DowntownSAM

Project Description

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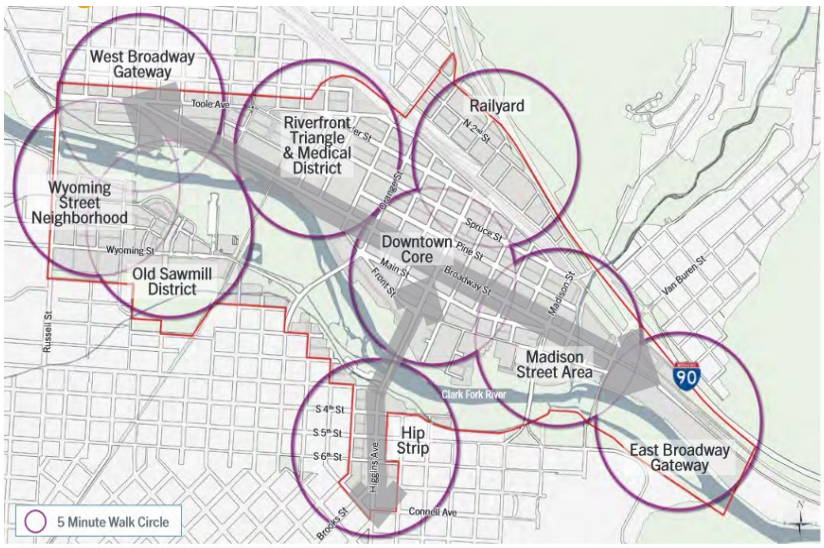
Missoula's **Downtown Safety and Mobility Project** (DowntownSAM) is the lynchpin of a regional vision where transportation choice, affordability and environmental sustainability come together to strengthen quality of life for our community. This project will complete a network of multi-modal transportation improvements in the heart of Downtown Missoula that will serve the needs of the community well into the future. Developing a safe, convenient, inter-connected multi-modal transportation network - especially for pedestrians, bicyclists, and those who are mobility impaired - is critical to the success of our "focus inward" growth policy.[1] DowntownSAM provides connectivity to, and within, downtown to support investment in housing, local business, lodging and hospitality, and government services necessary to meet our community goals.

DowntownSAM

DowntownSAM focuses on three key corridors in Downtown Missoula – Higgins Avenue, Front Street/Main Street, and Riverfront Trail Connections. This project will improve connectivity and accessibility of sidewalks and trails; upgrade and enhance transit stops; add protected bicycle facilities and left-turn lanes; improve intersection safety for all users, and restore two-way circulation on two streets that currently serve as a one-way couplet. While each of the components could be considered a stand-alone project, together they will amplify each other's benefits by creating a complete network of transportation options that will make it safe and convenient to access downtown destinations, support high density mixed-use growth, and connect regional multimodal transportation investments.

Broader Context

Missoula is a City of Neighborhoods. DowntownSAM is part of a regional strategy to increase transportation choice and promote sustainable inward growth by developing walkable and bikeable neighborhoods that are inter-connected by a multi-modal transportation network. At the heart of this is our downtown core, which serves as the economic, recreation, and community hub for the broader region.



5 minute walks around the downtown neighborhoods.

Figure 1 - Downtown Missoula Neighborhoods

Montana is one of the top ten fastest growing states in the nation[2], and Missoula is one of the most desirable destinations in the state. Rapid growth is leading to a crisis of housing affordability and strains on public infrastructure. Many of the qualities that make Missoula so desirable – our scenic

[1] Our Missoula Growth Policy. City of Missoula. https://www.ci.missoula.mt.us/1748/Our-Missoula-Growth-Policy
[2] https://www.census.gov/newsroom/press-releases/2022/2022-population-estimates.html

valley surrounded by mountains, rivers, and public lands – also make it imperative that we consider our impact on the environment. The growth policy, Long Range Transportation Plan, and Climate Ready Plan all recommend a "focus inward" growth strategy to increase density and infill development in the urban core, along with developing a robust multimodal transportation system that is safe, convenient, and accessible for all users. There is limited desire and less funding to build more roads.

Our challenge is to make timely investments that support sustainable growth and affordability. Missoula lies at the hub of five valleys. We are surrounded by mountains and crisscrossed by rivers, streams, and a major railroad. Transportation infrastructure is expensive and how we choose to invest influences the way development occurs. The need to own a car to meet basic needs has a significant effect on affordability and equity. Like many places, Montana's solution to affordable housing traditionally has been "drive until you qualify," encouraging people to move further from the urban core where land is cheaper. However, as the costs of fuel, car ownership, and infrastructure to support suburban and rural development continue to rise, this model is not environmentally or fiscally sustainable. While Montana has a strong car culture, and cars will continue to be a welcome and necessary part of Missoula, it is imperative to provide more safe multimodal transportation options.

Our strategy is to support development in the urban core by enhancing existing infrastructure to create a safe, connected, accessible, and intuitive network of multimodal transportation options. These efforts show promise. Missoula recently endorsed zero-fare transit, including a voter-supported ballot initiative that increased service to 15-minute frequency, nights, and weekends. Our Metropolitan Planning Organization (MPO) adopted ambitious mode split goals, aiming to cut single-occupancy vehicle trips in half, triple bike/walk share, and quadruple transit share by 2045. And the Mullan BUILD Project, which previously received $13M in federal funds, has so far generated over 3,000 housing units in the development pipeline in a dense, mixed-use pattern linked by multimodal streets.

Federal funding is crucial for our continued efforts. Like many communities across the country, Missoula lacks the resources to implement critical infrastructure at a pace that will keep up with growing demand. This grant application presents a transformative opportunity for our Downtown and the centerpiece of a regional transportation vision. It ties together many multimodal investments in sustainable regional transportation and strategic priorities shown in **Attachment A** and described in more detail in the below Statement of Work.

Project Location

DowntownSAM spans much of Missoula's Central Business District (CBD), the "Hip Strip" and the network of parks and commuter trails along the north shore of the Clark Fork River. The **Front/Main Two-Way Restoration** component involves an east/west couplet that crosses the CBD and adjacent Kiwanis Neighborhood. The **Higgins Corridor Multimodal Improvements** component spans two-thirds of a mile of Higgins Avenue between Broadway Street in the CBD and Brooks Street to the south. The **Riverfront Trail Connections** focuses on providing ADA-access and better pedestrian and bicycle access between the primary commuter trail on the north

bank of the Clark Fork River and the CBD, through Caras Park and Kiwanis Park. These project components in aggregate will complete a multi-modal transportation network that improves safety, mobility, accessibility, equity, and vibrancy through the CBD and Hip Strip which contain workplaces, affordable and workforce housing[3], restaurants, nightlife, retail, seasonal outdoor markets and events.

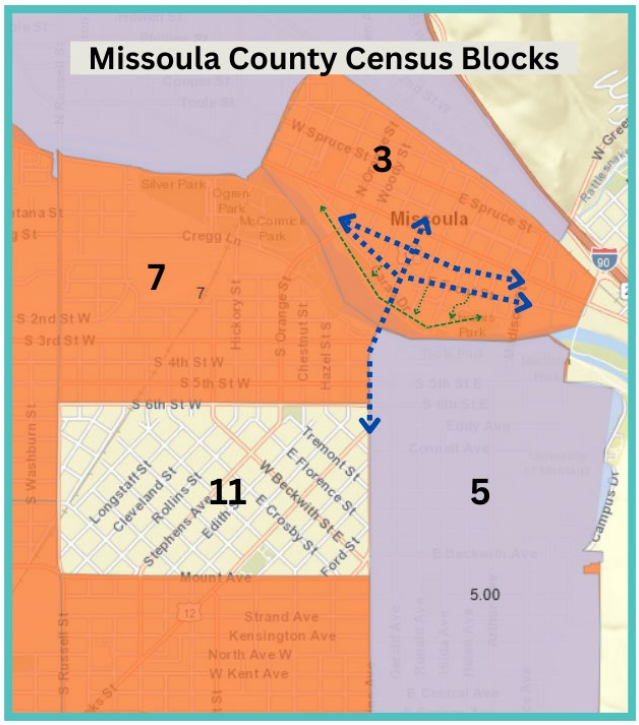


Figure 2 - Project location and Census Tracts.

DowntownSAM is centrally located in the City of Missoula, in Missoula County, and the federally recognized Urbanized Area 57736 (**Figure 2**). This area serves daily visitors and several distinct communities within Missoula. DowntownSAM will bring direct improvements to four City of Missoula Neighborhood Council Districts (Heart of Missoula, Riverfront, University, and Rose Park).[4] The bulk of the project is located within Missoula County Census Tracts 3 and 7, both **areas of persistent poverty**. The south end of the project along Higgins Avenue follows the border Missoula County Census Tracts 5 and 11. Missoula County Census Tract 5 is a **Historically Disadvantaged Community** and an **Area of Persistent Poverty.**[5]

Statement of Work

As noted above, DowntownSAM consists of three primary project components (**Figure 3**). Each project component is described in greater detail below. We are considering these three components as a single aggregate project to wholistically address a range of transportation challenges in Downtown Missoula and amplify project benefits.

A) Higgins Avenue Multimodal Improvements

Current status: Preliminary Design

The proposed design for the Higgins Avenue project component reconfigures an arterial from 4 lanes to 3, allowing for dedicated left turn lanes, protected bike lanes, standardized lane widths, curb extensions, improved transit stops, wide sidewalks, street trees, and ADA upgrades. All improvements will take place within existing right-of-way, and largely within existing curb lines. Conceptual design plans, detailed traffic analysis, and public outreach have been completed. Concept plans, detailed statement of work, and cost estimates are included in **Attachment B**.

