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**Introduction**

In August 2009, local citizens and City Council members initiated a process to address transportation infrastructure in the Rattlesnake Valley. This group prioritized areas of the Rattlesnake most in need of improvement. In May of 2011, the Rattlesnake Valley Transportation Summit Study was adopted by both the Lower and Upper Rattlesnake Neighborhood Councils, as well as the Missoula City Council.

Starting in the Fall of 2016, the Rattlesnake Transportation Committee was formed as a subcommittee of the adjoining neighborhood councils. The committee began monthly public meetings to discuss ways to effectively improve movement throughout the Rattlesnake Valley for all modes of transportation. Upon committee review, much of the 2011 document’s content was outdated or no longer relevant. In order to update the study, the committee worked alongside the Office of Neighborhoods to design a process which involved input from citizens. To collect feedback from residents of both neighborhoods, a questionnaire was designed and distributed over the span of approximately five months. The questionnaire received over 600 responses.

**Mission**

The mission of the Rattlesnake Transportation Committee is to promote safe, efficient, and accessible transportation options for residents and visitors of the Rattlesnake Valley. The committee is interested in all forms of transportation, including walking, biking, motor vehicles and public transit. The following transportation plan is a way for the committee, agencies and other citizens to meet this mission.

**History of Rattlesnake Valley**

The Rattlesnake Valley ranges from one half to one mile wide, and is approximately four miles long. The valley begins where Rattlesnake Creek meets the Clark Fork River near downtown Missoula, and extends north to the Rattlesnake mountains. Through the ages, the Rattlesnake Valley was a traditional dwelling and living place for Native Americans. The first known white settler operated a trading post at the mouth of Rattlesnake Creek, from 1858 to 1864.

From the mid-1800s until 1930, scattered settlement and development occurred, peaking at 139 habitants in 1910. Various amenities were built during this time, including a phone line, a school and a water system that served the entire Missoula Valley.

A major catalyst for this development was the building of the Northern Pacific Railroad in 1883. This was followed by consistent and intense logging of the Rattlesnake Valley in the late 1800's. In 1983, due to a Giardia outbreak in the surface water system, use of Rattlesnake Creek to
supply potable water for Missoula's growing population was discontinued. Water was then obtained by tapping into Missoula's immense alluvial aquifer, which is still the water source for most residents today.

A significant development in the Rattlesnake Valley history was ratified in 1980, when Congress set aside nearly 100 square miles to the north as a National Recreation Area and a Wilderness area. These areas of solitude attract residents and visitors alike, year-round.

**Existing Conditions**

Today, roughly 5,000 people call the Rattlesnake Valley home. Owners and renters live primarily in single family homes, with a small percentage in multi-family dwellings. Rattlesnake Elementary is the lone operating public school, and Clark Fork School nearby serves as a private school. A small handful of businesses serve the neighborhoods and the Rattlesnake Valley continues to be a highly desirable place to live, work, and recreate.

Two primary streets serve for connections and access: Greenough/Duncan Drive on the west side of the Valley (also the west side of Rattlesnake Creek) and Van Buren/Rattlesnake Drive on the east side. Only two streets connect across the valley: Vine Street, at the lower end of the valley, and Lolo Street (mid-valley). Lolo Street is the official border between the Upper and Lower Rattlesnake Neighborhood Councils. A main limiting factor in cross valley connectivity is Rattlesnake Creek and the associated riparian areas and flood plains, which makes street and pavement development undesirable. Several foot bridges span the creek, serving as important links in the walking and bicycling network.

**Changed Conditions from the 2011 Plan**

Since the 2011 Rattlesnake Valley Transportation Summit Study was completed, there have been several improvements to the streets and trails in the valley. These changes include the building of two modern roundabouts where Van Buren Street meets the I-90 interchange, sidewalk improvements and connections along lower Van Buren Street, a bike/ped trail from VanBuren Street to Pine Street (‘RUX’ trail), a sidewalk on Lolo Street and a turn lane at the Van Buren/Missoula Avenue intersection.

Overall, the street system in the Rattlesnake Valley is fairly well-connected for motor vehicles. Pedestrian and bicycling facilities are disconnected, however, and lack basic safety features. As pointed out in the 2011 plan, Greenough Drive, Duncan Drive and Rattlesnake Drive all have significant gaps that often make walking and biking dangerous and inaccessible. An increasing population is intensifying the situation and putting more pressure on these incomplete streets.
The 2011 plan identified many needed improvements. The following table shows projects identified in the 2011 plan and the current status of those projects.

**Priorities in 2011 Plan and 2021 Status**

Urgent: Appropriate non-motorized infrastructure on Lower Van Buren Street
Status: Sidewalks were fixed and connected
Note: Bike lane widths were reduced in order to standardize car parking

Urgent: Appropriate non-motorized infrastructure on the incomplete sections of Lolo Street
Status: A sidewalk was built on the south side of Lolo St. (Greenough Dr. to Rattlesnake Dr.)
Note: Motor speeds continue to be very high; the concrete on Lolo St. bridge is deteriorating

Urgent: Appropriate non-motorized infrastructure on Rattlesnake Drive from Lolo Street to Rattlesnake Elementary School
Status: No change

High: Appropriate non-motorized infrastructure on Greenough Dr. (Alvina to Lolo Street)
Status: No change

High: Appropriate non-motorized infrastructure on Duncan Dr. (Lolo St. to Mountain View Dr.)
Status: No change

High: Appropriate non-motorized infrastructure on Gilbert Avenue, from Lolo St. to Rattlesnake Elementary School
Status: No change
Note: The route has been designated a 'Safe Bike/Walk Route to School'

High: Appropriate non-motorized infrastructure on Rattlesnake Dr., from Rattlesnake Elementary School north to Creek Crossing
Status: Several sidewalk gaps on the west side have been filled

High: Appropriate non-motorized infrastructure on Rattlesnake Dr., from Creek Crossing to Tamarack
Status: No change

High: Appropriate non-motorized infrastructure on Lower Lincoln Hills Drive, from Rattlesnake Drive to Sunflower Drive
Status: Trail sections have been built and a bike park has been constructed
High: Appropriate non-motorized infrastructure along Lincoln Hills Drive, from Applehouse Lane to Contour Lane Status: No change

High: Appropriate non-motorized infrastructure along the east side of soccer fields connecting all neighborhoods above Rattlesnake Court with the fields and Lincoln Hills Drive Status: No change

Medium: Appropriate non-motorized infrastructure on Greenough Dr., from Waterworks Hill to Alvina Status: No change

Medium: Appropriate non-motorized infrastructure from 1800 Van Buren/Rattlesnake Drive to Wylie Street Status: Short sections of sidewalk have been built

Medium: Appropriate non-motorized infrastructure from the pedestrian bridge on Mountain View to Duncan Drive Status: No change

Medium: Appropriate non-motorized infrastructure on North Duncan Drive, from Mountain View Drive to Castle Pines Status: No change

Medium: Appropriate non-motorized infrastructure on Rattlesnake Drive, from Tamarack north to the city/county boundary line Status: No change

