Three Rivers Park District Regional Trail Network

Connecting Communities through Sustainability, Equity, and Mobility

Submitted by Three Rivers Park District

2022 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program



Project Name Three Rivers Park District Regional Trail Network: Connecting Communities through Sustainability, Equity, and Mobility

Total Project Cost : \$32,256,580 2021 RAISE Funds Requested \$24,837,567

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Supporting Information can be found at: <u>https://www.srfconsulting.com/trpd-raise/</u>





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I. PROJECT DESCRIPTION

Three Rivers Park District Regional Trail Network: Connecting Communities through Sustainability, Equity, and Mobility (herein referred to as "the Project") will improve the regional trail network through a series of strategic interventions identified through technical analysis and extensive community outreach. The Project will construct 7.2 miles of new regional trail, reconstruct 8.2 miles of existing trails and sidewalks, improve wayfinding and amenities along 8.5 miles, improve 51 trail crossings, and add 5 automatic trail counters. The Project will address existing regional trails in need of reconstruction, establish new north-south connections between existing east-west routes, and fill gaps in the existing regional trail network. Collectively, these improvements will spur active transportation and enable new connections and travel patterns.

The regional trail system spans all seven counties of the Minneapolis-Saint Paul, Minnesota (Twin Cities) metropolitan area. In Hennepin County, where the Project is located, the regional trail system functions as an arterial active transportation network, and the backbone of the bicycle transportation network. Like the vehicular highway system, it carries users across jurisdictions, then connects them to local routes that lead to their destinations. Critically, the trail system is off-road and separated from motor vehicle traffic, safely accommodating users of all ages and abilities.

Rather than focusing on a single route, the Project considers the trail network as a whole and applies interventions where they will be most impactful. The Project will improve safety for all modes of travel, increase access to opportunities for equity populations, and significantly reduce vehicle miles traveled, supporting sustainable and active transportation throughout Hennepin County.



Three Rivers Park District is a natural resources-based park system in suburban Hennepin County. The Park District was founded in 1957 by the Minnesota Legislature to acquire, develop and maintain regional parks, park reserves, and trails. A passionate staff of more than 2,000 employees manages nearly 27,000 acres of parkland and over 160 miles of regional trails.

Project Purpose

Improve safety for non-motorized travelers and equity communities through protected facilities, connected routes, and barrier crossings

Offroad facilities reduce bike fatalities by 44% and are more inclusive of less experienced riders, children, seniors, and people with disabilities. New north-south connections will create direct routes for longer trips. Rather than jumping between multiple local facilities, users will enjoy a continuous and protected route to their destination. Improved trail crossings will protect all modes of transportation, and new routes will carry trail users safely over five regionally significant bicycle barrier crossing areas.

Extend and improve connectivity to equity communities to improve quality of life

The communities Three Rivers Park District (Three Rivers) serves are changing, and to remain relevant, Three Rivers needs to change with them. Three Rivers' goal is to be welcoming and convenient to all people, as documented in the first goal of the agency's <u>2040 system</u> <u>plan</u>. People of color, people experiencing poverty, those with limited English proficiency (LEP), people with disabilities, and zero-vehicle households are all overrepresented in the Project area relative to suburban Hennepin County, the extent of Three Rivers Park District's service area. By extending the trail network to new equity communities and reconstructing substandard trails currently serving these populations, the Project will address historic disparities in transportation cost burden, public health, and access to opportunity.

Increase mobility by supporting new users and changing trail use patterns

Three Rivers's existing 165-mile trail network saw 5,808,500 visits in 2019, with 23 percent of visitors saying they use the trails for 'any transportation' and 9 percent specifically to commute. This is a significant increase in use, whereas in 2001, only 7 percent of users surveyed said their trip was for transportation.

Hennepin County's 2040 Bicycle Transportation Plan categorized 53% of users in Three Rivers' service area as "interested but concerned" cyclists. This group prefers off-street multiuse trails and will bike for transportation if the infrastructure makes them feel safe. A bad cycling experience – such as a trail in poor condition or a gap in protected facilities – can discourage these users for weeks. Attracting and retaining this group is critical to achieve County and Three Rivers public health, sustainability, and equity goals. When complete, the Project will help this group feel safe and confident cycling to destinations throughout its service area.

Improve air quality, develop resilient infrastructure, and support efficient land use and transportation systems

The Project will result in a reduction of 2.6 million miles of travel from passenger vehicles of a 25-year period, thus playing an important role in Hennepin County's Climate Action Plan. It will promote active transportation and improve public health throughout its service area. Cycling, walking, and rolling are zero-emission activities – the Project will increase trail connectivity and thus reduce air pollution in Minnesota's priority Environmental Justice communities. In addition to supporting walking, rolling, and cycling, the Project will link to transit and promote mixed-use, location-efficient, and fiscally responsible land use. Environmental sustainability and stewardship are at the core of Three Rivers' mission. The Project will be developed using environmental best practices, increasing resiliency throughout the regional trail network.

Contribute to a robust regional economy

The Project will support regional economic development by improving productivity, creating jobs, retaining talent, and creating equitable access to opportunities. Trails increase transportation system efficiency and improve labor productivity by promoting public health. Businesses use the regional trail network to attract and retain a talented workforce. Investing in cycling and pedestrian infrastructure produces more jobs than other roadway capital projects. Connections to bicycle and pedestrian facilities improve economic mobility and resilience for equity communities via free and reliable transportation.