[3] https://www.missouladowntown.com/wp-content/uploads/2020/06/MDMP_Appendix4_HousingAnalysis.pdf
[4] https://www.ci.missoula.mt.us/DocumentCenter/View/58267/2021-complete-city-neighborhood-map
[5] https://maps.dot.gov/BTS/GrantProjectLocationVerification/

Figure 3 - Project elements detail

Addressing Transportation Challenges

The Higgins Avenue design improves safety for all users by facilitating left-turns, standardizing parking and driving lane widths, providing dedicated facilities for different modes, and reducing pedestrian crossing distances at intersections. New protected bike lanes will provide a continuous connection between existing protected bike lanes on Higgins north of Broadway and traditional bike lanes south of the project area. Maintaining the wide sidewalks, street trees, and most of the on-street parking will enhance the pedestrian experience, improve accessibility for all users, and reduce reliance on cars. Improved transit stops, lane widths that accommodate buses, and reduced crossing distances at intersections will enhance transit access. Upgrading signals and retaining four travel lanes between Sixth Street and Brooks Street will better manage traffic flow and accommodate higher traffic volumes associated with US Highway 12.

B) Front/Main Two-Way Restoration

Current Status: Final Design

Restoring Front and Main Streets to two-way traffic includes intersection improvements, signal upgrades, a protected bicycle loop running west on Front Street and east on Main Street, and bus stop improvements. On-street parking will be maintained in most locations, although parking will be removed in some locations to accommodate intersection curb extensions. In some locations

angled parking will be converted to parallel parking to allow for new protected bike lanes. This project component is currently in the final design stage. Design plans advanced to a 60% level are included in **Attachment B**, and the City expects to have 90-100% plans completed by the time of the grant award (costs for this design work are not included in the grant request).

Addressing Transportation Challenges
Restoring Front and Main Streets to two-way traffic will slow vehicles, remove the double-threat that two lanes of one-way traffic presents to pedestrians, and improve traffic circulation and access to downtown destinations, such as the three parking garages located along these streets. Curb extensions will make pedestrians and bicyclists more visible and decrease crossing distances at intersections. Protected bike lanes will create safe, comfortable, and convenient east/west connections. A new traffic signal at Madison St will facilitate safe movement of motor vehicles to and from downtown while also connecting non-motorized traffic to the Riverfront Trail system.

C) Riverfront Trail Connections

Current Status: Concept & Preliminary Design
Riverfront Trail improvements include widening Ron's River Trail beyond AASHTO standards for urban commuter paths and creating safe and accessible connections between the trail and Front Street at four locations: Ryman Street Gateway, Pattee Street, Kiwanis Park, and the east side of Beartracks Bridge. Reconstructing Ryman Street between Front Street and the trail will provide universal access for pedestrians and protected bicycle lanes between the CBD and the Riverfront Trail system. It will also improve vehicular circulation and access to key downtown parking locations and create dedicated, protected bicycle and pedestrian connections to the trail system. The ramp from Beartracks Bridge to the Riverfront Trail provides a long-needed direct ADA-accessible route between the bridge and riverfront commuter trail system. This project element is currently in the conceptual design stage. Plans are included in **Attachment B**.

Addressing Transportation Challenges
Improved access from Front Street will create strong multi-modal connections between downtown destinations and the parks and trails. A new pedestrian ramp from the Beartracks Bridge to East Caras Park will provide direct ADA access for users of all abilities. This ramp connects to the newly rehabilitated Beartracks Bridge, which includes 12' wide pedestrian walkways on both sides, dramatically improving a heavily used pedestrian and bicycle connection across the river. Widening Ron's River Trail will reduce conflicts and increase safety for trail users. Improvements to Ryman Street will provide additional ADA access between Downtown and the riverfront trail system and formalize a gateway entrance into Caras Park, Missoula's most visited downtown park and home to hundreds of public events every year.

Signal Optimization

Current Status: to be completed post construction
Not a standalone project element, the City of Missoula and Montana Department of Transportation will upgrade signal detection, controllers, and other hardware with this project and conduct analysis and optimization of the entire downtown signal system following constructions.

DowntownSAM

Merit Criteria

Merit Criteria

Safety

Safety is at the center of Missoula's transportation vision for all users, whether driving, walking, rolling, cycling, using transit, or other emerging modes. The Missoula MPO's Community Transportation Safety Plan[1] (CTSP), updated in 2019, sets a goal of zero fatalities and zero incapacitating injuries. City Council then adopted a Vision Zero resolution in 2022[2] that directs staff to prioritize and design projects that will eliminate serious and fatal crashes. DowntownSAM has emerged as a priority for the community largely because of its safety benefits.

The DowntownSAM project area plays an outsized role in regional crash statistics (**Figure 1**). Between 2017 and 2021, the project area had an overall crash rate of 45.2 crashes per roadway mile, which is 7x higher than the crash rate of 6.7 within the urbanized area (UZA). From 2017-2021, the project area accounted for 4.8% of the overall crashes and 12.3% of the non-motorized crashes within the UZA, despite only comprising 0.29% of the UZA (see Attachment D for detailed crash data). Non-motorized crashes are likely underreported due to gaps in data collection and associated crash records.[3]

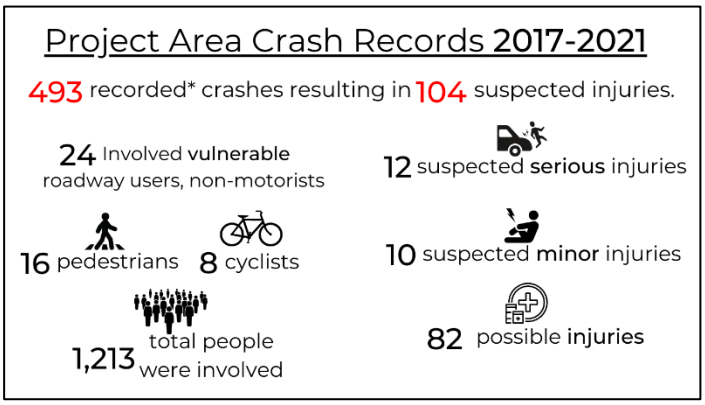


Figure 1 - Reported crashes within the DowntownSAM project area.

DowntownSAM prioritizes safety improvements for the most vulnerable roadway users. While non-motorist involved crashes represent only 4% of all crashes, they represent over 14% of non-fatal injuries. A pedestrian was killed in the mid-2000s at an intersection this project will improve. Fortunately, no fatalities were suffered in this project area in the last 5 years, the period typically used when evaluating safety benefits of projects. Improvements also address safety in areas of persistent poverty and historically disadvantaged communities.[4]

The project elements of DowntownSAM are intentionally designed to utilize Proven Safety Countermeasures (PSC) and evidence-based safety improvements to address known crash trends in our downtown core. Safe design of this project starts with a foundation of removing conflicts by converting the last remaining 4-lane section of Higgins Avenue to three lanes and converting the 2-lane one-way couplet of Front and Main Street to two-way traffic. These improvements, based on FHWA's PSC analysis, can reduce crashes by up to 50%. Other PSCs associated with the lane reconfigurations include **dedicated turn lanes** at intersections - where volumes necessitate, and right-of-way allows (28%-48% crash reduction)[5] - and adding **retroreflective backplates** to all signals (15% crash reduction).[6] The reconfigurations will standardize lane

[1] *Missoula Community Transportation Safety Plan.* https://www.ci.missoula.mt.us/DocumentCenter/View/49937/2019_CTSP_FINAL
[2] Resolution 8633. City of Missoula. https://www.ci.missoula.mt.us/DocumentCenter/View/63338/Resolution-8633-
[3] *Identifying Factors Affecting Non-Motorized Safety*. FHWA. https://highways.dot.gov/safety/local-rural/non-motorized-user-safety-manual-local-rural-road-owners/1-identifying-factors
[4] Census Tracts 3, 5 & 7 https://maps.dot.gov/BTS/GrantProjectLocationVerification/
[5] Dedicated Left- and Right-Turn Lanes at Intersections. FHWA Highway Safety Programs. https://highways.dot.gov/safety/proven-safety-countermeasures/dedicated-left-and-right-turn-lanes-intersections#psc-footnote
[6] PSC. Backplates with Retroreflective Borders. FHWA. https://safety.fhwa.dot.gov/provencountermeasures/backplate.cfm

widths, reduce conflicts from left turning vehicles, reduce speeds through curb extensions and tighter curb radii, and provide space for dedicated non-motorized facilities.

Figure 2 - Existing Higgins Avenue conditions.

DowntownSAM embraces four of the five objectives of the Safe Systems approach.[7] The project constructs **Safer Roads**, which will lead to **Safer Speeds** and **Safer People**, who will be able to make better and more predictable decisions when travelling. Safer downtown streets will reduce the frequency and severity of crashes, while also better facilitating emergency response when crashes do occur. The dedicated left-hand turn lane on Higgins, coupled with improved circulation via the Front and Main project, provides space for emergency vehicles, improving response time and **Post-Crash Care.** This project will not change speed limits, but the designs are intended to reduce vehicle speeds.