**Project Prioritization Process for 2021 Plan Update**

The Rattlesnake Transportation Committee felt that it was important to gather as much input as possible from a broad range of Rattlesnake Valley residents and visitors. Working with a retired UM Sociology Professor with extensive expertise in survey research, the committee constructed a questionnaire. The questionnaire was designed to gain public input regarding four modes of transportation in the Rattlesnake Valley: motor vehicles, public transit, bicycling, and walking. For each mode of transportation, questionnaire respondents were asked to identify specific locations in the Rattlesnake Valley that they believed to be “unsafe or especially challenging” for those using that mode of transportation. If a respondent identified a challenging location, the respondent was asked follow-up questions regarding the precise location, what makes the location unsafe or difficult to navigate, and what practical suggestions the respondent may have

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to make the location safer or more accessible. Respondents had the opportunity to identify as many as five specific locations for each mode of transportation. The questionnaire also provided space for respondents to make other comments regarding transportation issues in the Rattlesnake Valley. The Missoula Office of Neighborhoods assisted with this process. While designed as an online questionnaire, a hard copy version was made available to the public and could be obtained at the Office of Neighborhoods. Questionnaire responses were accepted from May of 2019 through October of 2019.

The Committee sought input from as wide an audience as possible by using a variety of methods to market the questionnaire. These included putting the link on the City of Missoula website, sending the online questionnaire link to those on the city email list for the neighborhood, publicizing the link on social media platforms, placing posters at trailheads, markets, cafes and grocery stores, and encouraging neighbors to talk to neighbors. Members of the Committee appeared at the general meetings of the Upper and Lower Rattlesnake Neighborhood Council to talk about the Committee’s work, answer questions, and encourage those present to respond to the questionnaire.

During the five months that the questionnaire was available, respondents identified many locations in the Rattlesnake Valley that they considered unsafe or challenging. Working with the Office of Neighborhoods, the Committee compiled all of the raw data and comments onto organized spreadsheets. Committee members divided up the data and worked in groups to take on the task of organizing a large amount of public input. They identified challenging locations, often lumping together multiple responses regarding the same location. To rate the projects they reviewed and revised the criteria established for the 2011 plan and then used the updated version (see Appendix B, Project Scoring Criteria Checklist) to rate and prioritize each project on a 0 to 5 point scale. Final ratings were based on the degree of concern expressed by the public (as reflected by questionnaire mentions), on-the-ground site visits, safety data, and Committee discussion. The results of this process are displayed below.

**Street System**

The current street system in the Rattlesnake Valley serves valley residents, others who are visiting or accessing recreation opportunities, and service providers. As the area has become more developed the streets have become more congested, especially during typical morning and afternoon commuting times. The congestion issues are further compounded by the fact that there are only two main access routes (Van Buren Street/Rattlesnake Drive and Greenough Drive/Duncan Drive), and just two streets that cross Rattlesnake Creek (Vine Street and Lolo Street).

The project priorities shown below were identified by the committee and from public input in response to the questionnaire and ranked using the Project Scoring Criteria Checklist (Appendix B) to address issues of safety and access for people that bike, walk, drive, and take public transit.
within the neighborhood. The projects are organized along the major travel corridors, from south to north, and by priority (‘Urgent’, ‘High’ and ‘Medium’).

Street System Projects- Summary

Urgent Priority:
U1- Front/Van Buren intersection
U2- Broadway/Van Buren intersection
U3- Van Buren/I-90 intersection
U4- Van Buren/Missoula Ave. intersection
U5- Greenough/Vine intersection
U6- Greenough Dr- Waterworks Hill to Lolo
U7- Rattlesnake Dr- Missoula Ave to Creek Crossing
U8- Rattlesnake Dr/Lolo intersection
U9- Lolo St- Greenough to Rattlesnake
U10- Duncan Dr- Lolo to Mtn. View
U11- Duncan Dr- Mtn. View to north end
U12- Rattlesnake Dr- Creek Crossing to USFS trailhead

High Priority:
H1- Westbound/I-90 merge lane
H2- Van Buren- Poplar to Missoula Ave
H3- Greenough Dr/N.2nd intersection
H4- Van Buren, Rattlesnake Dr- crosswalks
H5- Missoula Ave- Van Buren to Lolo
H6- Rattlesnake Dr/Lower Lincoln Hills intersection
H7- Rattlesnake Dr/Creek Crossing intersection
H8- Lower Lincoln Hills Dr- Rattlesnake to Contour Ln
H9- Lower Lincoln Hills Dr/Columbine intersection

Medium Priority:
M1- Madison/Spruce intersection
M2- Greenough Park commuter trail
M3- Spruce/Greenough Rail crossing
M4- Jackson/Monroe intersection
M5- Mtn. View Dr- Duncan to Rattlesnake
M6- Lower Lincoln Hills Dr- bike park to playing fields crossing
Street System Projects - Details

**Van Buren Street/ Rattlesnake Drive corridor**

*Scoring Level 5 - Urgent Priority*

**Intersection improvements:**

**Front Street at Van Buren Street - Map Index U1**

Issues - Hazardous high traffic crossing for bikes and peds., magnet destinations

Solutions - Make improvements for safer walking and biking such as:
- Re-install stop sign for east bound Front Street
- Create pedestrian zone/plaza across Front Street
- Install raised crosswalk
- Install urban mini roundabout

**East Broadway at Van Buren Street - Map Index U2**

Issues - Hazardous high traffic crossing for bikes and peds., magnet destinations

Solutions - Make improvements for safer walking and biking such as:
- Add signage to identify RUX trail for multi-use
- Realign motor vehicle lanes and bike lanes and enhance year-round pavement marking on Van Buren, south of roundabouts
- Activate left turn signals on Van Buren at E. Broadway
- Give walkers and bikers advanced crossing advantages when crossing E. Broadway
- Add flashing light for peds/bikes using the E. Broadway crosswalk
- Change signal at Broadway/Van Buren to single lane roundabout and change Broadway to 3-lane (one travel lane in each direction, with a center turn lane)

**Van Buren Street south of Poplar Street and I-90 roundabouts - Map Index U3**

Issues - Dangerous bike/ped crossings and routes, poor drainage, icy conditions in winter, lack of continuous bike lanes, lack of safety features for pedestrians on westbound entrance ramp, minimal signage, heavy mixed traffic, magnet destinations

Solutions - Make improvements for safer walking and biking such as:

**Roundabouts** -
- Improve drainage to limit ice buildup in bike/ped areas
- Add flashing light for pedestrian crossing on westbound entrance ramp
- Realign entrance and/or add raised crossing areas on westbound entrance ramp to slow motor vehicle traffic
- Add protected bike lanes around the roundabouts
- Remove the auxiliary lane for the eastbound I-90 entrance ramp

**Van Buren south of Poplar Street to roundabouts** -
- Redesign and install better signage for southbound bikers merging with motor vehicles on Van Buren Street south of Poplar Street
Van Buren Street at Missoula Ave. – Map Index U4
Issues - Limited sight distance, bike route, heavy mixed traffic, crash history