Proposed Improvements

Three Rivers selected Project components based on projected trail use, environmental justice, and proximity to existing and planned amenities. The network was developed in close partnership with local governments and in accordance with regional, county, and municipal trail planning.

The proposed improvements will strengthen and expand the regional trail network, promoting active transportation and improving community resilience through improved public health and reduced carbon emissions.

	Construct New Trail	Reconstruct Existing Trail	Improve Existing Trail	Total Trail Length	Improved Crossings
Bassett Creek Regional Trail	0.25	0.70		0.95	3
Bryant Lake Regional Trail	3.70		1.00	4.70	17
CP Rail Regional Trail	1.75		5.25	7.00	10
Eagle Lake Regional Trail	1.50	1.50	2.20	5.20	9
Medicine Lake Regional Trail		3.75		3.75	6
Nine Mike Creek Regional Trail		0.40		0.40	1
Rush Creek Regional Trail					1
Shingle Creek Regional Trail		1.84		1.84	4
Project Total	7.20	8.19	8.45	23.84	51

Table 1 Project Components

The Project includes 51 improved crossings spanning all eight regional trails. The table available <u>here</u> indicates the planned improvements by crossing type and regional trail

Toolkit of Interventions:

Drawing from over sixty years of experience planning, constructing, and maintaining parks and trails, Three Rivers has developed a toolkit of interventions to improve their regional trail network. They refine these strategies through regular field inspections and ongoing public outreach, with an emphasis on listening to communities underrepresented in the system.

- New construction: strategically linking state, regional, and local trails with new trail segments. The resulting connectivity will expand trail access to bicycle and pedestrian friendly destinations like jobs, schools, recreation and shopping destinations, and public transit lines.
- Reconstruction: updating end-of-life and substandard trail segments, to maintain a good state of repair on existing routes as well as
 consistent and reliable facility design. Three Rivers is a nationwide leader in infrastructure maintenance, which extends the life of trail
 pavement and improves user safety and satisfaction.
- Upgrading: trail amenities such as benches, bicycle parking, and bicycle fix-it stations welcome trail users of all ages, abilities, and experience levels, improving quality of life throughout the service area. Maps and signage help new users navigate the trail system and encourage multimodal transportation.
- Improved crossings: signalization, striping, wayfinding, and other strategies to ensure the trail network interfaces safely with other modes of transit as well as local and state trail and sidewalk systems. Surveys of regional trail users consistently rank 'improving or eliminating road crossings' to be a top intervention to increase trail use.

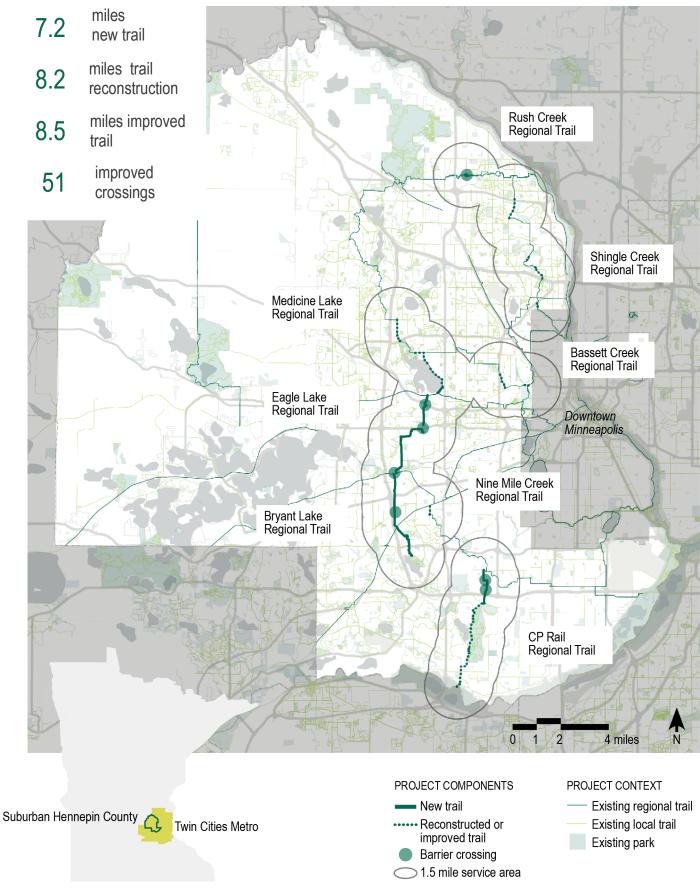


Figure 1 Trail Network Improvements

Project History

Three Rivers' regional trail network was originally planned as a spoke system, with all facilities stemming from Minneapolis. As development continues to accelerate in the region's suburban and exurban communities, users are requesting trails that connect to destinations outside Minneapolis, such as employment centers, parks, retail, places of worship, and transit stations. The Project leverages over four decades of investment in the existing spoke-based regional trail system, overlaying a grid of regional trails to better facilitate travel between suburban communities. Eagle Lake, Bryant Lake, and CP Rail Regional Trails included in the Project will introduce critical north-south connections to the existing network.