DowntownSAM will install continuous **protected bike lanes** along Higgins (**Figure 2**), Front, and Main, eliminating the existing dangerous conditions. The protected bike lanes will move bicyclists out of the travel lanes, connect safely to facilities on the east and west sides of downtown, and create safe, comfortable, and convenient connections to the riverfront trail network. Protected bicycle lanes are proven to reduce crashes by 30% or more.[8]

DowntownSAM improves pedestrian safety. The Higgins 4-to-3 lane **reconfiguration** (19%-47% crash reduction)[9] and Front/Main two-way restoration will slow vehicular speeds and remove the double-threat for pedestrians crossing multi-lane streets. **Curb extensions** will reduce vehicle speeds, improve visibility between pedestrians and drivers, and shorten crossing distances. They will calm traffic, encourage higher yield rates, and provide a safer and more comfortable pedestrian environment. DowntownSAM utilizes curb extensions at every intersection in the project area. These pedestrian safety improvements, combined with other crosswalk visibility enhancements such as **high visibility crosswalks**, **raised crosswalks,** and **leading pedestrian intervals** at signalized intersections with high right turning volumes, can reduce crashes by as much as 40% for the most vulnerable roadway users.[10]

Shared use paths such as the Riverfront Trail system form the backbone of Missoula's non-motorized transportation network, and the primary commuter trails converge in downtown. The ADA ramp from Beartracks Bridge will provide a direct connection between Higgins Avenue and Ron's River Trail. Improved access at Pattee and Ryman Streets will reduce slopes, widen surfaces, and reduce conflicts between users and impediments to accessing the trail. Widening Ron's River Trail, which is widely used by multi-modal commuters, will improve safety by providing more space for all users, no matter the speed.

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[7] What Is a Safe System Approach? PSC. USDOT. https://www.transportation.gov/NRSS/SafeSystem
[8] Bicycle Lanes. FHWA Highway Safety Programs. https://highways.dot.gov/safety/proven-safety-countermeasures/bicycle-lanes
[9] Road Diets. (Roadway Configuration). PSC. USDOT. https://highways.dot.gov/safety/proven-safety-countermeasures/road-diets-roadway-configuration
[10] PSC. USDOT. https://highways.dot.gov/safety/proven-safety-countermeasures/crosswalk-visibility-enhancements, https://highways.dot.gov/safety/proven-safety-countermeasures/leading-pedestrian-interval

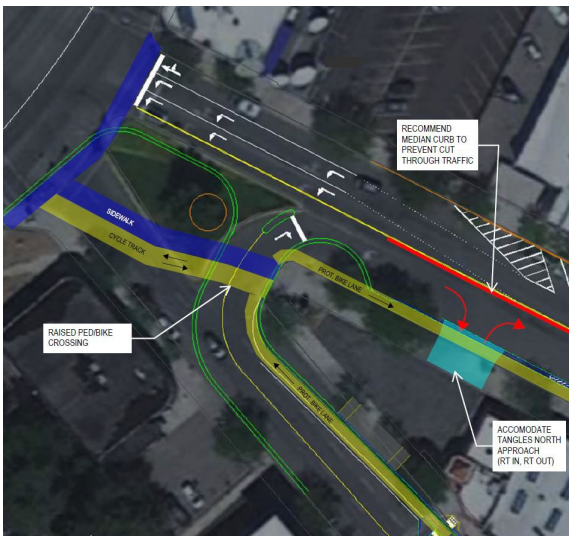

Figure 3 - Proposed intersection improvements at Front, Main and Orange Street.

DowntownSAM comprehensively improves multi-modal transportation safety. The project vision, goals, and attention to design details will reduce the occurrence and severity of crashes while transforming downtown into a safe, comfortable multimodal hub, moving the community towards our goal of zero deaths.[11]

Environmental Sustainability

Addressing our region's climate and environmental impacts is the second core goal of DowntownSAM. Missoula's Long Range Transportation Plan (LRTP)[12] and Climate Ready Missoula's strategic plan[13] (CRM) both have goals of reducing transportation-related air pollution and greenhouse gas emissions by decreasing the number of single occupancy vehicle trips and increasing sustainable trips. The LRTP sets mode split, air quality and other sustainability goals to improve our environmental quality.

Tailpipe emissions from motor vehicle transportation represents over a third of the region's greenhouse gas emissions.[14] Pollutants from brake wear, tire wear, and road debris also contribute heavily to the valley's PM2.5 & PM10 air quality issues; this area has not been addressed by advances in vehicle technology. Neighborhoods surrounding the DowntownSAM project area are particularly impacted by air quality and an unsustainable transportation system. The area along Higgins Avenue south of the river is considered a Historically Disadvantaged Community. Missoula's downtown core, which surrounds the remainder of the project, is an area of Persistent Poverty. These populations are vulnerable to the environmental impacts of a transportation system dependent on motor vehicles.

Shifting trips away from single-occupancy vehicles and towards sustainable modes such as walking, biking and transit provides one of the most cost-effective ways to address climate change in Missoula. DowntownSAM will improve transportation options, reduce reliance on motor vehicles, reduce the number of vehicle miles traveled over time, and support transportation-efficient land use and infill urban development, thereby significantly reducing air pollutants attributed to our transportation system. Street trees are an integral part of DowntownSAM with the goal of expanding the tree canopy to provide shade, reduce the heat-island effect, filter stormwater, and mitigate other climate change related events. Benefit analysis produced for this project demonstrates over $1 million in environmental cost savings over the first 20 years (see BCA Calculations Attachment tables).

Analysis from Streetlight data shows the majority of trips to downtown Missoula, the Hip Strip and through Higgins to downtown are five miles or less, revealing a high potential for safe and

[11] City of Missoula Vison Zero Policy. https://www.ci.missoula.mt.us/DocumentCenter/View/63338/Resolution-8633-
[12] 2050 Long Range Transportation Plan. *Missoula Connect.* https://www.missoulampo.com/long-range-transportation-plan
[13] *Goals + Strategies.* Climate Ready Missoula. https://www.climatereadymissoula.org/goals--strategies.html
[14] https://www.missoulaclimate.org/community-emissions-inventories.html

connected multimodal facilities to induce mode-shift (**Figure 4**).[15] This project completes connections to other high-quality multimodal facilities that are appropriate for all ages and all abilities, such as buffered bicycle lanes on S 5th and S 6th Streets, Missoula's primary commuter trail network, and protected bike lanes further north on Higgins. Improved bus stop access and design and increased downtown circulation will contribute to increased transit level of service.[16]

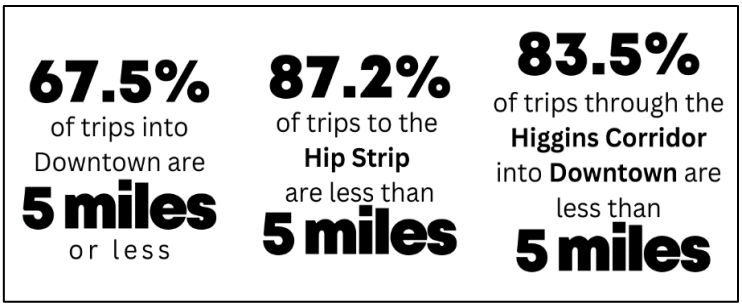

Figure 4. Higgins Streetlight data.

Improving transit service in Missoula has proven successful in recent years. Mountain Line's innovative Zero-Fare policy reduces barriers to transit and, since its 2015 debut, has increased ridership almost 70%.[17] High-quality public transportation facilities increase transportation equity and encourage reduced personal vehicle use, vehicle miles travelled, and reduce CO2 emissions. The project elements in the DowntownSAM will make the choice to bike, walk, and bus easier for more people to make.

Success in meeting the community's mode split goals is demonstrated by high rates of biking, walking, busing, and carpooling. Non-SOV trips account for 30% of daily commute trips compared to the state average of 14%.[1218] The DowntownSAM will continue to support shifting modes via more compact and higher density land use and development patterns. Several critical parcels surrounding Higgins, Front, Main, and adjacent to the riverfront commuter trail all have potential to create housing, commercial, retail, and other core downtown services. This project will provide the appropriate infrastructure to ensure trips generated by those developments are highly multimodal and do not rely solely on SOV modes. Increasing density and mixed use linked by sustainable transportation also creates a more resilient region and is a core climate mitigation strategy for Missoula.

Missoula's environment relies on water quality as much as air. It is critical to retain clean rivers and streams, as well as prevent contamination of the aquifer to provide clean drinking water. The ADA Ramp and the Riverfront Trail Connections dovetail with Parks and Recreation's Clark Fork River Restoration and Access project, which will improve riverbank stability and create ADA compliant river access points.[19] In the past decades, the use of the river has shifted from industrial to human-centered and ecologically restorative activities. Partnership with the Three Rivers Collaborative and the Clark Fork Coalition ensure new infrastructure projects do not cause degradation to the river ecology.

To avoid adverse impacts to water quality, this project will incorporate systems that provide pretreatment prior to discharging stormwater into a dry well. Historically, the stormwater

[15] 2019 Streetlight origin-destination and trip length data for Missoula Central Business District and Hip Strip, accessed between February 2022 and January 2023.
[16] Shi, Moudon, Hurvitz, et al. Does improving stop amenities help increase Bus Rapid Transit ridership? *Transportation Research Interdisciplinary Perspectives.* Volume 10. June 2021. https://doi.org/10.1016/j.trip.2021.100323
[17] *Zero-Fare*. Mountain Line. https://mountainline.com/sustainability/zero-fare/
[18] Volume II Transportation Users. MDT. Nov. 2017. https://www.mdt.mt.gov/tranplan/docs/TPMT-USERS.pdf
[19] Clark Fork River Restoration & Access Project. https://www.engagemissoula.com/clark-fork-river-restoration-access-project

management method in Missoula has been to discharge runoff directly from the street into a dry well. With Missoula's high infiltration rates and low organic matter, pollution from streets typically goes straight into the aquifer, with very little attenuation of contaminates. DowntownSAM will include innovative stormwater infrastructure that will provide pretreatment through vegetative swales or biological filtration prior to discharge.