Solutions - Make improvements for safer walking, biking, and motor vehicle use such as:
- Enhance pavement markings year-round
- Add a center island or raised pavement markers for left turns to calm traffic
- Add a painted/signed crosswalk on Van Buren Street

Complete Street
Rattlesnake Drive north of Missoula Ave. to Creek Crossing (LRTP # 156) – Map Index U7
Issues - Lack of ped/bike facilities along the entire segment, high volume mixed traffic, commuter route, school access route, bump-outs at Pineview and Mtn. View near Rattlesnake School, unsafe crosswalk on north side of Mountain View intersection due to vegetation, a fence, a power pole and an old river rock 'pier' blocking pedestrians’ and drivers’ view, housing density

Solutions - Make improvements for safer walking, biking, and school access such as:
- Construct sidewalks and designate bike lanes along entire segment
- Address Rattlesnake School crosswalk safety issues for pedestrians and bicyclists at Pineview and Mtn. View. Options include:
  - Modify bump-outs for safer biking
  - Change bump-outs to a raised pedestrian crossing
  - Remove bump-outs and install a pedestrian refuge island instead
  - Move crosswalk at Mountain View to south side of intersection for better visibility for both pedestrians and drivers. (Kids would also then be on the correct side of Mtn View so would not need to then cross again in front of buses, etc. to get to school)

Intersection Improvements
Lolo Street and Rattlesnake Drive – Map Index U8
Issues - Sight distance for vehicles turning north from Lolo Street is limited by fence and vegetation on SW corner, heavy vehicle traffic, lack of signed/painted crosswalk

Solutions - Make improvements for safer walking, biking, and driving such as:
- Relocate fence on SW side of intersection
- Trim or remove vegetation blocking line of sight
- Constructing a roundabout or adding stop signs on Rattlesnake Drive
- Paint and sign a crosswalk on Rattlesnake Drive

Bicycle and Pedestrian Facilities and Shared Use Path:
Rattlesnake Drive north of Creek Crossing to USFS trailhead (LRTP 341 and 193) – Map Index U12
Issues - Lack of safe pedestrian and bike facilities, heavy recreation and commuter use

Solutions - Make improvements for safer walking, biking, and driving such as:
- Designate safe bike and pedestrian facilities along the entire segment
- Improve, connect and formalize existing trail route in borrow ditch along westside of road. (Consider natural surfacing for trail for cost savings, drainage, and environment)
Van Buren Street/Rattlesnake Drive corridor

Scoring Level 4 - High Priority

Vehicles merging onto I-90
Westbound I-90 entrance ramp (merge lane) - Map Index H1

Issues - Difficult to merge onto I-90 at highway speed due to poor sight distance and the short, uphill ramp

Solutions – Make improvements for driving such as:

- Improve sight distance
- Reduce speed limit on I-90
- Lengthen ramp
- Improve signage on I-90 to move through traffic into left lane

Bike lanes
Van Buren Street from Poplar Street to Missoula Ave. – Map Index H2

Issues - Narrow bike lanes with hazards such as parked cars, trash cans, snow and winter gravel in bike lanes and bus stops, lack of year-round pavement striping, bus and bike route, heavy mixed traffic, magnet destinations, crash history, housing density

Solutions - Make improvements for safer biking, walking, and bus travel such as:

- Address identified issues through changes in maintenance and management (i.e. parking restrictions, snow and winter gravel removal, trash container placement, year round pavement striping, etc.)
- Change unprotected bike lanes to protected bike lanes (may require removal of parking on one side of street)

Crosswalks
Van Buren Street intersections from Poplar Street north to Holly Street – Map Index H4

Issues - Unmarked or insufficiently marked crosswalks for kids and others crossing street to get to Prescott School, Greenough Park and Mt. Jumbo trailhead, heavy foot and vehicle traffic, vehicle speeding

Solution - Make improvements for safer pedestrian crossing such as:

- Add painted and signed crosswalks where needed at intersections

Crosswalks
Rattlesnake Drive intersections between Lolo Street and lower Lincoln Hills Drive including Gilbert (bus stop) and Dickinson (Clark Fork School) – Map Index H4

Issues - Lack of painted and signed crosswalks for bus stops, and access to Clark Fork School

Solutions – Make improvements for safer pedestrian crossings such as:

- Add a painted and signed crosswalk for the bus stop near Gilbert
- Add a painted and signed crosswalk for Clark Fork School access at Dickinson

Bike/pedestrian facilities
Missoula Ave. from Van Buren Street to Lolo Street – Map Index H5

Issues - Poor pavement condition and overhanging vegetation restricts use of ped/bike space

Solutions – Reestablish safe pathways for bicycle and pedestrian travel such as:
- Repave existing bike/ped pathway and trim vegetation.
- Investigate different lane configurations for scheduled 2021 repaving project

**Intersection improvement**
Rattlesnake Drive at lower Lincoln Hills Drive – Map Index H6

Issues - Sight distance for vehicles turning onto Rattlesnake Drive blocked by parked cars on east side of Rattlesnake Drive, bike and ped. traffic to parks and school, high motor vehicle traffic volume, housing density

Solutions – Make improvements for safer motor vehicle, bicycle and pedestrian travel such as:
- Eliminate parking on east side of Rattlesnake Drive near the intersection
- Mark and sign crosswalks

**Intersection improvement**
Rattlesnake Drive/Creek Crossing/Lincolnwood – Map Index H7

Issues - Confusing 3-way stop intersection, lack of sidewalks and painted/signed crosswalks, heavy mixed traffic

Solutions - Make improvements for safer walking, biking, and driving such as:
- Add signage for 3-way stop or convert to a 4-way stop intersection
- Convert to urban compact roundabout or urban mini roundabout
- Add sidewalks and painted/marked crosswalks

**Lolo Street**

**Scoring Level 5 - Urgent Priority**

Bike/pedestrian Lolo Street – Map Index U9

Issues - Frequent mixed traffic, narrow bridge, crash history, vehicle speeding, housing density. East side: Unmarked crosswalk to bus stop at Raymond, bump-outs squeeze bike space. West side: Unmarked crosswalks, lack of bike lanes.

Solutions - Make improvements for safer walking and biking such as:
- Mark and sign crosswalks and bikeways
- Modify bump-outs at Gilbert and Raymond intersections for safer biking
- Convert street to a one-lane, one-way design
- Discontinue painting yellow center stripe and add Advisory Bike Lanes
- Widen or replace bridge to accommodate sidewalks and bike lanes

**Lincoln Hills Drive**

**Scoring Level 4 - High Priority**

Bicycle/pedestrian facilities and improvements

Lower Lincoln Hills Drive (LRTP #343, 344, 345) – Map Index H8

Issues - Lack of ped/bike facilities along entire length, frequent access to school, parks, and Mt. Jumbo trailhead
Solutions - Make improvements for safer walking and biking such as:
- Add bicycle/pedestrian facilities to connect soccer/baseball fields to all neighborhoods above Rattlesnake Ct.
- Add bicycle/pedestrian facilities connecting to Mt. Jumbo trailhead at end of Lincoln Hills Dr.