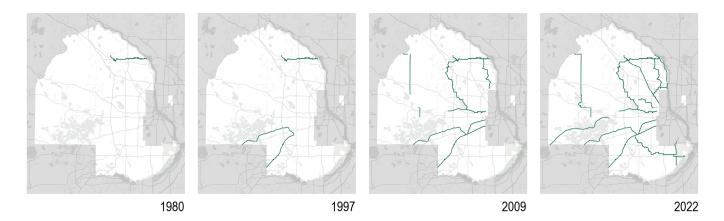


Figure 2 Regional Trail Network Growth

The Project supports Three Rivers and Hennepin County's shared vision for the regional trail network. Each Project component is guided by its respective regional trail master plan, each representing years of agency coordination and public engagement. The Project's trail alignments and crossings were identified and designed via ongoing coordination with local governments, watershed districts, and other agency stakeholders. Residents, business owners, and trail users shared their thoughts and suggestions via in-person and online events, targeted listening sessions, surveys, and interactive mapping. Figure 3 provides a summary of planning documents that identify the Project's components:

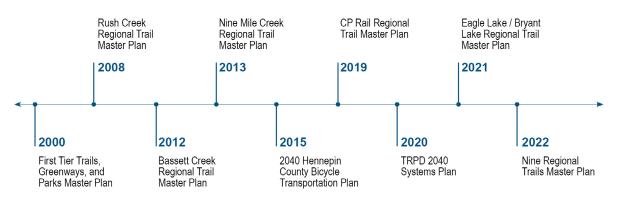


Figure 3 Planning Timeline

Through studies, outreach, and user surveys, it was determined that a growing number of Hennepin County residents are interested in cycling and walking for everyday trips, but are discouraged by existing trail and sidewalk gaps, unsafe crossings, and lack of wayfinding – this is especially relevant to new trail users and underrepresented community members. The elements of the Project are key improvements that will transform the existing regional trail system into an arterial off-road trail network.

II. PROJECT LOCATION

The Project is located in Hennepin County, Minnesota, with regional trails in nine cities: Bloomington, Brooklyn Center, Brooklyn Park, Eden Prairie, Edina, Golden Valley, Hopkins, Minnetonka, and Plymouth. It is located within the Minneapolis-Saint Paul, MN-WI Urbanized Area, which is designated as an Urban Area.

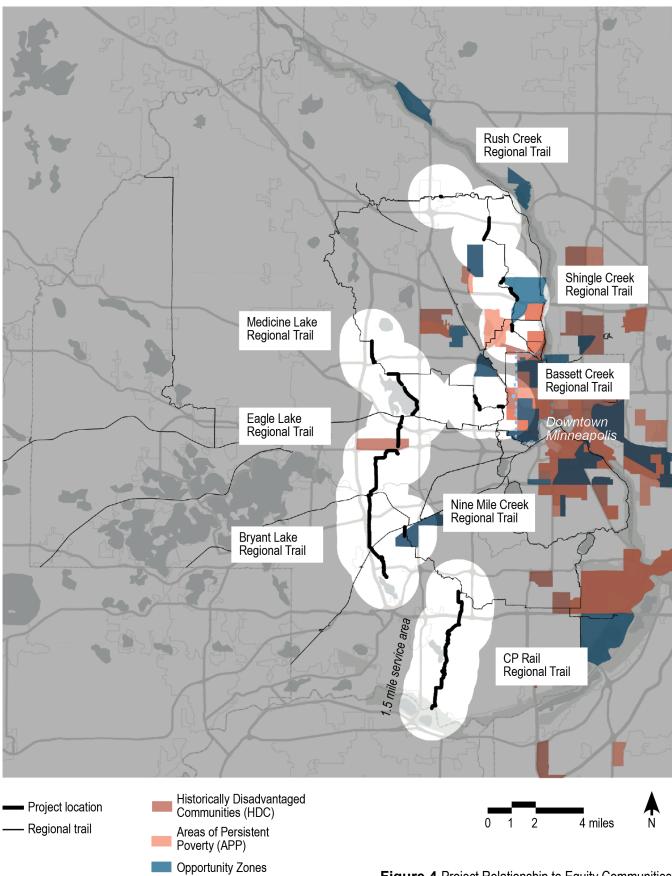
The Project includes improvements to eight regional trails:

- · Bassett Creek Regional Trail in Golden Valley
- · Bryant Lake Regional Trail in Minnetonka and Eden Prairie
- CP Rail Regional Trail in Bloomington and Edina
- · Eagle Lake Regional Trail in Minnetonka and Plymouth
- Medicine Lake Regional Trail in Plymouth
- Nine Mile Creek Regional Trail in Hopkins
- Rush Creek Regional Trail in Brooklyn Park
- · Shingle Creek Regional Trail in Brooklyn Center and Brooklyn Park

We define the Project service area (Project area) as within 1.5 miles of the regional trail improvements included in the Project. This definition aligns with the trail service area (or catchment area) Three Rivers uses for planning purposes, derived from a statistically valid survey of trail users in 2019. As shown in Figure 4, the Project will serve 15 Areas of Persistent Poverty, 15 Historically Disadvantaged Communities, 10 Opportunity Zones, and one Promise Zone (collectively referred to as equity communities).