Figure 5. Inversion in the valley of Missoula.

Quality of Life

Missoula's quality of life relies on affordable housing, equitable access to resources, jobs and economic opportunities, and high-quality recreation to maintain a healthy lifestyle. The City strives to integrate land use and infrastructure decisions to build a strong foundation in each of these areas.[20]

The Higgins Corridor project component improves north/south connectivity, helping multi-modal users travel between Downtown and the Hip Strip and access the businesses and amenities nearby. The Front/Main Two-Way Conversion offers improved east/west connectivity through downtown and to adjacent neighborhoods. These roadway reconfigurations include protected bike lanes, improvements to sidewalks and intersections, and accessible bus stops, improving connectivity for all modes of transportation on primary corridors in the downtown street grid. The ADA Ramp and Riverfront Trail Connections & Improved Accesses will connect on-street facilities to the North Riverside Parks and Trails network, offering better access to and through Caras, East Caras and Kiwanis Parks and Ron's River Trail.

These trail connections will also improve off-street bicycle and pedestrian commuting connections to Missoula's expansive primary commuter trail network, including the Milwaukee Trail and Bitterroot Branch Trail which extends over 50 miles into Ravalli County. The planned green infrastructure will help to protect water quality, provide green space (e.g., pollinator habitat), and help mitigate urban heat islands that result from increased impervious areas. The project benefits are amplified by combining project elements, which are designed with safety, access, inclusivity, and comfort for all users as the foremost concerns.

The project spans the Clark Fork River, connecting the University, Riverfront, and Heart of Missoula Neighborhoods. These neighborhoods house communities that will benefit from equitable transportation investment and the travel options provided by DowntownSAM. This area is encapsulated in four Missoula County census blocks [21][22][23]:

- **Census block 3** has a population of 2,288 and 23.09% zero-car households. This census tract registers as poverty disadvantaged, and is considered health, economy and

[20] City of Missoula Strategic Plan. https://www.ci.missoula.mt.us/DocumentCenter/View/53797/City-of-Missoula-2020-2023-Strategic-Plan

[21] https://www.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

[22] https://www.arcgis.com/apps/dashboards/d6f90dfcc8b44525b04c7ce748a3674a

[23] https://www.policymap.com/newmaps#/

environmentally disadvantaged by the 2022 SS4A Transportation Disadvantage Communities Map

- **Census block 5** has a population of 6,158 and 11.31% zero-car households. This census tract registers as poverty and historically disadvantaged, and is considered economy, equity and environmental disadvantaged
- **Census block 7** has a population of 2,970 and 7.43% zero-car households. This census tract registers as poverty disadvantaged, and is considered economy, equity and environmental disadvantaged
- **Census block 11** has a population of 3,105 and 4.55% zero-car households. This census tract does not register as poverty or historically disadvantaged using the 2023 RAISE grant map but is considered to be economy and environmental disadvantaged

Housing affordability is a high priority issue facing Missoula, showing no sign of improving through market-based development alone. The Missoula Organization of Realtors (MOR) reports a median home price of $525,000 and a Housing Affordability Index 50 as of Q3 of 2022.[24] The DTMP includes in-depth economic, land-use and housing development goals,[25] showing that the project area already contains substantial student and affordable workforce housing units, as well as a growing number of market rate options. The analysis also demonstrated that downtown is ripe for further development of both market rate and affordable housing units. **Figure 6** shows locations of major housing opportunities, cultural and educational resources, and impending redevelopment projects that support a high quality of life in Missoula. The DowntownSAM project links these opportunities and resources within the downtown core, and to the broader community via a complete sustainable transportation system.

The project area includes opportunities for diverse housing through public and private development projects (**Figure 6**):

1. Higgins Waterfront is a planned large-scale mixed-use development with over 200 apartments and condominiums, and ground level commercial space[26]
2. The Hogan is a newly constructed affordable senior living center, focused on walkability[27]
3. The ROWE Condominiums include 40 market-rate units and 8 income-based permanently affordable condominiums for ownership[28]
4. The Palace affordable housing building managed by the Missoula Housing Authority[29]
5. ROAM Private Student Housing and Mixed-Use Building contains 164 residential units housing over 460 people and ground level commercial units[30]

Downtown Missoula and the Hip Strip are concentrations of economic, cultural and educational destinations. Key resources with improved access via DowntownSAM include:

6. The award-winning Missoula Library offers free computer and internet access, events, education opportunities, and houses non-profit organizations and community resources

[24] Housing Affordability Index. Missoula Real Estate. https://www.missoularealestate.com/housing-affordability-index-hai/
[25] Missoula's Downtown Master Plan. MDMP_2019-11-4_FINAL_SR_SM.pdf (missouladowntown.com)
[26] https://www.higginswaterfront.com/
[27] https://www.thehoganmt.com/
[28] https://www.missouladowntown.com/property/the-rowe-condos/
[29] https://missoulahousing.org/housing-programs/affordable-housing
[30] https://liveatroam.com/amenities/

7. Caras Park, a regional park that serves as a central community event space, outdoor recreation, and park space for downtown residents[31]
8. Planned Beartracks Underbridge Multi-use Park[32]
9. Health care facilities within ¼ mile of the project area such as Partnership Health and St. Patrick Providence Hospital Complex

Downtown Missoula is an area of focus for redevelopment projects that will provide job growth and a greater diversity of centrally located resources:

10. The Payne Block is undergoing a planning process, with consideration for affordable housing and other public interest development[33]
11. The Riverfront Triangle Development, located at the western edge of the project, is planned to have residential units, commercial mixed use, and a multi-use convention and events center[34]
12. The City of Missoula and Missoula County received the historic downtown Federal building from the General Services Administration in December 2022, allowing for consolidation of a wide variety of government services
13. The current City Hall may be available for redevelopment after moving services to the Federal Building, opening an opportunity for housing, mixed use, and transit-oriented development.

Figure 6 - Housing, development, economic and cultural resources.

[31] https://www.missouladowntown.com/events/
[32] https://www.missouladowntown.com/wp-content/uploads/2020/11/Missoula-Park-design-report-Plan-1120-reduced.pdf
[33] https://www.missoulapartnership.com/grow/invest-in-transformation/
[34] https://www.missoulapartnership.com/grow/invest-in-transformation/

This project also helps prepare our community for expected population growth from climate migration through supporting equitable, dense, and mixed-use development.[35] A grant award will provide quality of life benefits for Missoulians and visitors by improving equitable and affordable transportation options, increased accessibility to destinations and opportunities, and the necessary infrastructure to support more compact, mixed-use development necessary to support growth and resiliency.

Mobility and Community Connectivity

The DowntownSAM project builds on decades of previous transportation investments and its completion is essential to maximizing the value of all our future projects. This project is the lynchpin that will connect downtown to the rest of the community through wide trails, protected bike lanes, enhanced pedestrian safety, improved vehicular access, and high frequency transit service. Each of the components of this project help transform Missoula from an automobile-dependent collection of neighborhoods to a fully multimodal small city. Mobility and community connectivity is a primary project purpose and has clear, direct, data-driven, and significant benefits.

First, all bus stops within the project area will be modernized and brought up to ADA-standards or higher. Each of these stops has been reviewed by Mountain Line in the context of their entire transit system and stop size and amenities have been designed to reflect the needs of current and future ridership. Fare-free service has recently been expanded later into the evening and weekends, and the community is beginning a feasibility study for a BRT line that will connect to Higgins.[36]

Second, each project component is identified and prioritized in several adopted community plans, all of which were developed with high levels of public engagement. Identified in the 2009 Downtown Master Plan (DTMP) and affirmed in the 2019 update[37], reconfiguring Higgins Ave and restoring Front/Main to 2-way travel have been priority projects in the 2012, 2016, and 2020 LRTP[38] updates. The Bicycle Facilities Master Plan recommends connecting gaps in the on-street bike network downtown and modernizing Ron's River Trail.[39] Mountain Line's Strategic Plan highlights the need for bus stop improvements to maintain and expand service.[40] Multiple agencies have recently defined and refined project scopes, performed feasibility analyses, collaborated with the Montana Department of Transportation (MDT), and conducted extensive outreach communicating project benefits to the public.[41][42][43]

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[35] https://www.climatereadymissoula.org/uploads/1/2/6/6/126687164/climatereadymissoula_adopted_may2020.pdf

[36] *Mountain Line, MRA Set Contract to Begin Brooks Street Design.* Missoula Current. Feb 23, 2023. https://missoulacurrent.com/brooks-street-design-2/

[37] More than 3,000 people participated in the DTMP. https://www.missouladowntown.com/downtown-master-plan/missoulas-downtown-master-plan/

[38] The LRTP update included scores of public meetings and hundreds of public comments. https://www.missoulampo.com/_files/ugd/31250b_66ec0b40355843a4bdb608880f427245.pdf

[39] Bicycle Facilities Master Plan. http://www.ci.missoula.mt.us/DocumentCenter/View/39172/2016-Bicycle-Facilities-Master-Plan?bidId=

[40] Mountain Line Strategic Plan. https://mountainline.com/wp-content/uploads/2023/02/MUTD-Strategic-Plan-2019-Update-Compressed.pdf

[41] Front/Main Two-Way Conversion Feasibility Study. https://www.ci.missoula.mt.us/DocumentCenter/View/29737/2015-5-15-FRONT_MAIN_FINAL

[42] Higgins Avenue Corridor Plan. https://www.engagemissoula.com/higgins-avenue-corridor-plan

[43] North Riverside Parks and Trails Plan. https://www.engagemissoula.com/north-riverside-parks-trails

Third, the DowtownSAM project elements work in tandem to remove barriers and connect communities to safe, affordable transportation options. This project greatly improves the safety, comfort, and convenience of the on-street bike network by connecting critical gaps (**Figure 7**). Protected bike lanes (in pink) currently exist on Higgins just north of the project area and across the recently rehabilitated Beartracks Bridge. South of the river, 5th and 6th Streets have wide, buffered bike lanes (pink). The riverfront trail system (purple) is the backbone of Missoula's bike network. However, sections through downtown are not wide enough to serve an ever-increasing user base – especially with emerging micromobility options – and connections to the street grid are substandard. Standard bike lanes (blue) connect to adjacent neighborhoods and further across the city. These pieces of high-quality infrastructure are currently isolated from the rest of downtown by Higgins Ave, a 4-lane arterial, accessible only to brave riders.