Intersection improvement
Lower Lincoln Hills Drive at Columbine - Map Index H9
Issues - Sight distance blocked by vegetation on southeast corner, frequent bike/ped. traffic, lack of sidewalks, bike lanes, or shoulder, higher vehicle speeds due to grade, magnet destinations (parks, school), housing density

Solutions – Make improvements for safer walking, biking, and driving such as:
- Trim/modify vegetation that blocks line of sight
- Add marked and signed crosswalk
- Add appropriate bikeways and walkways

Lincoln Hills Drive
Scoring Level 3 - Medium Priority
Crosswalks
Lower Lincoln Hills Drive – Map Index M6
Issues - Lack of painted/signed crosswalk between soccer/baseball fields parking lot and Syringa Bike Park across the street

Solutions - Add a painted and signed crosswalk

Greenough Drive/Duncan Drive corridor
Scoring Level 5 - Urgent Priority
Complete Street
Greenough Dr. (Minckler Loop to Waterworks Hill TH) to Lolo St. (LRTP #129) – Map Index U6
Issues - Lack of bike/ped. facilities along entire segment, narrow hilltop section with curve and steep drop-off, high volume mixed traffic, crash history

Solutions - Make improvements for safer walking and biking such as:
- Add bike lanes, cycle tracks, sidewalks and/or a multi-use path
- Continuing a curbless street for cost savings and natural water drainage

Complete Street
Duncan Drive from Lolo Street to Mtn. View and Mtn. View to north end trailhead (LRTP #129) – Map Index U10 and U11
Issues - Lack of bike/ped. facilities along entire segment, high volume mixed traffic, crash history, vehicle speeding
Solutions - Make improvements for safer walking and biking such as:

- Add bike lanes, cycle tracks, sidewalks and/or a multi-use path
- Continuing a curbless street for cost savings and natural water drainage
- Manage parking on Duncan Drive section to accommodate safe bike/ped travel

**Intersection Improvements**

**Greenough Drive at Vine Street (LRTP #3024) – Map Index U5**

Issues - Lack of safe bike/ped. crossing to park entrance and commuter trail on Vine Street, heavy mixed traffic, sight distance for vehicles on Vine Street turning onto Greenough Drive blocked by vegetation in park, magnet destinations, crash history

Solutions - Make improvements for safer walking, biking, and driving such as:

- Remove vegetation in SW corner of park that blocks drivers view from Vine Street
- Improve or relocate Vine Street crossing and/or park entrance for mixed bike/ped traffic
- Investigate a spur trail going under Vine street bridge and continuing to Clark Fork river trail, also going under Broadway street bridge and Front Street bridge

**Greenough Drive/Duncan Drive corridor**

**Scoring Level 4 - High Priority**

**Sight distance**

**Greenough Drive at N. 2nd Street – Map Index H3**

Issues - Lack of sight distance for drivers turning from N. 2nd Street north onto Greenough Drive, heavy mixed vehicle/bike/ped traffic, magnet destinations

Solutions – Make improvements for safer driving, biking, and walking such as:

- Install mirror, flashing light or other device on N. 2nd Street to allow drivers turning north onto Greenough to be aware of southbound vehicles
- Slow vehicle speeds on Greenough to increase turning safety
- Incorporate solutions into current study of Madison/Spruce intersection

**Greenough Drive/Duncan Drive corridor**

**Scoring Level 3 - Medium Priority**

**Bicycle/pedestrian facilities and improvements**

**Greenough Park (west side) commuter trail – Map Index M2**

Issues – High maintenance, irregular, and unsafe trail surface due to tree roots, mixed bike/ped. traffic, magnet destinations, housing density, crumbling trail, toxins from asphalt getting into Rattlesnake Creek

Solutions - Make improvements for safe bike and pedestrian use such as:

- Reconstruct trail surface using a permeable and/or environmentally friendly material that allows water to reach tree roots
Turn lanes
Madison Street at Spruce Street and Greenough Drive – Map Index M1
Issues - Northbound traffic on Madison backs up due to lack of turn lanes, especially after train delays, heavy mixed traffic, magnet destinations, housing density

Solutions – Make improvements for driving, biking, and walking such as:
- Delineate left and right turn lanes for northbound Madison at Spruce Street
- Constructing an urban compact roundabout or urban mini roundabout

Railroad track crossing
Spruce/Greenough railroad track crossing - Map Index M3
Issue - Trains cause traffic delays and increased air pollution from idling vehicles

Solutions – Make improvements for more efficient traffic flow such as:
- Add a flashing light and/or text sign on Madison south of E. Broadway to alert northbound drivers to take alternate routes when a train is present at Spruce/Greenough RR crossing.
- Enforce limits on amount of time freight trains can block street crossing
- Construct bike/ped. underpass at existing Rattlesnake creek train trestle

Greenough Drive/Duncan Drive corridor
Scoring Level 2 - Medium Priority
Multi-modal Improvements
Mountain View Drive west of Rattlesnake Drive (LRTP #340) - Map Index M5
Issues - Lack of bike/ped. facilities for school access route on west side of creek
Note - Sidewalk, curb, and gutter are present east of the creek on the south side of Mtn. View.

Solutions - Make improvements for safer walking and biking on Walk/Bike to School Route such as:
- Install sidewalk, bike lane or pathway on west side of creek
- Widen bike ped bridge and/or approaches
- Remove chain link fence along bridge

Other Areas
Scoring Level 2 - Medium Priority
Sight distance
Jackson at Monroe Street – Map Index M4
Issues - Sight distance on blind, tight curve, mixed traffic, route to park

Solutions – Add safety signage and/or mirrors

Other Issues and Concerns
The following issues and concerns reflect public comments for multiple locations that are in
addition to those specifically described by location in the table above. They are not in priority order but all projects identify a significant safety issue.

**Bus service**

*Neighborhoods in the upper Rattlesnake Valley and west of Rattlesnake Creek*

- Issues - No bus service
- Solution - Consider adding bus service to under-served areas

**Crosswalks**

*Various locations - See Appendix I.*

- Issues - Lack of marked (painted or signed) crosswalks increases safety risk for pedestrians
- Solution - Add marked crosswalks in locations displayed in Appendix I

**Motor Vehicle Speeding**

*All arterial/collector streets and many side streets*

- Issues - Drivers traveling over posted speed limits
- Solutions - Increase enforcement, implement wider use of speed monitoring signs, initiate traffic calming, change character of the streets to naturally slow motor traffic

**Unsafe and/or unusable bike lanes, bus stops, sidewalks, and street shoulders used by pedestrians and bicyclists**

*Various locations but significant along arterial/collector streets with frequent use by bikes/peds*

- Issues - Snow, ice, and gravel make pedestrian areas, bike lanes, and bus stops unsafe and/or unusable; excessive dust and pollution from motor vehicles affecting health
- Solutions: Change snow plowing practices to deposit snow elsewhere and/or remove snow and gravel from bike/ped. use areas and bus stops soon after; improve dust mitigation

**Lack of year-round pavement striping**

*Various locations but significant along arterial/collector streets with frequent use by bikes/peds*

- Issues - Lack of striping leads to confusion and increased safety conflicts between drivers and bikers and pedestrians
- Solutions - Use paint which lasts longer or repaint travel ways more often.