Equity and environmental justice were key criteria when selecting and prioritizing the Project components. Minneapolis' first-ring suburbs are more socio-economically diverse and have higher rates of poverty than the rest of suburban Hennepin County. Three Rivers has been dedicated to serving these communities since developing their First Tier Trails, Greenways, and Parks Master Plan in 2000. The First Tier Master Plan identifies strategies to extend trails from Minneapolis to its inner ring suburbs, which are the most socioeconomically diverse communities in Three Rivers' service area. Transportation infrastructure in the first tier was built rapidly and designed for vehicular traffic, and the suburbs are served by fewer and less frequent transit connections than the urban core.

The plan aimed to increase first tier communities' connectivity and mobility, which has become even more critical since its publication. Poverty in Twin Cities suburbs increased <u>92%</u> from 2000 to 2013. There are now more <u>people living in poverty outside the urban core</u> than in Minneapolis and Saint Paul combined, and the number of people living in poverty is increasing more quickly in suburban than urban communities. As referenced in Partnerships and Collaboration, Three Rivers has partnered with cities throughout the first tier to identify and implement the trails that best serve disadvantaged populations. The Project leverages these investments to improve quality of life, connectivity, mobility, safety, and sustainability in first tier communities. It will directly impact five of the ten first-tier communities identified in the master plan and by increasing trail service and connectivity throughout the regional network, it will support active transportation across all ten. The Project's proposed interventions on Bassett Creek, Nine Mile Creek, and Shingle Creek Regional Trails continue Three Rivers' long-term commitment to its most diverse and disadvantaged users.



Promise Zones

Figure 4 Project Relationship to Equity Communities

III. GRANT FUNDS, SOURCES, AND USES OF PROJECT FUNDING

Project Budget

Total Project Cost: \$32.26 million

RAISE grant request amount: \$24.84 million

All funding identified below is available and is formally committed to this project. Three Rivers is committed to contributing \$7.42 million (23%). Table 2 presents the project budget and funding sources. Detailed construction cost estimates by project component and a summary are provided <u>here</u>. All estimates are in year 2022 dollars and are based on preliminary design and master planning work completed to date, along with historical cost data collected by Three Rivers.

Table 2 Project Budget

						Proje	ect Funding					
	Project Element		Federal			Other Federal		Non-Federal				
			RAISE			Three Rivers		Three Rivers		Total	Cost Estimate	
			Dol	llars	Project Percentage	Dollars	Project Percentage		Dollars	Project Percentage		
								_				
Past	Environmental & Preliminary Design		(0		0		\$	1,500,000		\$	1,500,000
Å	Total Incurred Expenses		\$	-	0.0%	\$-	0.0%	\$	1,500,000	100.0%	\$	1,500,000
	Final Design		\$	3,138,594		0		\$	937,502		\$	4,076,097
1	Construction Cost		\$ 1	9,516,338		0		\$	5,829,556		\$	25,345,894
4	Right-of-Way Acquisition		\$	231,000		0		\$	69,000		\$	300,000
Cost	Contingencies		\$	1,951,634		0		\$	582,956		\$	2,534,589
Eligible	Total Future Costs		\$ 24	4,837,567	77.0%	\$0	0.0%	\$	7,419,013	23.0%	\$	32,256,580
Elig												
Future	RAISE Participation Maximum (80/20)											
Fut				SE Request	. , ,	77.0%						
				ner Federal		0.0%			Total Costs: P	osts: Past and Future		33,756,580
1				on-Federal	1	23.0%					\$	
		Total Future	Eligible Pro	oject Costs	\$ 32,256,580							

Match Funding – Non-Federal Funding Sources

Three Rivers has served as the champion of the Project and is committed to providing \$7.42 million toward the Project, amounting to 23% of total eligible project costs. The Three Rivers Park District Board of Commissioners has adopted a resolution to approve the request for RAISE funding and to commit to the non-federal local match for the Project. Local funding from Three Rivers Park District is dedicated to the Project through its General Obligation Bonds or its other resources, as confirmed in the letter from the Chief Financial Officer and Superintendent available <u>here</u>.

RAISE Funding Need

The Project schedule and design were developed to maximize the benefits of other regional investments – in sidewalks and trails, public transit, mixed-use development, and parks – while minimizing impacts from construction, climate change-related flooding, and other disruptions. As described in the Project Readiness section, construction of the Project is anticipated to begin in 2025, with environmental review and approvals completed prior to the September 30, 2026 obligations deadline.

A delay in the Project would cause active harm toward the communities Three Rivers serves, particularly the Historically Disadvantaged Communities, Areas of Persistent Poverty, Environmental Justice communities served by the Project. Systemic safety issues would continue along the Project alignments, at documented barrier crossings, and at the 51 substandard trail crossings addressed by the Project. Without the Project, climate-change related flooding and failing infrastructure will continue to dissuade active transportation in Environmental Justice and equity communities, worsening already unacceptable racial disparities in health. Already transportation-burdened households, and those who cannot or do not drive, will be limited to costlier transportation options when seeking access to opportunities until this regionally significant Project is implemented. Lastly, delays in the Project restrain our region's economic development strategies and result in missed opportunities for supporting mixed-use and transit-oriented development, and multi-modal connections to high-quality transit service. Securing the requested RAISE funds would ensure that Three Rivers is able to fulfil its obligations to its partners and the diverse communities that have already contributed to project development. Therefore, the project is a high priority for Three Rivers and its many partners.