This project will construct protected bike lanes – and intersections – along Higgins and on Front and Main, and will widen existing substandard trail sections to meet AASHTO recommendations and community need for urban shared use paths, reducing conflicts between users and providing appropriate and accessible connections to nearby streets and sidewalks. The combined project elements create direct biking connections between residential neighborhoods, affordable housing, downtown jobs and shopping, government offices, healthcare facilities, museums, an internationally award-winning library, a high school, and the University.

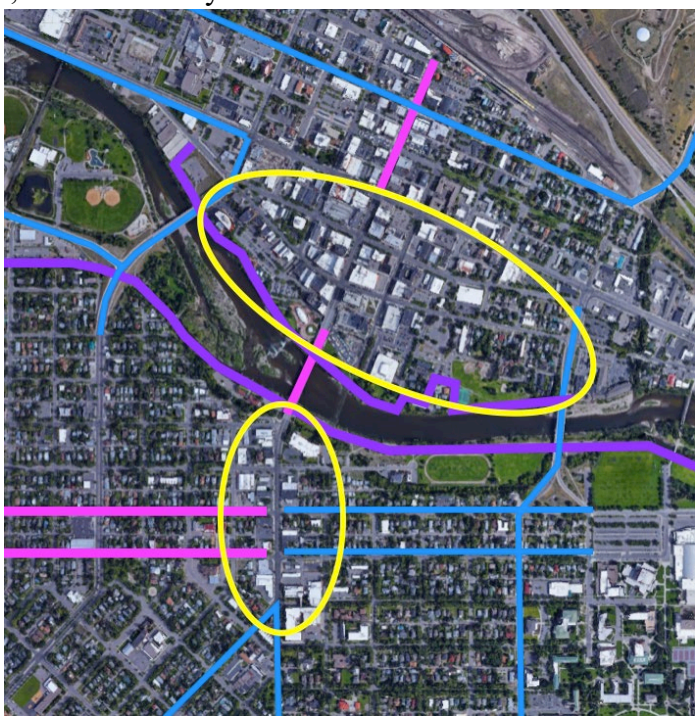

Figure 7. Critical gaps in Missoula's existing bicycle infrastructure, limiting the benefit of our multimodal transportation system.

The DowntownSAM project also removes physical barriers for people walking. As mentioned above, the neighborhoods surrounding this project house vulnerable populations and underserved communities. This project will repair and replace broken sidewalks, add curb ramps where they don't exist, create opportunities for street trees, benches, and other pedestrian amenities, upgrade signal detection and APS systems, and shorten travel and crossing distances for pedestrians of all ages and abilities. The pinnacle of pedestrian improvements will be the ramp from the east side of Beartracks Bridge to Caras Park below. The existing ADA route between these locations is circuitous and not intuitive. This ramp will provide a direct connection between Higgins, the main multimodal gateway into downtown, and Caras Park, the heart of the community that plays host to hundreds of thousands of people annually at concerts, celebrations, demonstrations, and other events.

Finally, the Complete Streets[44] approach this project will improve access and circulation for drivers, facilitating connections to more places and facilities while potentially reducing VMT. The Front/Main one-way couplet necessitates superfluous block circling and out of direction travel when people are looking for parking in general, and these streets happen to have all 3 public parking garages located along them. The Front/Main Two-Way Conversion Feasibility Study predicts a modest increase in traffic and no detriment to LOS.[45] On Higgins Ave, a 4-lane arterial that has historically prioritized vehicle through-put, left turns are prohibited much of the day (**Figure 8**). The 3-lane conversion will add protected left turns at all signalized intersections, improving access while maintaining vehicular capacity and acceptable LOS.[42] By increasing and protecting left turning movements, the two-way restoration and 4-3 lane conversion will improve access and connectivity. The new traffic signal at Front and Madison will enhance access to and improve circulation for the historic Kiwanis Neighborhood, a dense, mixed housing area bounded by Front Street, Madison St, and the Clark Fork River.

Figure 8 – Traffic circulation limitations and turn restrictions on Higgins Ave.

Freight was also a consideration through the analysis and design of each of the project elements. Two blocks of Higgins in this section are on the federal highway system (US 12) and those blocks are designed to ensure the adequate movement of freight and people in vehicles through turning lanes and advanced stop bars. Large trucks and out of region trips account for less than 1% of motorized traffic on the US 12 section. Still, care was taken to perpetuate large truck turning movements and vehicular capacity along the US 12 section.

Economic Competitiveness and Opportunity

Downtown Missoula is the economic center of the region with resources that serve the city and surrounding communities. Prior planning efforts completed on DowntownSAM project components included economic analyses revealing beneficial outcomes across each major grant component. A retail analysis of downtown estimated that the core could see as much as 100,000 square feet of new retail and restaurants, and nearly 1,000 new housing units, leading to an additional $40M in new sales.[46] Safe, equitable, transportation options are necessary to attract and accommodate this growth in the heart of the region and the subsequent increase in people traveling in, out and around downtown.

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[44] *Missoula Among National Leaders in 'Complete Streets' Policy.* Missoula Current. June 8, 2017. https://missoulacurrent.com/missoula-complete-streets/

[45] Front/Main Two-Way Conversion Feasibility Study. March 2015. https://www.ci.missoula.mt.us/DocumentCenter/View/29737/2015-5-15-FRONT_MAIN_FINAL

[46] Retail market Analysis, Downtown Missoula. Downtown Missoula Partnership. March 14, 2019. https://www.missouladowntown.com/wp-content/uploads/2020/06/MDMP_Appendix2_RetailAnalysis.pdf

The project provides infrastructure to support affordable transportation options, connecting public and private housing development opportunities, job growth and economic market capture identified in the DTMP and Missoula County Comprehensive Economic Development Strategy.[47] Several large-scale development projects are on the horizon within the project area, including mixed-use developments at Higgins/4th, Front/Orange, and a public-private partnership on Front St's Payne Block, site of the old library. By revitalizing main streets and supporting locally-driven density, the DowntownSAM project will help ensure these projects are accessible to people of all abilities and economic means, fostering greater use of our downtown space through creating a more inviting, navigable, and safe built environment.

Figure 9 - Existing business activity along Higgins Avenue in downtown.

The Higgins Ave Corridor Plan showed that similar project types typically yield positive economic benefits in similar infrastructure projects across the U.S. Most notably, projects that improve walking and biking infrastructure, while maintaining parking, yield short and long-term local business growth.[48]

The Higgins Corridor Plan will improve direct route options for freight and visitors to businesses along the corridor as left turn prohibitions are to be removed, a two-way left turn lane with protected left turn movement at intersections will allow for easy access to alleyway deliveries, driveway access and parking in the surrounding areas. Rethinking Higgins Avenue as a destination, and providing improved connections to parking, businesses, cultural resources, and other locations will ensure that businesses and economic activity can continue to grow.

The Front/Main Two-Way Conversion Feasibility Study estimates a 10-13% short-term increase in retail and restaurant sales, and more significant long-term impacts such as larger redevelopment opportunities and increased tourism.[45] Front/Main increases access to key parking and delivery destinations in the downtown and is complimented by the Higgins improvements in creating a more efficient circulation pattern to support businesses off Higgins.

The economic benefits of the ADA Ramp and Riverfront Trail Connections & Improved Accesses are framed within the North Riverside Parks and Trails and Downtown Master Plans. "ADA access to the riverfront, and ADA access enhancements to amenities, could help remove barriers and fully engage underserved populations, protect and enhance health equity, enhance community support and understanding for all (particularly those who often experience discrimination), and enhance economic health and opportunity, especially for low to moderate income residents."[49] Beyond

[47] Missoula County Comprehensive Economic Development Strategy. https://www.missoulapartnership.com/wp-content/uploads/2022/01/MEP_CEDS_Layout_Final_Web-large.pdf
[48] Missoula Higgins Corridor Economic Impacts of Proposed Multi-Modal Improvements. https://www.engagemissoula.com/11878/widgets/35150/documents/40170
[49] Missoula North Riverside Parks and Trails Design Plan Report. Nov. 2020. https://www.missouladowntown.com/wp-content/uploads/2020/11/Missoula-Park-design-report-Plan-1120-reduced.pdf

helping improve access for underserved communities these improvements help usher all people to Caras Park, a community gathering space for events, including live music and farmers markets.