**Bicyclists not obeying traffic laws**

*Various locations*

- Issue - Increased risk for all
- Solutions - Improved information, education, and enforcement

**Vegetation or fencing blocking sight lines at intersections**

*Various locations*

- Issue – Increased risk for all
- Solutions - Inform landowners, enforce city code, slow speeds to reduce chance of conflict
Multi-use trail connections
Various locations (see Trails System section)

Issues - Lack of connecting routes to facilitate non-motor vehicle travel
Solutions - Construct or designate routes and segments as needed

Trails System

The current trail system in the Rattlesnake Valley serves many people. Walking and biking closer to the natural environment and without the presence of motor vehicles is a treasured activity of residents and visitors alike. There are several sections of existing trails, with a backbone along or near Rattlesnake Creek. These trails include The RUX Trail, Greenough Park Trail, Pineview Park Trail, Tom Green Trail, The PEAS Farm Trail, Waterworks Hill Trails, The Jumbo Saddle, The Power Line Trail and a vast network of natural surface trails in the Rattlesnake National Recreation Area.

There is a strong neighborhood desire to connect The Clark Fork River to The Rattlesnake Recreation Area (and thus the Rattlesnake Wilderness Area) by off-road trail, without having to cross the path of a motor vehicle. Many of the comments received during the process of making this transportation plan focused on the dangers of walking and biking in close proximity to motor vehicles. Off-road trails provide a way to mitigate these dangers and help make for a healthier neighborhood circulation system. Below is a brief description of existing trails in the Rattlesnake Valley along with desired connections that were identified during the public comment period.

The Clark Fork River to Greenough Park: This potential trail could help connect the Rattlesnake Valley to the rest of Missoula by providing safer passage to the existing Riverfront trail system. Having the trail go under I-90, the railroad tracks and Broadway could be a safe and accessible option that should be explored. This trail partly exists on the east side of Rattlesnake Creek, just south of Vine St.

Greenough Park to Pineview Park: These valued neighborhood parks could be better connected by a trail either along the creek or through some of the existing open spaces. One option is a natural surface trail through Bugby Nature Preserve, with a walk/bike bridge over Rattlesnake Creek.

Pineview Park to the North end of Duncan Dr: This desired trail would incorporate the existing PEAS Farm trail and connect all the way to the end of Duncan Dr. The PEAS Farm trail currently ends at a point of private homes near Rattlesnake Creek. It is desired to work with landowners to create a natural surface walking and bicycling trail that would connect to the existing trailheads at the end of Duncan Drive- which then connects to the Rattlesnake Recreation Area.
**Duncan Dr. Trail:** The neighborhood has expressed a strong desire to have a bike and pedestrian path along upper Duncan Drive to allow better commuter access to Missoula. Upper Duncan Drive currently has little to no shoulder, creating a dangerous situation for people that are biking and walking. Continuing a trail south along Greenough Dr is another potential connection that was mentioned in several public comments.

**Borrow Trail:** This trail informally exists yet needs grading and other improvements to the natural surface to become more usable year round. The proposed trail would start at Creek Crossing, run along the east edge of Ten Spoons Winery (west side of Rattlesnake Drive), and then connect to the High Line Trail near Tamarack St. The trail would serve a great number of residents and visitors going to the Upper Rattlesnake Valley trails and the Rattlesnake National Recreation Area. This trail would serve pedestrians, school children and people on bikes. The existing situation is dangerous to bikers and walkers who must use the narrow road shoulder.

**Mt. Jumbo Trails:** On the Eastern border of the Rattlesnake Valley are the Mt. Jumbo Trails. These include the L Trail and the Southface Trail, which connect to the Jumbo Backbone Trail. The L Trail starts at Cherry St or Prescott School and heads up Mt Jumbo towards the “L”. The “L” trail also branches eastward above I-90 and becomes the Southface Trail. These trails are heavily used by Missoula residents from many different neighborhoods. Most of these trails are closed in winter to protect elk and other big game animals. The public comment period identified a desire to further extend and connect the existing trails around Mt. Jumbo. This includes a desire to connect the Rattlesnake Valley to E. Missoula via non-motorized trail.

**Waterworks Hill Trail:** This trail starts out just north of the railroad tracks on Greenough Drive. One trail goes to Waterworks Hill while another fork heads up Cherry Gulch and eventually goes to the North Hills Open Space. This trail gets heavy year-round use, especially from dog-walkers. The trailhead is crowded during evenings and weekends. This is one of the heaviest used trails in Missoula. More connections should be explored for this part of the Rattlesnake Valley, including better connections to the Grant Creek neighborhood trail system.

**PEAS Farm Trail:** This trail starts near the Mountainview Pedestrian Bridge over Rattlesnake Creek near Mountainview Drive and Pineview Park and extends northward along Rattlesnake Creek (on the West side of the creek). This trail should connect to the end of Duncan Drive going north and to Greenough Park going south.

**Mountain View Trail:** This short trail segment connects Pineview Park to the PEAS Farm trail. There is a strong public desire to connect this trail to the North Hills trails on the west side and the Lincoln Hills trails on the east side.

**Sunlight Trail:** The Sunlight Trail trailhead is located on Duncan Drive and heads up the hill to the
North Hills Trail and open space. More connections are desired to the north into the Rattlesnake National Recreation Area and to the west into the Grant Creek and Snowbowl areas.

**North Rattlesnake Creek Trail:** This trail starts at the park near Timber Lane and goes north along Rattlesnake Creek, eventually going through the Rattlesnake Dam removal area and up to the Rattlesnake National Recreation Area. The trail gets heavy use by dog-walkers, families, bikers and hikers. An additional starting point for this trail is at the North end of Duncan Drive—a footbridge that crosses Rattlesnake Creek is the connector. Portions of this trail are unique in that it goes through tall, mature Douglas Fir and Ponderosa forests. It is a popular trail for picnicking, hiking and biking. Ensuring these trails are well-connected is a priority for the neighborhoods.

**Powerline Trail:** This trail goes from the Rattlesnake Creek Trail to the Lincoln Hills Jeep Trail. Part of this trail was recently surfaced using compressed gravel. The trail sees heavy use by families, dog-walkers, hikers and bikers. Public comment supports continued improvements and connections for this popular trail as well as a signed and marked crosswalk where the trail crosses Rattlesnake Drive.

**North Loop Trail:** This trail comes off of Tamarack Dr. and goes up to the Lincoln Hills Trailhead. Several other trails branch off of this popular route, including the Lower Lincoln Hillstrails, the Elk Ridge Trail and Three Trees Trails. More connections for these trails are valued by the neighborhoods.

**Lincoln Hills Trailhead:** Accessed at the end of Lincoln Hills Road, the parking area is often full and gets high use by bikers, hikers and families. Many trails can be accessed from the trailhead including the Lower Lincoln Hills Trail, Tamarack Jeep Trail, Elk Ridge, Jumbo Saddle Trail, the North Loop Trail and the Mount Jumbo Backbone trail. These trails can be very congested on weekends and other times, yet there are many trails for hikers and bikers to access. Public comment favors increased connections.