IV. MERIT CRITERIA

Safety

A core purpose of the Project is to improve safety through protected facilities, connected routes, and barrier crossings. Hennepin County and Three Rivers' <u>2040 Bicycle Transportation Plan</u> establishes a safety vision is to "decrease the risk of crashes by reducing gaps and adding more separation from motor vehicles through more interconnected networks". The Project will support this vision by expanding the regional network of off-road trail facilities, providing safe crossings over documented barriers to walking and cycling, and protecting the trail network's most vulnerable and historically disadvantaged users.

On the Project's current alignments, there were 30 cyclist and pedestrian crashes in the last ten years (Figure 5). Cyclists and pedestrians are extremely over-represented in fatalities and injuries from motor vehicle crashes in Minnesota. According to <u>Minnesota Department of Transportation (MnDOT) data</u>, from 2016-2020, 5% of pedestrian crashes and 1.2% of cyclist crashes were fatal, compared to 0.4% of total crashes. Ninety-seven percent of pedestrian crashes and 92% of cyclist crashes resulted in injury, compared to 26% of total crashes.

By improving existing and providing new off-road multiuse trails, the Project will reduce the risk of fatalities and serious injuries for underserved, overburdened, or disadvantaged communities. The Project's off-road multiuse trails are the safest facilities for cyclists and pedestrians and most appropriate for its urban context, relative to other on-road facilities. Eighty-five to 95% of cyclist and pedestrian crashes in the state of Minnesota occur in urban areas with populations over 5,000. For routes with over 6,000 average daily traffic (ADT) or speeds over 30 mph, the <u>FHWA Bikeway Selection Guide</u> recommends off-road bicycle facilities that are physically separated from motor vehicle traffic. While cyclists have the same rights as motor vehicles, they are more vulnerable to injury and death from collisions. In Minnesota in 2020, 30% of cyclists killed and 20% of cyclists injured in motor vehicle crashes were cycling with traffic, meaning they were using bike lanes, traffic lanes, and shoulders on existing roadways. This disparity disproportionately impacts underserved, overburdened, and disadvantaged communities, who are more likely to rely on walking and cycling for transportation. Separated facilities like those proposed by the Project reduce cyclist road deaths by 44%.

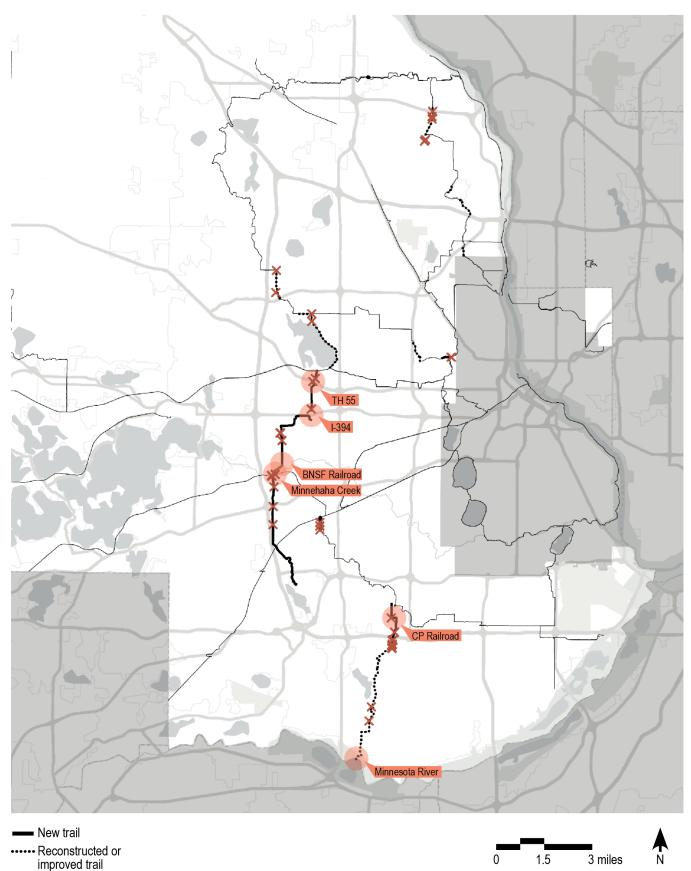
Cross Documented Barriers to Cycling and Walking

The <u>Metropolitan Council Regional Bicycle Barriers Study</u> identifies major physical barriers to bicycle transportation in the Twin Cities region and prioritizes locations where new crossings would most impact the regional network. The study considers proximity to bicycle and pedestrian crashes, population and employment density, and safety concerns identified through community outreach. The Project will construct protected trail crossings at five of these priority crossing areas: Canadian Pacific Railroad, Highway 7, SOO Line Railroad, Minnehaha Creek, and the BNSF Railroads (Figure 5). The Project will create a safer and more connected and useful regional trail network that is inviting to more people by removing these barriers to bicycling – ultimately leading to increase in use and active transportation.

The Project will mitigate systemic safety issues and reduce the risk of bicycle/pedestrian-vehicle collisions by improving a total of 51 trail crossings throughout the regional trail network. Crash data indicate that 86% of bicycle crashes in Hennepin County occur within an 11' radius of an intersection.

