going Straight	S	Angle Turning	In Intersection	Failed to Obey Signal	None	None				0	0	16C433018	7/28/2016	C Injury Accident
104	SUV/Crossover	Going Straight	S	Angle Turning	In Intersection	Failed to Obey Signal	None	None	Clear	Dry	Day	0	2	17C466923	9/10/2017	C Injury Accident
	Car	Turning Left	W	Angle Turning	In Intersection	Failed to Obey Signal	None	None				0	0	17C466923	9/10/2017	C Injury Accident
105	Pickup	Turning Left	N	Angle	Intersection Related	Sick	None	None	Clear	Dry	Day	0	3	14C374096	7/1/2014	B Injury Accident
	Van - 1 to 8 seats	Stopped in Traffic	E	Angle	Intersection Related	None	None	None				0	0	14C374096	7/1/2014	B Injury Accident
106	Car	Right Turn on Red	SE	Pedestrian	In Intersection	Failed to Obey Signal	Failed to Yield	Inattention	Clear	Dry	Day	0	1	16C426004	4/27/2016	B Injury Accident
	Pedestrian	Crossing at Intersection, Crosswalk	E	Pedestrian	In Intersection	None	None	None				0	0	16C426004	4/27/2016	B Injury Accident
107	Pickup	Right Turn on Red	E	Pedalcycle	In Intersection	Failed to Yield	None	None	Cloudy	Dry	Day	0	1	16C434709	8/18/2016	B Injury Accident
	Pedalcycle	Crossing at Intersection, Crosswalk	N	Pedalcycle	In Intersection	None	None	None				0	0	16C434709	8/18/2016	B Injury Accident
108	Car	Going Straight	N	Angle Turning	In Intersection	Failed to Obey Signal	None	None	Clear	Dry	Day	0	0	20C538829	1/18/2020	Property Dmg Report
	SUV/Crossover	Turning Left	W	Angle Turning	In Intersection	None	None	None				0	0	20C538829	1/18/2020	Property Dmg Report

ATTACHMENT C:

PUBLIC FEEDBACK SUMMARY

Rose Hill Street Temporary Traffic Calming

ROOSEVELT STREET TO VISTA AVENUE

Public Feedback Summary | March 10, 2022 – March 24, 2022

Public comments were collected through the following means:

- Online survey (234 responses)
- Online comment map (65 comments and 55 replies to comments)

In total

419 people

viewed the Storymap

What works well for people today on Rose Hill Street

- The left-turn lane is helpful - 53% (109)
- Motor vehicle traffic flows well - 45% (91)

What are your concerns?

72% People driving too fast (153)

65% Biking doesn't feel safe (138)

63% Crossing the street doesn't feel safe (134)

HOW PEOPLE RANKED PRIORITIES FOR ROSE HILL STREET

1. Improving crossings of Rose Hill Street for people walking or biking
2. Slowing motor vehicle speeds
3. Providing bike lanes or paths
4. Maintaining the center left-turn lane
5. Maintaining on-street parking

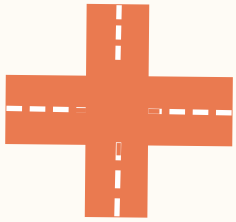
SPECIFIC CONCERNS PEOPLE HAVE

On-street parking limits how far people are able to see down the street

Vehicle Speeds and the crossing distance at Vista Avenue

Vehicles not yielding to people walking and biking in marked crosswalks, especially at Peasley Street and Owyhee Street

People feel it is difficult to turn onto Rose Hill Street from side streets, especially Peasley Street



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ACHD
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APPENDIX D

Cost Estimate

Rose Hill Street Temporary Traffic Control

Alternative 2: Seperated Bike Lanes, On-Street Parking, No Center Turn Lane

ACHD

Engineer's Conceptual Estimate

Prepared By: SAM		*Date: 8/19/22*		
Reviewed By: NMF				
	This Estimate has a Rating of:	**2C**		
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
Mobilization	LS	ALL	$22,000.00	$22,000.00
Traffic Control	LS	ALL	$11,000.00	$11,000.00
4" White Continuous Stripe	LF	25,000	$1.25	$31,250.00
4" White Dash Stripe	LF	0	$1.00	$0.00
4" Yellow Dash Stripe	LF	5,000	$1.00	$5,000.00
TWLTL Stripe	LF	0	$4.50	$0.00
Bike Ladder Stripe	SF	800	$4.00	$3,200.00
Bike Stamp Stripe	EA	40	$25.00	$1,000.00
Candle	EA	400	$225.00	$90,000.00
Armadillo	EA	300	$225.00	$67,500.00
Obliterate Pavement Markings	SF	5,000	$2.00	$10,000.00
			TOTAL CONSTRUCTION COST	**$ 240,950**
			DESIGN	**$ 48,000**
			TOTAL PROJECT SUBTOTAL	**$ 288,950**
			30% Contingency	**$ 86,690**
			TOTAL ESTIMATED PROJECT COST	**$ 375,640**

Assumptions:

-
-
-
-
-
-
-

Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Level C: No engineering performed. Educated guesstimating. Limited technical information available and/or analysis performed. Project Development and Construction Contingencies should be selected appropriately by Project Manager. Contingency may range up to 50%.