**Woods Gulch Trail:** Accessed off of Woods Gulch Rd., this trail provides access to the Mount Jumbo Saddle trail system as well as many trails on the Lolo National Forest and Rattlesnake National Recreation Area trails. Ensuring a well-connected trail system in this area is supported by the Rattlesnake neighborhoods.

**Numerous small trail connections:**

The Rattlesnake neighborhoods are full of cul-de-sacs and dead end streets. Often, two cul-de-sacs are very close to each other, yet not connected. By working with landowners, a small strip of land between homes can connect the cul-de-sacs and provide for essential human connection, especially for kids that live near each other yet are disconnected by fences, ditches, and other small obstructions. Public comment strongly supported trail connections within the
neighborhood that have a focus on families and children.

**Mountain and Hill trails:**

The Rattlesnake Valley is bordered by Mount Jumbo to the East and the North Hills to the west. Extending, connecting and improving the existing trails in these areas can make for a more seamless way for walkers and bikers to travel for both utility and recreation.

Note: Several public comments focused on the need for safer and more accessible crossings wherever a trail crosses a street. This should be an on-going discussion of implementing best practices for these situations.
Projects are not prioritized by any order. Not all projects are listed with visual aids.

The color red indicates an urgent project with a score 5.
The color orange indicates a high priority project with a score of 4.
The color yellow indicates a yellow a medium priority project with a score of 3 or 2.

Front Street @ Van Buren Street- U1

Headed south (above) and facing east (below). Hazardous crossings for bikes and pedestrians.
Van Buren Street & East Broadway - U2

Intersection heading north (above and below). Multiple vehicle lanes cause blind spots/danger.

View of intersection heading south (below). The area is hazardous for bicycles and pedestrians, while being near many magnet destinations in the neighborhood.
A bird’s eye view of the two roundabouts located on Van Buren Street (above). The roundabout on the left is the furthest south, while the roundabout pictured on the right is further north. Some of the large sweeping angles lead to higher motor vehicle speeds, which decreases overall safety. Also, the extra turn lane (SE portion of the roundabouts, upper left in the above picture) adds crossings conflicts and should be considered for removal.

This public art mural was supported by the transportation committee to help improve the aesthetic of the roundabouts. While the roundabouts seem to have improved flow and safety,
there are further improvements that can be made to increase safety and lessen the impact of the impervious surfaces in the area.

**Van Buren Street @ Missoula Avenue - U4**

Turning from Van Buren Street onto Missoula Avenue (above) can be dangerous. There is limited sight distance, heavy mixed use traffic, and a crash history. *Area has changed since the public comment period for this transportation plan.*

**Rattlesnake Drive - U7, LRTP #156**
Rattlesnake Drive (above) lacks walking and bicycling facilities, while being a popular route.

**Lolo Street and Rattlesnake Drive - U8**

The intersection of Lolo Street and Rattlesnake Drive (above) lacks a signed or painted crosswalk. Turning north from Lolo Street onto Rattlesnake Drive is dangerous for motor vehicles as sight distance is blocked by a fence and vegetation on the southwest corner.

**Rattlesnake Drive (north of Creek Crossing) to USFS Trailhead - U12 - LRTP #341**
Lack of bicycle and pedestrian facilities along Rattlesnake Drive (above), which acts as a school access route. The informal Borrow trail is visible on the far left of the photo.

**Westbound I-90 Entrance Ramp - H1**

The short, uphill ramp along with sight distance blocked by the sound wall (on right) creates danger for cars merging onto I-90 (above).

**Van Buren Street from Poplar Street to Missoula Avenue - H2**

Van Buren Street near Poplar Street (above) has a very narrow bicycle facility, forcing people to ride with car traffic. Other obstacles such as trash cans, parked cars, snow, and winter gravel create hazardous bicycling conditions. Several blocks further north (below) shows two young people riding bicycles in the door zone, which threatens a cyclist’s safety (from abruptly opening doors of parked cars).
Rattlesnake Drive at Mountain View - H4

Unsafe crossing, pictured on the right of photo- the fence, power pole, vegetation, and river rock pier block the view of both drivers and pedestrians.

Gilbert Avenue at Pineview Drive - H4

This popular intersection (above) lacks signage or painted crossings although it is a heavily used walk to school route.
West Greenough to Duncan Drive

U 6

Lolo Street - U 9

- Narrow bridge
- Crash history
- Lack of crosswalks
- No bicycling facilities

U 10

- Crash history
- Lacking bicycle & pedestrian facilities
- High volume mixed traffic
- LRTP Project #129

Lolo St. & Rattlesnake Dr.

U 8

- Heavy vehicle traffic
- Sight distance for vehicles heading north is blocked
- No marked crosswalks

Greenough Drive & Vine St.

U 5

- No safe entrance to the park for bikes and pedestrians
- Lack of sight distance for vehicles turning from Vine St.
- Crash history
- LRTP Project #3024

Greenough Drive & N. 2nd St.

H 3

- Heavy mixed traffic
- Lack of sight for vehicles turning north from N. 2nd St.
- Near magnet destinations
Summary

Since the 2011 Rattlesnake Valley Transportation Summit Study was completed, the neighborhood population has continued to increase resulting in more travel by motor vehicle, bicycle, bus, and on foot. These changes have served to highlight both the continuing needs for improvement as well as new opportunities to create and enhance a safe and accessible transportation system for all. While several projects identified in the 2011 Study have been implemented, there is more work to do.

This 2021 update to the 2011 Study continues with the premise that biking and walking to destinations is good for the environment and good for personal and community health and that many people who choose these modes of travel live in or visit the Rattlesnake Valley. This update also recognizes the importance of a bus system that serves the needs of the entire neighborhood and the need to improve efficiency and safety for those that drive.

The committee’s attempts to identify and prioritize projects are based on both public input and a criteria checklist. This effort is intended to serve the entire neighborhood and the committee believes that priority projects can and should proceed concurrently in all locations as opportunities and needs arise. The Rattlesnake Transportation Committee generally meets the 2nd Tuesday of each month and will use this transportation plan as a guiding document to increase safety and accessibility for all that pass through and within the Rattlesnake Valley. The committee welcomes and needs citizen involvement. More information can be gained through the City of Missoula’s Office of Neighborhoods.

Participants List

Citizen Participants: The Rattlesnake Neighborhood Transportation Committee is a public work group open to all citizens.

Report Preparers:
Bob Giordano (co-chair)
Emily Jensen (co-chair)
Tom Carlson (Secretary)
Dan Doyle
Bill Ruediger
Ike Moody
Fred Rice
June Siple
Tom Javins
Coordination with Others

The Rattlesnake Transportation Committee has prepared this 2021 update of the 2011 Rattlesnake Valley Transportation Study in coordination with the following:

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Upper Rattlesnake Neighborhood Council Leadership Team

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Appendix A

Public Questionnaire

The Rattlesnake Transportation Committee is a subcommittee of the Upper and Lower Rattlesnake Neighborhood Councils. The mission of this committee of volunteers is to promote safe, efficient, and accessible transportation options for residents and visitors to the Rattlesnake Valley. We are interested in all forms of transportation, including transportation by motor vehicles, public transit, bicycles, and walking.