Safe, Protected Facilities are Crucial for Equity Populations, Including:

- Women: The proportion of female bicyclists using a trail system is considered a key indicator of its safety. One third of bicycle
 commuters in Hennepin County are women. The proposed improvements would address the gender gap in cycling by growing the
 network of protected facilities and increasing connectivity between existing facilities.
- Seniors and people with disabilities: In community outreach, listening sessions, and surveys, seniors in the service area expressed
 feeling unsafe around motorized traffic and prefer off-street routes. The Project will provide continuous protected facilities that are
 comfortable to navigate mobility devices. Improved crossings with Americans with Disabilities Act (ADA)-compliant curb cuts, clear
 striping and signage, and signals where appropriate will help protect trail users who need extra time at intersections.
- Low-income households: Seven percent of households in the Project area do not have access to a personal vehicle (source: 2015-2019 American Community Survey 5-year estimates). Safe pedestrian and bicycle facilities support the mobility of these households. The Project will protect these users by providing a protected bicycle and pedestrian facility. <u>More than 90% of transit trips</u> are combined with considerable walking or rolling to reach a destination. The Project will enable 'last mile' trips by foot or mobility device, expanding transit service areas.



- Barrier crossing
- Bicycle or pedestrian crash, 2012-21 X

Figure 5 Known Safety Problems

Public Health Benefits

In addition to reducing safety risks, the Project will increase access to and make the use of regional trails more appealing and more frequent, and result in health benefits to non-motorized travelers, communities, and the region. The Project's construction of 7.2 miles of new regional trail increases the proportion of suburban Hennepin County residents with access to the regional trail network. Moreover, the increased connectivity achieved by filling gaps and addressing barriers in the existing regional trail network will increase the utility and overall use of the system. A study released in 2014 by the American Journal of Public Health found a direct and significant correlation between how close people live to bicycling and walking facilities and the amount of exercise they get.

The Project will increase use of the regional trail system and produce subsequent health benefits. A <u>2017 study</u> found that commuting by foot or bike is associated with a significantly lower risk of cancer, cardiovascular disease, and overall mortality. Similarly, a <u>literature review</u> from the American Heart Association estimates that every \$1 invested in building trails directly correlates with \$3 in saved medical costs. At that that rate, the Project will result in about \$96.8 million in saved medical costs. Health benefits related to reduced air pollution and emissions resulting from the Project are discussed in the following section.

Environmental Sustainability

A core purpose of the Project is to improve air quality, develop resilient infrastructure, and support efficient land use and transportation systems. The Project will do so equitably, with a focus on addressing disproportional negative environmental impacts of transportation on underserved, overburdened and disadvantaged communities and strategies to combat climate change.

The Project will result in 2.5 million fewer vehicle miles traveled by 2050 by converting driving trips to biking, walking, or rolling. This is projected to reduce CO2 emissions by 782 metric tons, NOx by 562 kilograms, and eliminate 5 kilograms of SO2 and 14 kilograms of PM. The Project will play a role in <u>Hennepin County's Climate Action Plan</u>, which aims to reduce vehicle miles traveled 26% by 2050. The proposed regional trail facilities will provide a safe and attractive alternative to driving, reducing vehicle emissions while enabling active transportation.

The Project will serve 40 Environmental Justice communities <u>identified by the Minnesota Pollution Control Agency</u>. These neighborhoods have historically borne a disproportionate share of the region's pollution. As shown in Figure 6, these communities are overrepresented in the service areas of Shingle Creek, Rush Creek, Bassett Creek, and Nine Mile Creek Regional Trails. By improving trail access for state Environmental Justice communities, the Project is projected to convert roughly 551,000 vehicle trips to walking, biking, or rolling, reducing air pollution and promoting public health. In doing so, the Project will address the disproportionate negative environmental impacts of transportation on underserved, overburdened, or disadvantaged communities.

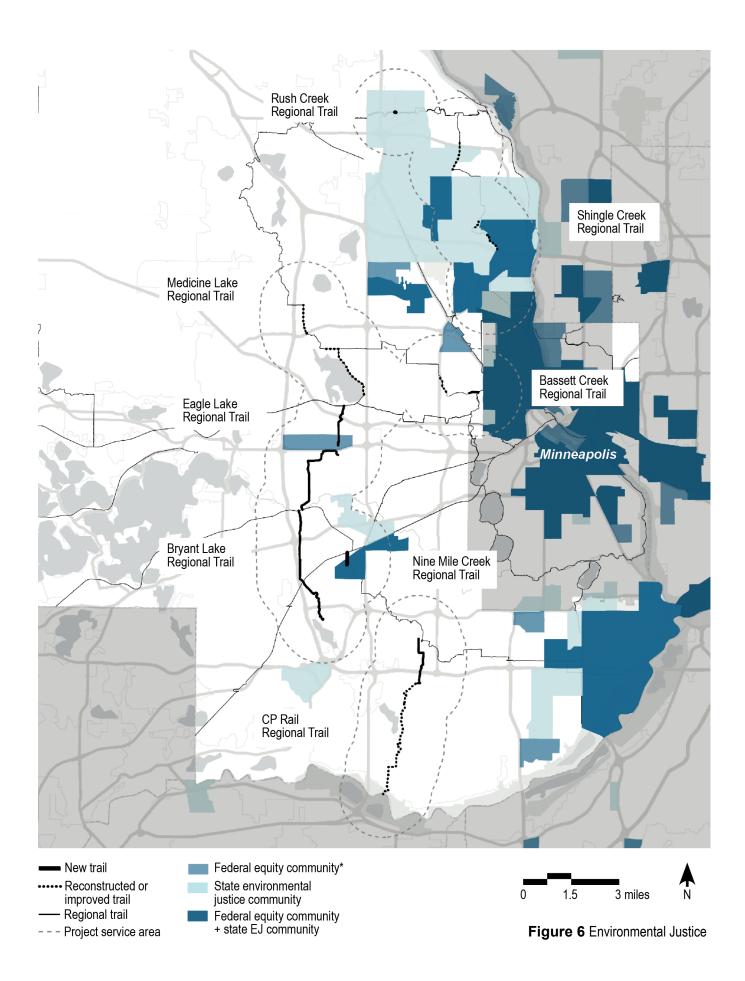
Improving Resiliency of Infrastructure in Response to Climate Change

