MISSOULA COUNTY BRIDGES REPLACEMENT PROJECT II

PROJECT DESCRIPTION

The Missoula County Bridges Replacement Project II (Project) improves transportation infrastructure, enhances public safety and quality of life, and ensures economic viability by replacing seven structurally deficient bridges in western Montana: Cold Creek Road Bridge, Styler Drive West Bridge, Styler Drive East Bridge, Kraft Creek Road Bridge, Riverview Drive Bridge, Owl Creek Lower Bridge, and Bench Road Bridge.

The project area is a discrete rural district in northeastern Missoula County (Figure 1). Situated in the picturesque Clearwater/Swan River drainage between two mountainous federal wilderness areas, the communities here are defined by geography. Populations are unincorporated, dispersed, and bifurcated by rivers, lakes, and streams. One bridge is located inside the boundaries of the Lolo National Forest. The entire district is characterized by a strong outdoor recreation economy and extreme wildfire risk exacerbated by climate change.

Missoula County is the setting for the book and movie, *A River Runs Through It,* and rivers and streams literally run through nearly every town in this county. Given these conditions, bridges are essential to the most fundamental civic functions. The communities in the project area depend on bridges for public safety, economic activities including tourism and logging, access to daily destinations, recreation, and every other facet of public life.

The seven bridges in this funding proposal are at various stages of structural deficiency, including five that have load restrictions of various levels. Project-wide, these deficiencies are already impacting economic health and community cohesiveness.

Missoula County is largely rural, with a very low tax base for infrastructure funding. Maintaining the seven project bridges represents a serious financial burden. Shane Stack, Public Works Director for the County, noted in a recent news article that “We receive about $1 million annually for our bridge program and there are some 124 bridges in Missoula County. There’s just not enough funding to maintain and replace all these structures.”

The proposed project will replace seven high maintenance timber bridges, five of which have load restrictions of emergency vehicles. The other two bridges are showing signs of deterioration and will likely need to be load restricted in the near future for public safety. Most importantly, it will enable Missoula County to restore transportation links necessary for public health, economic vitality, and community connectivity.

LOCATION NARRATIVE

Missoula County spans 2,618 square miles and is home to approximately 119,553 people as of the 2021 census. While the majority of the population resides in the City of Missoula, smaller, largely unincorporated communities account for the remainder. The county is defined by its extensive public lands, which foster a strong connection to the landscape and a deep sense of place within its communities. The project area is situated in the northeastern portion of Missoula County. Within this area are three dispersed, unincorporated communities, the most populous of which is Seeley Lake. Despite its rural character, the project area serves as a critical lifeline for residents, providing access to essential infrastructure, economic opportunities, and emergency

services. The area is not located within an Area of Persistent Poverty, a Historically Disadvantaged Community, or a Census-designated urbanized area, underscoring its unique rural challenges and characteristics.

The Project also located within the Wildland-Urban Interface (WUI), a transitional zone where human development meets and intermingles with wildland vegetation. This interface presents heightened risks for wildfire due to the close proximity of structures and natural fuels, as well as limited evacuation routes in the event of an emergency. The WUI designation is significant because it underscores the need for reliable infrastructure to support emergency response, evacuation, and community safety. Figure 1 below illustrates the extent of the WUI in Missoula County and its intersection with the project area. This context highlights the critical importance of bridge replacement projects in maintaining public safety, ensuring reliable access to daily destinations, and mitigating the impacts of wildfire-related risks on local residents and visitors.