The committee is presently working on updating the 2011 Rattlesnake Valley Transportation Summit Study. To do so we need your help in identifying challenges to safe, efficient, and accessible transportation in the Rattlesnake Valley on roads, bicycle paths, sidewalks, and trails. We ask that you take a few minutes to answer the questions below.

Thank you for your assistance!

1. Can you think of specific locations in the Rattlesnake Valley that are unsafe or especially challenging for those traveling via motor vehicles? You will be given the opportunity to mention up to five different locations.

   Yes (If they mark “Yes,” go to follow-up question 1a.)
   No (If they mark “No,” skip ahead to question 2.)

1a. Describe as precisely as you can the location that is unsafe or challenging for those traveling via motor vehicles. (For example, write: “Corner of Lolo St. and Duncan Dr.” or the “2900 block of Missoula Ave.”)

1b. Briefly tell us what makes this location unsafe or challenging for those traveling via motor vehicles.

1c. What practical suggestions do you have for making this location safer or less challenging?

1d. Are there other locations in the Rattlesnake Valley that are unsafe or especially challenging to those traveling via motor vehicles?

   Yes (If they mark “Yes,” repeat follow-up questions.)
   No (If they mark “No,” skip ahead to question 2.)

2. Can you think of specific locations in the Rattlesnake Valley that are unsafe or especially
challenging to those traveling via public transit (Mountain Line or school buses)? You will be given the opportunity to mention up to five different locations.

Yes (If they mark “Yes,” go to follow-up question 2a.)
No (If they mark “No,” skip ahead to question 3.)

2a. Describe as precisely as you can the location that is unsafe or challenging for those using public transit. (For example, write: “Southbound bus stop near Brookside” or “the 1500 block of Sunflower Dr.”)

2b. Briefly tell us what makes this location unsafe or challenging to those using public transit.

2c. What practical suggestions do you have for making this location safer or less challenging?

2d. Are there other locations in the Rattlesnake Valley that are unsafe or especially challenging to those using public transit?

Yes (If they mark “Yes,” repeat the follow-up questions.)
No (If they mark “No,” skip ahead to question 3.)

3. Can you think of specific locations in the Rattlesnake Valley that are unsafe or especially challenging to those on bicycles? You will be given the opportunity to mention up to five different locations.

Yes (If they mark “Yes,” go to follow-up question 3a.)
No (If they mark “No,” skip ahead to question 4.)

3a. Describe as precisely as you can the location that is unsafe or challenging to those on bicycles. (For example, write: “Trail at the north end of Lincolnwood” or the “The curve on Rattlesnake Dr. near Cornerstone.”)

3b. Briefly tell us what makes this location unsafe or challenging to those on bicycles.

3c. What practical suggestions do you have for making this location safer or less challenging?

3d. Are there other locations in the Rattlesnake Valley that are unsafe or especially challenging to those on bicycles?

Yes (If they mark “Yes,” repeat the follow-up questions.)
No (If they mark “No,” skip ahead to question 4.)

4. Can you think of specific locations in the Rattlesnake Valley that are unsafe or especially challenging to people walking? You will be given the opportunity to mention up to five different locations.

Yes (If they mark “Yes,” go to follow-up question 4a.)
No (If they mark “No,” skip ahead to question 5.)

4a. Describe as precisely as you can the location that is unsafe or challenging to people walking. (For example, write: “Trail at the north end of Lincolnwood” or the “Sidewalks near the roundabouts at the freeway.”

4b. Briefly tell us what makes this location unsafe or challenging to people walking.

4c. What practical suggestions do you have for making this location safer or less challenging?

4d. Are there other locations in the Rattlesnake Valley that are unsafe or especially challenging to people walking?

Yes (If they mark “Yes,” repeat the follow-up questions.)
No (If they mark “No,” skip ahead to question 5.)

5. If you have any other comments that you would like to make, please share them here.

Thank you again for your assistance!
Appendix B

PROJECT SCORING CRITERIA CHECKLIST

Used to generate a numerical rating for road sections

This checklist is designed so that the higher the number, the higher the degree or probability of risk. The guiding principles (e.g., doing the most good for the most people, noting cumulative effects, examining the current roadways and sidewalks, etc.) are meant to be reflected here. This checklist can be used to determine the order in which projects of High Priority will be completed. Use the rating system below to answer the questions.

Identify the segment being studied:

(NOTE: The 2021 Plan update uses the categories of ‘Urgent’, ‘High’, and ‘Medium’)

Rating system - In answer to the questions below, select the number that best describes the project area.

5 = High priority
4 = Yes, definitely, a serious problem in one or more locations.
2 = Somewhat, seldom, or present but not a serious problem.

ROAD CHARACTERISTICS: (25% of total)

Is the road dangerous for bike/peds and vehicles to travel together? Is the road rough or does it have an irregular surface?
Is the line-of-sight seriously blocked by parked cars, curves or buildings or other obstructions?
Are there any magnet destinations along or near the roadway such as commercial enterprises, schools, parks, etc.?
How heavy is the vehicle traffic? (Heavy = 4, Moderate = 2 and Low = 0)
How heavy is the bicycle and pedestrian traffic? (Heavy = 4, Moderate = 2 and Low = 0)
Are one or more intersections ambiguous, dangerous or difficult to see?

SIDEWALKS OR PEDESTRIAN/BIKE SPACE: (25% of total)

Does the road lack sidewalks or pathways needed for safety? Are sidewalks available, but lacking curbs?
Are the sidewalks chipping apart, irregular, collecting mud/water/ice? Do cars park on the sidewalks or into the road, crowding out bike/ped?
Does the road lack flat shoulders or space for bike/peds to get out of the path of vehicles? Are ADA (for the disabled) ramps missing at crossings and intersections?
Are speed-mitigating bulbouts creating hazards? (Consider a raised crosswalk?)
Are there any magnet destinations along or near the roadway such as commercial enterprises, schools, parks, etc.?

**APPROPRIATE SPEED, SIGNAGE OR TRAFFIC CALMING DEVICES: (10% of total)**

- Does the area need signs warning of school children crossing or other hazards? Do vehicles pick up speed because of grade?
- Is the posted speed appropriate for safe usage?
- Would traffic-calming devices improve safety in the area? Explain.

**DEGREE OF RISK: (15% of total - lower because there is overlap with other topics)**

- Is there frequent use by the young, elderly, parents with children or other vulnerable people?
- Does the segment pass busy locations requiring egress and entrance or picking up and dropping off passengers?
- Are there many deer or other large mammal crossings and/or animals killed?

*Crashes (information provided by city personnel)*

- Is there a record of crashes over the last 10 years? How many? (Two or more = 4, 1 = 2, 0 = 0) Injuries? (A fatality should be given a 6.)