The DTMP reaffirms maintaining and growing the seasonal markets, events and maker workspaces that foster our community's small businesses. This project will improve access to these outdoor markets, helping support many farmers, artists and craftspeople from Missoula and surrounding communities.[25] An estimated 4 million tourists visit Missoula annually.[50] Caras Park draws an estimated 100,000 people to over 81 annual events (Attachment C). Improved access and transportation options to downtown will increase efficiency and opportunity to grow the tourism economy in Missoula.

State of Good Repair

This project will modernize the condition and safety of state and locally owned transportation infrastructure in the core of the community and within the current right-of-way. The project will reuse and maintain as much infrastructure as possible while also replacing facilities that are at the end of their functional lives. This project also addresses system vulnerabilities in Missoula's Downtown and its adjacent neighborhoods; the project is in census blocks identified as Area of Persistent Poverty and Historically Disadvantaged Community.[4]

System vulnerabilities in this area are defined by the lack of safe spaces for vulnerable roadway users in this underserved community. Located within and adjacent to downtown, these streets have: missing and disconnected non-motorized facilities, substandard and non-ADA-compliant bus stops, multiple vehicle travel lanes that pose double threats for people crossing them, and non-standard lane widths for driving and parking that lead to user conflicts and increased crashes. Residents must compete for space with those traveling to and from downtown. The DowntownSAM project implements Complete Streets principles and will improve circulation, remove the double threat to pedestrians, provide dedicated spaces for people walking and biking on both Front/Main and Higgins, improve bus stops, and increase access to the Riverfront Trail. This project redistributes limited downtown space and makes travel safer and easier for a more diverse number of people. These project elements formalize road space for all users of all ages and abilities, transforming how people who live, work, and shop in this area navigate the downtown.

The DowntownSAM project will accomplish all these goals within existing right-of-way and often within existing curb lines. Efforts are being made to reuse as much infrastructure as possible, such as keeping the newly constructed Beartracks Bridge and intact curb/gutter and stormwater systems in place, building upon recent state DOT efforts to upgrade tactile domes at intersections, and preserving mature street trees recently installed suspended pavement systems. Other elements will have to be replaced, and many of these are at or beyond their useful life spans. Much of the pavement on S Higgins is deeply rutted. Sections of Front and Main have various types and severities of cracking. Overall, pavement in the project area is in fair-poor condition. Patches and overlays have created steep cross slopes that are challenging for people in wheelchairs and do not meet ADA. Replacing the asphalt and rebuilding the street will allow these mobility issues to be mitigated. Reducing vehicle lanes and lane widths will reduce the maintenance burden**,** as there is less asphalt to replace or repair. The 4-3 lane conversion will creating a continuous two-way left

[50] Retail market Analysis, Downtown Missoula. Downtown Missoula Partnership. March 14, 2019. https://www.missouladowntown.com/wp-content/uploads/2020/06/MDMP_Appendix2_RetailAnalysis.pdf, page 33

turn lane, allowing plow crews to utilize the center lane and keep traffic moving. The operations and maintenance benefit over 20 years is estimated at **$2,356,979** (See BCA Narrative file).

The Front/Main project element restores and modernizes the two streets to meet evolved speed and circulation best practices in downtowns[51], all within the existing right-of-way. The two-way conversion will require new traffic signals and related hardware. However, existing signal infrastructure no longer serves the community properly. The detection and controllers are not able to perform modern operations such as detecting bicycles, incorporating adaptive signal controls, or integrating with connected vehicles. This project allows the City and MDT to modernize the downtown signal system, adding new technology that will last long into the future. These replacements further the state of good repair of the existing transportation system by completing deferred maintenance and replacing core infrastructure assets that have met their useful life.

All project elements will bring existing non-ADA-compliant infrastructure into conformity, often going above bare minimums. The ramp connecting Beartracks Bridge to Caras Park and the Riverfront Trail prioritizes the improvement of the existing accesses to and from the current footprint of the trail, while the trail widening element will repair deferred maintenance, be constructed to withstand increased use, and will be maintained in a state of good repair with the other sections of recently modernized trail.

Careful consideration was given to combining these project elements into one application. Planning for and implementing these elements as one large project amplifies the project benefits while minimizing construction impacts to adjacent businesses and the travelling public. It would allow us to retain the maximum amount of existing infrastructure and coordinate the most efficient installation of new infrastructure. Investment in the DowntownSAM builds on targeted previous investments and will serve Missoula well into the future.

Partnership and Collaboration

The City of Missoula has developed authentic partnerships with community groups and residents who have helped prioritize, design, and vet DowntownSAM project elements, both through direct engagement on this project and by crafting the community vision that values safe and sustainable access to jobs, services, and affordable housing.

In 2019, the Downtown Missoula Partnership, a collaboration of business owners, property owners, and fundraisers, coordinated an update of the DTMP.[52] Over a dozen agencies and governing boards and more than 3,000 individuals contributed to the development of this plan. The planning process included a wide range of engagement techniques from the DOT's Promising Practices for Meaningful Public Involvement in Transportation Decision-Making guide,[53] such as community design charrettes, in person and virtual Open Houses, surveys, interactive online tools, story maps, and videos. In the final plan, both the Higgins 4-3 lane conversion and the Front/Main two-way restoration emerged as critical projects for the health and sustainability of downtown.

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[51] Two Way Street Conversion. Community and Economic Development in North Carolina and Beyond. 6 Dec. 2018. https://ced.sog.unc.edu/2018/12/the-state-of-the-debate-two-way-street-conversion/

[52] https://www.missouladowntown.com/downtown-master-plan/

[53] *Promising Practices for Meaningful Public Involvement in Transportation.* USDOT. https://www.transportation.gov/sites/dot.gov/files/2022-10/Promising%20Practices%20for%20Meaningful%20Public%20Involvement%20in%20Transportation%20Decision-making.pdf

City and MPO staff have hosted several Inclusive and Interdisciplinary Move/Walk Audits in the project location, the most recent two in 2022. These walk audits provide an opportunity for local and state government officials and mobility-challenged community members to tour the project location, identifying problems, opportunities, and solutions. Representatives from Summit Independent Living, University of Montana Rural Institute, the Montana Department of Public Health and Human Services, Montana Chapter of the National Federation of the Blind, and the Specialized Transportation Advisory Committee, walked and rolled the length of the project areas to share their perspectives with planners, engineers, and elected officials. Their insights helped highlight the need for universal access, inform intersection design, and built trust through meaningful collaboration in the planning process, ensuring equity considerations for underserved communities were included in the project. As this project advances in development, walk audits will continue to be an important component of public engagement.

The bridge that spans the Clark Fork River along Higgins Ave was recently dedicated as Beartracks Bridge (Sxʷúytis Smx̣e) in collaboration with and in honor of the people of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, just north of Missoula. The City of Missoula and Missoula County partnered with the Tribal Council and the Séliš-Ql̓ispé Culture Committee to propose the renaming of the bridge to the Montana Transportation Commission, which provided unanimous support. The dedication included the installation of permanent historical, educational, and cultural signage at the south end of the bridge. DowntownSAM improves bike/ped connections to and from the bridge, bringing more people in contact with this important legacy.

This project has the support from economic development organizations like the Missoula Economic Partnership (MEP) and the DMP as they recognize the importance of multi-modal facilities in creating a vibrant and accessible community. MEP's Comprehensive Economic Development Strategy supports complete streets, urban active transportation improvements, shared use path and trail connections, and safety improvements and enhanced crossings, specifically identifying the Front/Main two-way conversion as a priority.[47] Business leaders and economic development agencies understand how DowntownSAM facilitates increased residential and commercial investment downtown.

Innovation

Missoula is a rapidly growing mid-sized city with geographic, right-of-way, cultural, and financial constraints to roadway expansion. The MPO and City are therefore pursuing strategies to maximize transportation network efficiency through safe, multimodal design and innovative signal improvements.

Innovative Technologies The primary technological innovation of the DowntownSAM project is the significant upgrade to signal technology. MDT is undertaking a long-term effort to establish Automated Traffic Signal Performance Measures (ATSPM). This project will be the first in the state to deploy probe-based ATSPM, using connected vehicle data to assess performance such as (1) progression/number of stops/arrival on green, (2) travel time/speed/reliability, (3) split features/phase terminations/red occupancy ratio vs green occupancy ratio, and (4) vehicle delay. This project will also upgrade all signal detection and communications in anticipation of integrating a future detector-based ATSPM system. Since probe-based ATSPM relies on connected vehicles which have seen slower adoption in Montana, pre and post construction video counts will help understand traffic pattern changes and ped/bike usage of the new facilities. These

local data sources will also be supplemented with an analysis of StreetLight data after the project to compare to the existing analysis.

This project will add a signal at the Front/Madison intersection and significantly change several others, necessitating a retiming of all the connected signals, some of which are beyond the boundaries of this project. A comprehensive signal timing project has not happened in Missoula since 2009/2010, when different policy priorities required optimizing signals for main line through put. This project presents an opportunity to consider multimodal safety and community connectivity alongside vehicular level of service when coordinating the downtown signal system. The FHWA and Institute for Transportation Engineering (ITE) data show that signal coordination can reduce up to 15% of all crashes, and up to 32% of angle crashes.[54] Reducing congestion and limiting vehicle arrivals on a red light can decrease the number of crashes, particularly rear-ends. Basing signal timing on weeks or months of data (from the ATPSMs) will enhance smooth traffic flow, improving safety and reducing fuel consumption and air pollution for all residents.