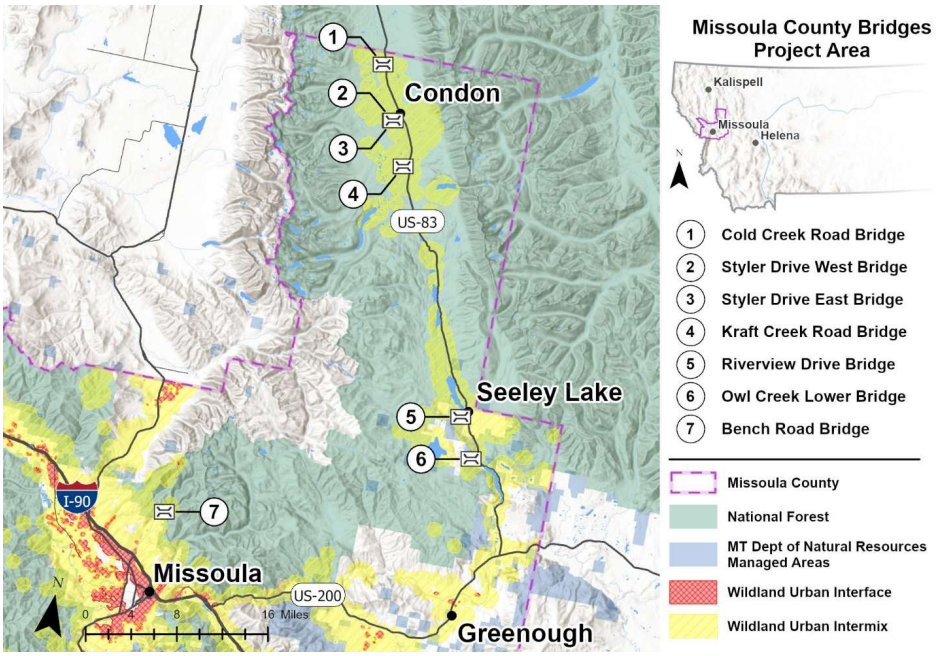

Figure 1 Missoula County Bridges Replacement Project Area Map

PROJECT COMPONENTS

The Project contains seven component bridges. Table 1 below provides an overview of the bridges and their condition; Figure 1 above depicts their location in Missoula County.

These bridges support livelihoods for local residents, businesses, tourism, and recreation, and are critical to fire response in a county with very high wildfire risk. Replacing them will create benefits collectively and individually. As project components, the bridges are related in that they

are all rural and part of the state's off-system bridge system, which the Montana Department of Transportation has flagged as "one of Montana's most significant challenges." All have been identified in the Missoula County Transportation Plan as top priorities for replacement.

STATEMENT OF WORK

The proposed improvements include the replacement of multiple bridges to meet modern load requirements, ensuring safer and more reliable infrastructure. At Riverview Road Bridge, a two-lane bridge with a shared-use path will be constructed on the existing alignment. The design includes updated roadway approaches for smooth transitions and a revised vertical alignment to accommodate longer spans, reducing the number of in-stream piers. Similarly, Cold Creek Road Bridge will be rebuilt on its current alignment, with options for one or two lanes under evaluation. Stabilization measures will protect the east approach against occasional overtopping, and longer spans will minimize the need for in-stream piers.

Additional bridges slated for replacement include Bench Road, Owl Creek Lower, Styler Drive East and West, and Kraft Creek. Each will be reconstructed on their current alignments, with designs tailored to support modern loads. Both one- and two-lane configurations are being considered for all these structures. Updated roadway approaches will ensure smooth transitions, and the vertical alignments will be adjusted to accommodate prestressed concrete girders with longer spans, reducing environmental impacts by minimizing in-stream pier requirements. These improvements collectively enhance safety, reliability, and resilience in the transportation network.

MISSOULA COUNTY BRIDGES REPLACEMENT PROJECT II
OVERVIEW OF OFF-SYSTEM BRIDGES PROPOSED FOR REPLACEMENT

Bridge name (Waterway Crossed)	Bench Road (Grant Creek)	Riverview Drive (Clearwater River)	Owl Creek Lower (Owl Creek)	Cold Creek Road (Swan River)	Styler Drive East (Glacier Creek)	Styler Drive West (Glacier Creek Overflo	Kraft Creek Road (Swan River)
Build Year	1955; reconstructed in 1983	1967	1970	1954; reconstructed in 1974	1970	1974	1954
Structure	Steel with timber deck; 1 spans; 27 ft long	Steel with timber deck; 5 spans; 101 ft long	Timber with timber deck; 1 span; 40 ft long	Timber with asphalt deck; 3 spans; 99 ft long	steel with timber deck; 1 spans; 38 ft long	steel with timber deck; 1 spans; 34 ft long	Timber with glue-lam panel deck; 4 spans; 101 ft long
Sufficiency Rating	46.6	80.1	66	84.0	63.8	76.9	81.6
Needs for Replacement	Load restricted due to structure deficiencies; inventory is 18 tons, operating 24 tons. Due to the deck being timber, it is vulnerable to fire. Closure could impact fire suppression capacity	Historically was #1 priority in the state for replacement before MDT changed load rating requirements. Timber deck vulnerable to fire; scour issues.	Due to structure having both timber girders and deck, it is vulnerable to fire. Closure could impact fire suppression capacity	Bridge has been considered scour critical by MDT since 2008. 100+ feet of river right bank had been lost since 2003. Closure could impact fire suppression capacity.	Load restricted due to structure deficiencies; inventory is 22 tons and operating is 36 tons. Due to the deck being timber, it is vulnerable to fire. Closure could impact fire suppression capacity	Due to the deck being timber, it is vulnerable to fire. Closure could impact fire suppression capacity	Due to structure having both timber girders and deck, it is vulnerable to fire. Closure could impact fire suppression capacity
Detour for Current or Anticipated Bridge Closures	Bypass Detour Length: 124 mi	Potential anticipated detour: approx. 9 miles, including 5 miles on private property and primitive public roads	Bypass Detour Length: 16 mi	Potential anticipated detour: 16 miles, including several miles on non-maintained, dirt Forest Service Roads	Bypass Detour Length: 124 mi	Bypass Detour Length: 124 mi	Bypass Detour Length: 25 mi