**DENSITY**

- Eight or more dwelling units per acre
- (4) Three to seven dwelling units per acre
- (2) Zero to two dwelling units per acre (0)
## Appendix C

### Intersections and Crosswalks*

<table>
<thead>
<tr>
<th>Location</th>
<th>Issue</th>
<th>Crosswalk Present</th>
<th>Painted</th>
<th>Signed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison Ave. at Spruce Street</td>
<td>High traffic volume</td>
<td>Madison Ave.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Greenough Drive at N. 2nd Street</td>
<td>High traffic, semi-blind intersection</td>
<td>N. Second St.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Greenough Drive at Vine Street</td>
<td>High traffic volume</td>
<td>Vine Street</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Greenough Drive at Minckler</td>
<td>Park access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenough Drive at Alvina</td>
<td>Park access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenough/Duncan/Lolo</td>
<td>High traffic volume</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Duncan Drive at Mtn. View</td>
<td>Walk to School Route and access to Water Works Hill trail.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Duncan Drive Water Works Trailhead</td>
<td>Connection from Rattlesnake Greenway to Water Works Hill trails.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lolo at Woodland</td>
<td>Walk to School Route</td>
<td>Lolo</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lolo at Missoula Ave.</td>
<td>High traffic volume</td>
<td>Lolo</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lolo at Raymond</td>
<td>High traffic volume, school access route, bus stop</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lolo at Gilbert</td>
<td>High traffic volume, school access route</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lolo at Rattlesnake Drive</td>
<td>High traffic volume</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rattlesnake at Gilbert</td>
<td>High traffic volume, bus stop</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rattlesnake at Missoula Ave.</td>
<td>High traffic volume, bike route</td>
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<td></td>
<td></td>
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<tr>
<td>Rattlesnake at Dickinson</td>
<td>High traffic volume, CF school access</td>
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<td></td>
<td>X</td>
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<tr>
<td>Rattlesnake at Pineview</td>
<td>High traffic volume, school access</td>
<td>Rattlesnake and Pineview</td>
<td>X</td>
<td>X</td>
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<td>Rattlesnake and Mtn View</td>
<td>High traffic volume, school access</td>
<td>Rattlesnake and Mtn. View</td>
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<td>X</td>
</tr>
<tr>
<td>Pineview at Gilbert</td>
<td>School access</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pineview at Raymond</td>
<td>School access</td>
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</tr>
<tr>
<td>Rattlesnake at Lincoln Hills</td>
<td>High traffic volume, school access</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rattlesnake/Lincolnwood/Creek</td>
<td>High traffic volume</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rattlesnake between Foxfield and Tamarack</td>
<td>Trail crossing</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Intersection</td>
<td>Conditions</td>
<td>Improvements</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Rattlesnake Drive Lolo Street to Creek Crossing</td>
<td>High traffic volume, schools, bike/ped route</td>
<td>Except for Pineview and Mtn. View</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lincoln Hills at Syringa Park and ball fields</td>
<td>Park access from parking area</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Vine Street at Monroe</td>
<td>Critical Bike Ped Route</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Van Buren north of I-90 to Missoula Ave.</td>
<td>High traffic volume, bike/ped route</td>
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<td>X</td>
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</tr>
<tr>
<td>Van Buren at I-90 roundabouts</td>
<td>High traffic volume, bike/ped route</td>
<td>Van Buren and ramps</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Van Buren at E. Broadway</td>
<td>High traffic volume, bike/ped route</td>
<td>Van Buren and E. Broadway</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Van Buren and Front Street</td>
<td>Bike/ped route</td>
<td>Front Street</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*Note - Under state law pedestrians can cross at any intersection and motor vehicles are required to yield. This table represents the neighborhood intersections that either have pavement markings and signs or should be considered for crosswalk improvements.*
Appendix D

City of Missoula - Transportation Planning Processes and Funding Sources*

* Status and timelines are current as of 2021. The Missoula County Metropolitan Planning Organization (MPO) notifies interested parties when there is a call for projects and when public comment periods are open. Source: Missoula City and Missoula County Metropolitan Planning Organization (MPO) at: https://www.missoulampo.com/plans

<table>
<thead>
<tr>
<th>Process</th>
<th>Status</th>
<th>Purpose</th>
<th>Review Schedule</th>
<th>Timeline for Input</th>
<th>Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missoula Connect: 2050 Long Range Transportation Plan (LRTP)</td>
<td>5 year update cycle</td>
<td>Establishes regional transportation goals and provides a project list and investment strategies</td>
<td>Current update to be completed in 2021</td>
<td>Year previous to update</td>
<td>Local, State and Federal taxes</td>
</tr>
<tr>
<td>Transportation Improvement Program (TIP)</td>
<td>Annual Update</td>
<td>Provides a priority list of projects for each five-year period after adoption of the LRTP.</td>
<td>Next review in 2022</td>
<td>Ongoing</td>
<td>Local, State and Federal taxes</td>
</tr>
<tr>
<td>MATP Missoula Active Transportation Plan (MATP)</td>
<td>2011: plan created</td>
<td>Guides public and private development of active transportation facilities</td>
<td>Unknown</td>
<td>Ongoing</td>
<td>Unknown</td>
</tr>
<tr>
<td>Bicycle Facilities Master Plan (BFMP)</td>
<td>2017: plan created</td>
<td>Establishes a detailed strategy and project list for improving bicycling</td>
<td>Unknown</td>
<td>Ongoing</td>
<td>Unknown</td>
</tr>
<tr>
<td>Pedestrian Facilities Master Plan (PFMP)</td>
<td>2018: plan created</td>
<td>Presents a strategy for a connected, safe, accessible pedestrian network</td>
<td>Unknown</td>
<td>Ongoing</td>
<td>Unknown</td>
</tr>
<tr>
<td>Community Investment Program (CIP)</td>
<td>5-year plan</td>
<td>Updated annually, looks at local infrastructure improvements</td>
<td>Adopted in Summer</td>
<td>Spring, Summer</td>
<td>Mainly local taxes</td>
</tr>
<tr>
<td>Special Assessments</td>
<td>As needed basis</td>
<td>Tax on a group of property owners where an improvement takes place</td>
<td>As needed</td>
<td>When project is proposed</td>
<td>Local taxes</td>
</tr>
<tr>
<td>Neighborhood Grants</td>
<td>Annual</td>
<td>To improve local, neighborhood conditions</td>
<td>Ongoing</td>
<td>Ongoing</td>
<td>Local taxes</td>
</tr>
<tr>
<td>Missoula Area Community Transportation Safety Plan- CTSP</td>
<td>2019: update cycle</td>
<td>Provides a detailed strategy to reduce and eliminate traffic fatalities and injuries</td>
<td>Ongoing</td>
<td>Ongoing</td>
<td>No funding attached to Plan</td>
</tr>
<tr>
<td>MPO Public Participation Plan (PPP)</td>
<td>Annual</td>
<td>Describes the MPO’s typical processes, timelines, and proposed annual work</td>
<td>Ongoing</td>
<td>Ongoing</td>
<td>Local, State, Federal Taxes</td>
</tr>
</tbody>
</table>