Environmental sustainability and stewardship are at the core of Three Rivers' mission, with progress regularly assessed. In addition to regional trails used for transportation and recreation, Three Rivers manages 27,000 acres of parkland and offers a variety of outdoor recreation opportunities and nature-based education programs. The Project will be developed using natural resources management and environmental best practices to increase resiliency of at-risk infrastructure and ensure a collective ability to adapt and thrive in response to our current climate crisis. The Project increases connectivity to these recreational and educational natural resources and programs through a systems approach to close gaps and remove barriers.

As referenced in the State of Good Repair section, increased flooding due to climate change is projected to increase the frequency and duration of closures and detours on Bassett Creek and Shingle Creek Regional Trails. The trail segments most impacted by climate change are in state Environmental Justice communities. Flood closures create gaps in trail service and continuity, reducing safety and discouraging use by people of color and / or living with a disability. The Project will improve resilience of at-risk infrastructure by realigning trail segments at risk of climate-change related floods. In doing so, the Project increases the resiliency and longevity of the regional trail network for years to come. The Project demonstrates a commitment to environmental justice and addressing disproportionate negative environmental impacts by focusing on at-risk infrastructure in equity communities.

Supporting Fiscally Responsible Land Use and Transportation Efficient Design

The Project results in the creation and maintenance of high-quality facilities for people to walk, roll, and bike. In turn, the Project contributes to more compact and integrated communities, more space-efficient transportation networks, and more efficient and fiscally responsible land use patterns that produce or improve places to live, work, and play. The 24 miles of regional trail constructed or reconstructed as part of the Project will be in developed communities seeking opportunities to create more efficient land use patterns and transportation networks. Three Rivers is at the table during the development of local comprehensive planning efforts. The Project supports regional sustainability initiatives by encouraging non-motorized transportation.



The latest Intergovernmental Panel on Climate Change (IPCC) <u>mitigation report</u> underscores the importance of the Project impacts. The report identifies supporting walking, bicycling, and public transportation as strategies to achieve large reductions in greenhouse gas (GHG) emissions and avoid further climate catastrophe. In addition to supporting and increasing walking, bicycling, and connections to public transit, the Project will support coordinated land use decisions and promote more connected, mixed-use development, which the IPCC identifies as critical mitigation strategies.

In the Twin Cities region, about half of trips are three miles or less, and about one quarter of trips are one mile or less, according to the Metropolitan Council's 2019 Travel Behavior Inventory Household Survey. Short vehicle trips emit a disproportionate amount of air pollution. Research by Washington State University and the Utah Department of Environmental Quality show that 75% of harmful emissions, including precursors to ozone and fine particulate matter, are generated during the first three minutes after ignition. Through increased access and connectivity, the Project will enable more short trips on the regional trail network and reduce disproportionately polluting short vehicle trips. Overall, the Project will reduce vehicle miles traveled by 2.5 million by converting driving trips to biking, walking, or rolling, therein eliminating 782 metric tons of CO2 emissions.

Quality of Life

The Project's purpose includes improving the quality of life for those who live and work nearby. Its components will increase accessibility, remove barriers to opportunity, address health equity, and create stronger, more affordable communities. Underserved, overburdened, and disadvantaged communities (equity communities) were key partners in identifying Project components. This population will be overrepresented among recipients of direct Project benefits, relative to Three Rivers' service area.

Addressing Racial Equity and Other Disparities

The Twin Cities region, and Minnesota as a whole, have some of the <u>worst racial disparities in the nation</u> in terms of health, poverty, unemployment, transportation, education, and <u>other factors crucial to quality of life</u>. The Project considered these disparities at a system level, increasing and improving trail connections to equity communities throughout the Three Rivers service area.

People of color, experiencing poverty, with limited English proficiency (LEP), with disabilities, and zero-vehicle households are all overrepresented in the Project service area relative to suburban Hennepin County, Three Rivers' primary service area (Figure 6). The Project will serve 39% of residents living in Three Rivers' overall service area, 53% of service area residents who are people of color, and 55% of service area residents experiencing poverty.