Table 1 Overview of Project Bridges

Commented [kh1]: 81.5 Sufficiency Rating for Kraft Creek from the MDT Off System Bridge Website

CURRENT DESIGN STATUS

Preliminary engineering reports (PERs) are complete or drafted for all seven of the bridges proposed for replacement. Refer to the Project Readiness section for more details on design and construction schedule.

TRANSPORTATION CHALLENGES THE PROJECT WILL ADDRESS

Please see Merit Criteria for a full discussion of challenges the project will address.

Safety: The Project prioritizes safety and enhances emergency response and evacuation, especially for wildfires. Missoula County faces growing wildfire risks due to its wilderness, population growth, and expanding WUI. Many critical bridges for evacuation and emergency response are structurally deficient, with load limits, closures, and wildfire vulnerability. Restrictions and detours on these bridges hinder response times and evacuation in high-risk areas. Replacing them will improve reliability, address safety concerns, and include modern features like wider paths and protective barriers for pedestrians and cyclists.

Environmental Sustainability: The Project improves infrastructure resilience in wildfire-prone areas by replacing timber bridges with fire-resistant materials, addressing climate-driven wildfire risks. It supports federal and state goals for sustainability, accessibility, and emissions reduction while benefiting communities through efficient transportation, reduced detours, and multimodal options like biking and walking paths. The replacements expedite wildfire responses, reduce health risks from poor air quality, and protect wildlife habitats and in-stream resources. By cutting vehicle miles traveled and improving air quality, the Project advances climate adaptation, public health, and active transportation goals.

State of Good Repair: The current bridges do not meet modern design and safety standards and are unable to accommodate increasing volumes of traffic and the weight of modern vehicles. One of the bridges is currently closed and the other two bridges have load restrictions on them.

Economic Competitiveness: Replacing key bridges in Missoula County is essential to the region's economy, which depends on outdoor recreation, tourism, ranching, and logging. Tourism alone generates $652 million annually, with the area serving as a gateway between Yellowstone and Glacier National Parks and a hub for outdoor activities. Bridge closures disrupt access to economic drivers, landmarks, and infrastructure, forcing costly detours for residents, businesses, and emergency responders. Replacing these deteriorating bridges will protect economic opportunities, improve safety, and ensure access to vital resources in this recreation-dependent corridor.

Quality of Life: The Project will improve safety and quality of life in rural Missoula County by ensuring reliable wildfire emergency response and evacuation routes, particularly for disadvantaged areas like Seeley Lake and Condon. Timber bridges currently pose safety risks and lengthy detours of 30-45 minutes during emergencies. Replacing these structures will enhance access to schools, emergency services, and recreation while supporting pedestrian and bike transportation. This investment strengthens community resilience, economic efficiency, and environmental sustainability in wildfire-prone areas.

PROJECT HISTORY

In 2022 the County contracted PERs with the plan of applying for discretionary funding; the three bridges had PERs completed in 2023 and 2024. In 2023, Missoula County applied for RAISE funding for two bridges, Cold Creek Road Bridge and Riverview Drive Bridge, gaining recommended on the Safety, Mobility and Community Connectivity, and Partnership and Collaboration merit criteria and highly recommended on the Environmental Sustainability, Quality of Life, Economic Competitiveness and Opportunity, State of Good Repair, and Innovation merit criteria.

OTHER TRANSPORTATION INFRASTRUCTURE INVESTMENTS PROJECTS BEING PURSUED

Missoula County, like most local jurisdictions across the country, has limited funding and needs that exceed local revenues. The County is finding as many ways to invest in infrastructure as possible. It has also invested over $600,000 in recent years developing preliminary plans and reports for high priority projects – many of which are bridge projects – to support funding applications. The seven structures in this application are examples of those bridges, but there are several others that the County plans to rehabilitate or replace through a variety of funding sources.