This project will also deploy bicycle signal heads, lead pedestrian intervals, and other innovative strategies to separate users, minimize conflicts, and improve safety. The DowntownSAM is the first project of its kind in Missoula and the state of Montana, and the innovative and emerging technologies used will significantly enhance the safety and operations of the transportation system while serving as a model for future projects in the community, region, and state.

Innovative Project Delivery By combining and coordinating project components that can be constructed separately, the City is minimizing construction time and mitigating construction impacts. Additionally, the City is looking to mitigate businesses' construction fatigue. Business owners, no matter how excited they are about downtown improvements, are concerned about construction impacts. To address these concerns, a "Downtown is Open" Public Relations mitigation plan is proposed to reduce the potential impacts from construction (Attachment C shows local marketing costs). The City is also considering a Construction Manager / General Contractor project delivery method to facilitate risk management and time / cost savings.

Innovative Financing To provide just under a 5% local match, the City has worked with the MRA (Missoula Redevelopment Agency), Missoula Downtown Foundation, Business Improvement District (BID), and Mountain Line (Attachment X). MRA is providing $1 million of Tax Increment Financing (TIF) funds through 3 TIF districts associated with the project area. This project also has several private business and nonprofit match supporters showing the extent of commitment to this project.

[54] Institute of Transportation Engineers, "Toolbox of Countermeasures and Their Potential Effectiveness to Make Intersections Safer." Briefing Sheet 8, ITE, FHWA, (2004)

Environmental Risk

1. Project Schedule

City of Missoula Downtown - RAISE	Milestone Dates*	
Activities	**Start**	**Finish**
Grant Review Process and Award	Feb-2023	Sep-2023
Grant Agreement	Sep-2023	Dec-2023
Engineering Consultant Procurement	Nov-2023	Feb-2023
Preliminary Engineering Phase	**Jan-2023**	**Sep-2023**
Public Involvement	Feb-2024	Dec-2028
Preliminary 30% Design	Feb-2024	Nov-2024
Environmental (NEPA) Document	Aug-2024	Mar-2025
Alternative Contracting Procurement (if desired)**	Jan-2025	Mar-2025
Scope of Work Document Approved	Feb-2025	Mar-2025
Final Engineering Phase	**Sep-2023**	**Sep-2025**
60% Design	Mar-2025	Jul-2025
Limits of Construction Finalized	May-2025	Jul-2025
Right-of-Way Appraisals & Acquisitions (if necessary)***	Jul-2025	Mar-2026
90% Design	Jul-2025	Dec-2025
Project Permitting	Mar-2025	Jun-2026
100% Design and PS&E	Dec-2026	Jul-2026
Execute Final Grant Agreement	Jul-2026	Oct-2026
Construction Phase	**May-2025**	**Dec-2027**
Construction Contract Soliciation**	Oct-2026	Jan-2027
Construction	Apr-2027	Dec-2028

The City of Missoula is in a good position to deliver this project within the timeframes required by the 2023 RAISE Grant Program, and within the parameters of Federal, State and Local approval processes. Completed planning and design work leaves us with well-defined and understood project that can be quickly moved to construction if funding is received. The City's strong Public Involvement and Planning efforts to date have readied the projects for streamlined delivery. We anticipate finalizing preliminary and final engineering by October 2026, almost one year earlier than the statutory requirement of September 30, 2027. This delivery schedule will set the project up for Fall 2026 construction letting followed by a two-year construction season with final completion anticipated by the end of 2028. See Attachment B for a detailed project schedule.

Project Startup:

Immediately after notification of grant award the City will begin discussions with FHWA to finalize the grant funding agreement. When the grant agreement has been finalized the City will solicit a consultant to lead the project delivery and engineering work. We anticipate selecting a preferred consultant, issuing a Notice-to-Proceed and kicking-off the project by February 2024.

Preliminary Engineering and Design:

The project delivery process will leverage existing planning and design work we have already completed. Given the significance of this project to the City, our delivery approach will incorporate

every robust public involvement (PI) throughout all phases, including construction. This PI work will the steering team of critical decisions, shape the project design, and support the NEPA document.

The key project elements are at the following level design:

- Higgins Avenue Corridor – Preliminary Design (10% level)
- Front and Main Two-Way Restoration – Final Design (90% level currently funded)
- Riverfront Connections Accessibility – Conceptual & Preliminary Design (10% level)
- Comprehensive Downtown Signal Optimization – no engineering required. This task will be completed post construction.

Alternative Project Delivery Opportunity – The FHWA recognizes CMGC as an innovative project delivery strategy (see EDC-2 Initiatives. The City of Missoula has a proven track record of utilizing the CMGC method of project delivery, most recently through the successful delivery of the Mullan BUILD (2019 BUILD Grant Award). We will consider utilizing CMGC for DowntownSAM, and will explore opportunities to release the Front and Main Two-Way Restoration Project and the Long Lead Material Procurement (specifically signal poles) as early work packages.

Environmental Permits and NEPA Document:

We anticipate this project can be permitted under a Categorical Exclusion (Cat Ex). An environmental scan was conducted as part of the Higgins Avenue Corridor Study[1], this document informed the City that a Cat Ex is likely a sufficient level of documentation for the Higgins element of the project. A more detailed overview of the anticipated project permits and NEPA analysis can be found below under *Required Approvals*. The Cat Ex will be a critical path item and is anticipated to be completed by March of 2025.

Final Engineering and Design:

The final engineering work will begin as soon as the NEPA process concludes. The final engineering phase will also include any necessary ROW activities. While no permanent easements or ROW acquisition are anticipated, the project will need to secure temporary construction easements. This will include close coordination with adjacent businesses to minimize impacts during construction. Using lessons learned from the recent Beartracks Bridge Projects (led by the Montana Department of Transportation), The City will plan to work on securing a nearby contractor staging location. The City also anticipates traffic staging and phasing work to be extensive. This planning work will be a significant component of the final engineering and design work.

Right-of-Way and Private Utility Coordination:

All projects included in this application are improvements to existing transportation facilities in a constrained downtown environment. As such, each project was designed to avoid impacts to adjacent properties by focusing solely on existing right-of-way and city-owned parkland. One key outcome of this project is to maintain the existing wide sidewalks and historic building facades in

[1] Higgins Ave Corridor Plan. Environmental Scan Report. 2021.
https://www.engagemissoula.com/11878/widgets/35150/documents/40197

our downtown. This will serve the dual purpose of reducing risks to project delivery, while also maintaining the historic character of Missoula's downtown core. The Front and Main Two-way Restoration does require a small easement from one parcel to resolve an existing sidewalk encroachment.

Private utilities conflicts are expected to be minor and will be further identified during the 30% design phase. Necessary coordination and relocations will be determined during final design. If necessary, utility relocations will occur during the second half of 2026, or they may be coordinated during construction to reduce overall impacts to the public.

Construction:

The project is anticipating a two-year construction season that will take place in 2027 and 2028. This allows for project phasing to minimize disruption and impacts to downtown businesses. Management of all modes of traffic (vehicles, bikes, and pedestrians) will be a significant construction challenge. As noted above, the use of CMGC will be evaluated and may be a viable strategy to work with the construction contractor throughout the final engineering phase to minimize these impacts and ensure proper construction cost contingencies are in-place.

Public Involvement:

Each of the elements included in this grant application include a history of extensive outreach, engagement, and public input. Missoula is an engaged community, and our Downtown is served by an active community and business advocacy organization, the Missoula Downtown Partnership, that works in close coordination with the City. To ensure the project can move forward with continued public support, this grant application schedule proposes to begin comprehensive public engagement as soon as funding and procurement is complete.

The City recognizes that projects of this scale can have a significant impact on adjacent properties, particularly in dense commercial centers like Missoula's Downtown. To mitigate that impact and involve the business community, commuters and residents, budget is included in this project for coordinated public relations and engagement activities such as developing a "construction toolkit" for affected businesses, ad campaigns to ensure continued business activity from the surrounding region, and comprehensive branded marketing to sustain a vibrant downtown before, during and after construction.

2. Required Approvals

Environmental Permits and Reviews

As discussed above, we anticipate this project can be permitted under a Categorical Exclusion (Cat Ex). An environmental scan was conducted as part of the Higgins Avenue Corridor Study[11] above.

No floodplain, wetland, or stream permitting is anticipated under Montana's Joint Application for Proposed Work in Montana's Streams, Wetlands, Floodplains, and Other Water Bodies. The contractor will be required to apply for a General Permit for Storm Water Discharges Associated with Construction Activity, commonly known as a SWPPP Permit, for construction disturbance.

Since the project site is within the Missoula Municipal Separate Storm Sewer System (MS4) area, storm drainage design will need to comply with the relevant General Permit issued by the State.

MS4 requirements are regulated by the local jurisdiction and are primarily a function of compliance in design with respect to detention/retention and storm water quality. The storm drainage design proposes a combination of piped infrastructure, biofiltration, mechanical treatment, and groundwater recharge to reduce storm water runoff volume and improve storm water quality. These measures readily meet MS4 needs.

The Riverfront Trail improvements and connections are located within public parkland or public easements along the Clark Fork River. Portions of the trail and ADA ramp improvements are located along a floodplain levy, which may require coordination and approval from the U.S. Army Corps of Engineers. The City of Missoula has a long history of working collaboratively and obtaining necessary permits for trail and park improvements; the City anticipates successful permitting for this project within the identified schedule.

State and Local Approvals

The project elements will be located entirely within City and State rights-of-way.

Front and Main are City-maintained Urban Highway Routes (U-8108A & U-8110A), requiring consultation with MDT. In addition, Higgins Avenue is a State-maintained urban route (U-8113A) as well part of US Highway 12, requiring support and approval from MDT for any proposed changes. In order to reduce project delays and to ensure a high level of coordination, the City worked closely with MDT to meet state-level requirements and goals during planning phases.

DowntownSAM project elements involved MDT staff from the outset, including participation on the project steering committees and detailed design coordination meetings. Due to that high level of engagement, the state determined that the project design met all requirements with specific signal and intersection improvements (Letters of Support Attachment, MDT Support Letter). This application includes those requests as part of the innovative design.

The Riverfront Trail Connections project element is generally outside the purview of MDT, however provisions for the ADA connection to Caras Park were considered during the recent rehabilitation of Beartracks Bridge.

Federal Transportation Requirements Affecting State and Local Planning

The project is included as a high priority in the Missoula Long-Range Transportation Plan as recommended for funding and, should this 2023 RAISE Grant request be successful, the Missoula Metropolitan Planning Organization's Transportation Improvement Program will be amended to include the project. Construction of the project was considered in the air quality conformity analysis for the LRTP, which was approved by FHWA in 2021.

The three primary project elements are also included in the Missoula MPO's current LRTP air quality analysis, as required under 23 U.S.C. 134 and 135, due to our community's air quality maintenance status for CO, PM2.5 and PM10. Construction of the project will not negatively affect Missoula's air quality standards and has significant opportunity to improve conditions based on anticipated mode shift and reduction in vehicle trips.

3. Assessment of Risks and Mitigation Strategies

There are several risks typically associated with this type of project, many of which are mitigated by the significant progress made to date. These include:

Environmental Clearance

As noted previously, several of the project elements have undergone pre-NEPA scan for potential impacts. While this is a complex downtown environment, the City has completed similar projects in the area using federal funds and has sufficient experience to successfully navigate the environmental review process. Based on the scan completed with the Higgins Avenue Corridor Study, the expected level of environmental review is a Categorical Exclusion. We have also identified the following risks:

- Public Participation: through planning and design phases, thousands of residents, businesses, and key stakeholders were engaged in the process as noted in this application's Merit Criteria and in our schedule detail above. These efforts are expected to continue throughout the life of the project.
- Cost Inflation: due to the recent volatile bidding and construction environment in Missoula, cost estimates include substantial contingencies for all phases of the project as well as annual cost inflation that matches recent experience with large infrastructure construction projects such as the 2019 BUILD grant project that is nearing completion.
- Construction Delays and Impacts: construction projects in a downtown can be complex and difficult to manage. However, the Montana Department of Transportation recently completed a successful bridge rehabilitation project with assistance from the City and downtown partners for staging, business and commuter impact mitigation, and coordination with adjacent property owners. The GMGC project delivery method will also be considered to identify risk mitigation strategies early in the project schedule.
- Historic and cultural resources: location of the project in Missoula's Historic Downtown presents risks to historic and cultural resources. The City has already started coordination with adjacent property owners to identify and mitigate for risks to resources, such as underground vaults, and included contingencies in the project budget to avoid project delays or cost impacts. The City and MDT have experience mitigating impacts to historic and cultural resources during the Beartracks Bridge rehabilitation.

4. Technical Capacity

The City has extensive recent experience managing federal aid projects, including the Mullan BUILD Project awarded in November 2019. The $21 million project will complete construction by the summer of 2023, less than four years after award.

The City of Missoula prepared and bid for over $10 million of street and utility work for the upcoming 2023 construction season and is currently working with MDT to help design and construct a $3.7 million roundabout on a state highway using federal funding.

This experience, along with the technical and financial staff resources with the Public Works and Mobility Department provides the knowledge, experience, and track record necessary to successfully deliver this RAISE project if awarded.

Project Budget

The City of Missoula is requesting **$24,535,398** in funding from the 2023 Rebuilding American Infrastructure through Sustainability and Equity (RAISE) program. The Missoula Downtown Safety and Mobility (DowntownSAM) project is a multi-agency effort between the City of Missoula Redevelopment Agency (MRA), Missoula Parks & Recreation (Parks), the Missoula Metropolitan Planning Organization (MPO), and private partners such as the Missoula Downtown Partnership (MDP) that represent a broad coalition of businesses, non-profits and other interests in our downtown community. As detailed below, the City of Missoula and private partners are committing up to $1,160,000 towards completion of the project. Even though there is no requirement for a local match under our Rural designation, we strongly believe that having a local commitment is vital to successful implementation of a project of this scale and transformative potential in a downtown environment.

Each project element identified in this grant are independent, stand-alone components of the full DowntowSAM project. While there is unique benefit and utility to each element, we strongly believe that the complete project is necessary to fully transform our downtown transportation system and set Missoula up for a more sustainable, multimodal future. Without this infusion of critical federal investment, Missoula is facing years or decades of delay in delivering the project.

While we do not include previously expended funds in this project budget, it is important to recognize the substantial investment our community has made in getting the project ready for capital funding. Previous phases of the project including feasibility studies, engineering design, park and trail construction, ADA upgrades, Beartracks Bridge (Higgins Avenue) rehabilitation and community engagement represent a total prior investment of $4,167,000 in local funding, and $16,800,000 in federal funds.

The detailed project budget outlined below is based on current engineers estimates for each project element, provided in more detail in Attachment B.

Project Costs:

Project cost estimates are based on a combination of final design (Front & Main Two-way Restoration), preliminary design (Higgins Avenue Reconfiguration), and conceptual design (Riverfront Trails Connections). The cost estimates by component include grant administration, environmental review, design, construction, construction administration, and contingency.

Due to the varying stages of design completion, more conservative estimates and larger contingencies were used for projects in earlier phases of design and engineering. For example, the ADA Ramp portion of the Riverfront Trail Connection project element has only gone through conceptual design. Due to the potential risk in cost inflation as the project goes through design phases, a substantial 50% contingency was added to construction costs. In addition, an annual inflation factor of 4% was used to estimate year of construction costs consistent with the project schedule. Based on experience with other federal-aid projects, including a 2019 BUILD grant award, these cost estimates represent the budget necessary to deliver this project successfully.

Sources and Uses of Funds:

The City of Missoula is requesting **$24,535,398** in federal RAISE grant funding, to be matched by a local contribution of up to $1,160,000 from a variety of local sources and partners. The City of Missoula is committed to providing $1,100,000 in contributions, and other community partners will provide the remaining $60,000 in non-federal funding.

If awarded, the City of Missoula expects to successfully complete the project and expend all funds by the statutory deadline of September 30, 2032.

Sources of Project Funds	Non-federal	RAISE	Other federal	% of Total
City of Missoula				
Tax Increment Financing	$ 1,000,000			4%
City Parks	$ 100,000			0.39%
Partner Contribution				
Mountain Line	$ 10,000			0.04%
Missoula Downtown Foundation	$ 10,000			0.04%
Business Improvement District	$ 40,000			0.16%
RAISE Grant		$ 24,535,398		95%
Project Total	$ 1,160,000	$ 24,535,398	$ -	100%
Total				**$ 25,695,398**

Funding Source	Front & Main 2-way Restoration	Higgins Ave Reconfiguration	Riverfront Trails Accessibility	Signal Optimization
RAISE funds	$ 10,775,255	$ 7,724,780	$ 5,735,363	$ 300,000
Other Federal Funds	-	-	-	-
Non-federal Funds	$ 500,000	$ 500,000	$ 160,000	-
Project Total	$ 11,275,255	$ 8,224,780	$ 5,895,363	$ 300,000

Census Tract (s)	Project Costs per Census Tract
30063000300	$20,995,523
30063000700	$1,762,452.81
30063000502	$2,349,937.08
30063001100	$587,484.27

Non-Federal Funds:

The DowntownSAM project is located entirely within the Missoula urbanized area, which has a population under 200,000 and is therefore considered rural for the purposes of the 2023 RAISE grant program. No local match is required per the 2023 RAISE Notice of Funding Opportunity, however the City of Missoula and its partners feel strongly that contributing a portion of the

project costs is essential to demonstrate our commitment to delivering the project if awarded, and to ensure it continues to be a strong public-private partnership effort.

Downtown businesses and other stakeholders have helped in all stages of development for the DowntownSAM project, including project identification in the 2009 Downtown Master Plan. Throughout development of all project elements, the downtown community has had a strong role in making this a successful effort, as demonstrated in the Partnerships and Collaboration section of the Merit Criteria narrative. Continuing this strong involvement means providing a meaningful contribution to project construction. While these are small contributions in the context of the overall grant cost, they are substantial and meaningful for the organizations providing the match.

Non-federal funds proposed for this project include a mix of both public and private funds. The City of Missoula is contributing $1,100,000 towards all project elements, including $1,000,000 of Tax Increment Financing committed through Missoula Redevelopment Agency and $100,000 in Parks funding. In addition to these funds committed by the City, partner contributions include $10,000 from the Missoula Downtown Foundation, $40,000 from the Business Improvement District and $10,000 from the Missoula Urban Transportation District (Mountain Line Transit). The Funding Commitment Documentation file details these funding commitments.

Other Federal Funds:

No other federal funds are currently included to fund the components submitted with this DowntownSAM grant request, however as noted above there has been substantial investment in these projects over the last decade.