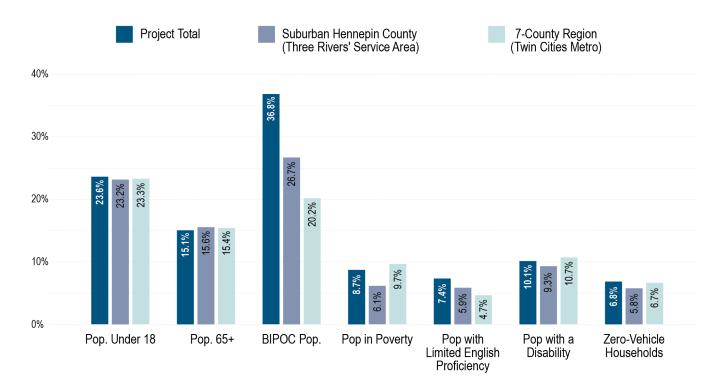


Figure 7 Population Living Near the Project Source: Minnesota Department of Education, ESRI

2022 RAISE GRANT PROPOSAL

As shown in the Project Location section, the Project will serve Areas of Persistent Poverty, Historically Disadvantaged Communities, Opportunity Zones, and a Promise Zone. Three of the five Areas of Persistent Poverty located within the Three Rivers service area will be served by the Project, while the remaining two Areas of Persistent Poverty are already served by one or more existing Three Rivers regional trails (Figure 4). Among the nine Historically Disadvantaged Communities within the service area, five will be served by the Project, with three already served by existing regional trails (Figure 4).

As referenced in the Safety and Mobility and Community Connectivity criteria, the Project will also directly address disparities in traffic safety, health, accessibility, and transportation cost burden.

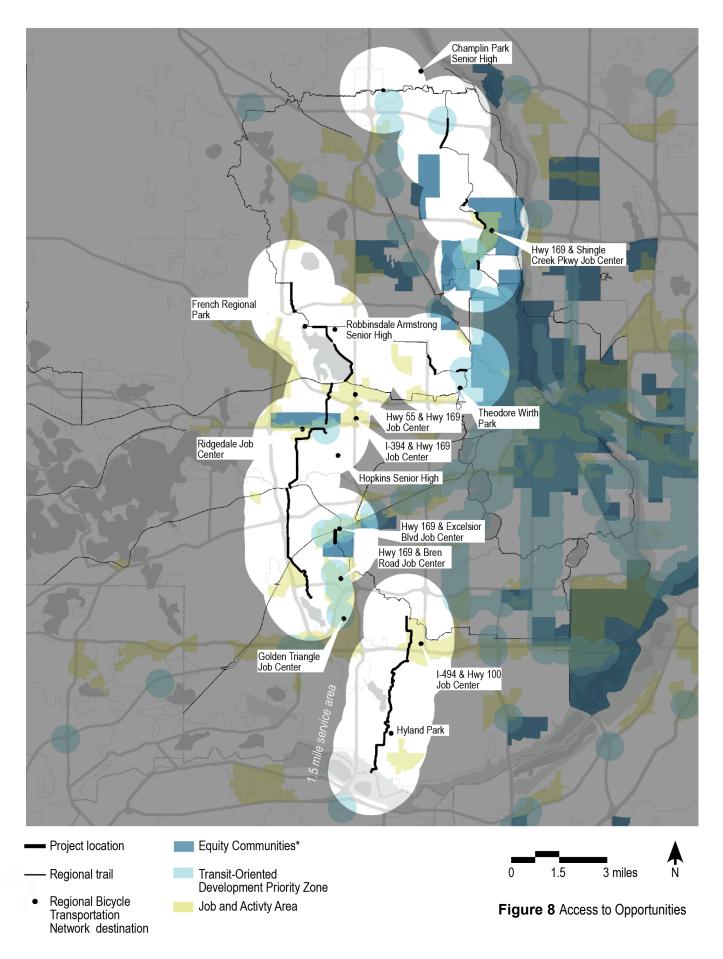
Removing Barriers and Increasing Access to Opportunities

The Project will increase accessibility and access to opportunities for those who walk, roll, and ride. As referenced in the Project History section, the Project leverages the existing spoke regional trail system by overlaying a grid design. The grid will make direct connections between suburban communities and fill critical north-south gaps in the regional trail network. In addition to increasing access to opportunity by closing gaps in the network, the Project will increase accessibility for non-motorized travelers, as described in the Mobility and Community Connectivity section. The Project specifically benefits non-motorized travelers in historically underserved, overburdened, and disadvantaged communities, who are overrepresented within the Project area (Figure 7, Figure 4), by investing in infrastructure.

The Project will remove barriers to active transportation, jobs, businesses, and other opportunities. As described in the Safety section and shown on Figure 5, five of the 51 trail crossings included in the Project are identified as priority barrier crossing areas in the <u>Metropolitan</u> <u>Council Regional Bicycle Barriers Study</u>. The study used four evaluation factors to prioritize barrier crossing areas: social equity, network connectivity, bicycling demand, and safety/existing conditions. It refined its priority crossing areas with a list of regionally significant origin and destination points. As shown in Figure 8, the Project service area contains 14 of these points, including eight job centers, three high schools, and three regional parks.

The Metropolitan Council identifies regionally-significant locations of concentrated jobs benefiting from existing infrastructure investment as <u>Regional Job and Activity Centers</u>. The Council encourages continued development and investment in these centers. The Project will construct new regional trails to directly serve four Job and Activity Centers, creating new connections to over 50,000 jobs in roughly 2,000 worksites (Figure 8). The Project's total service area includes 26 Job and Activity Centers, representing 220,000 jobs in 7,700 worksites. As referenced in the State of Good Repair section, the Project will ensure safe and equitable access to these opportunities.





Supporting Strong Communities and Location Affordability

The Project will enhance existing underserved, overburdened, or disadvantaged communities, support transit-oriented development, and reduce transportation and housing cost burdens.

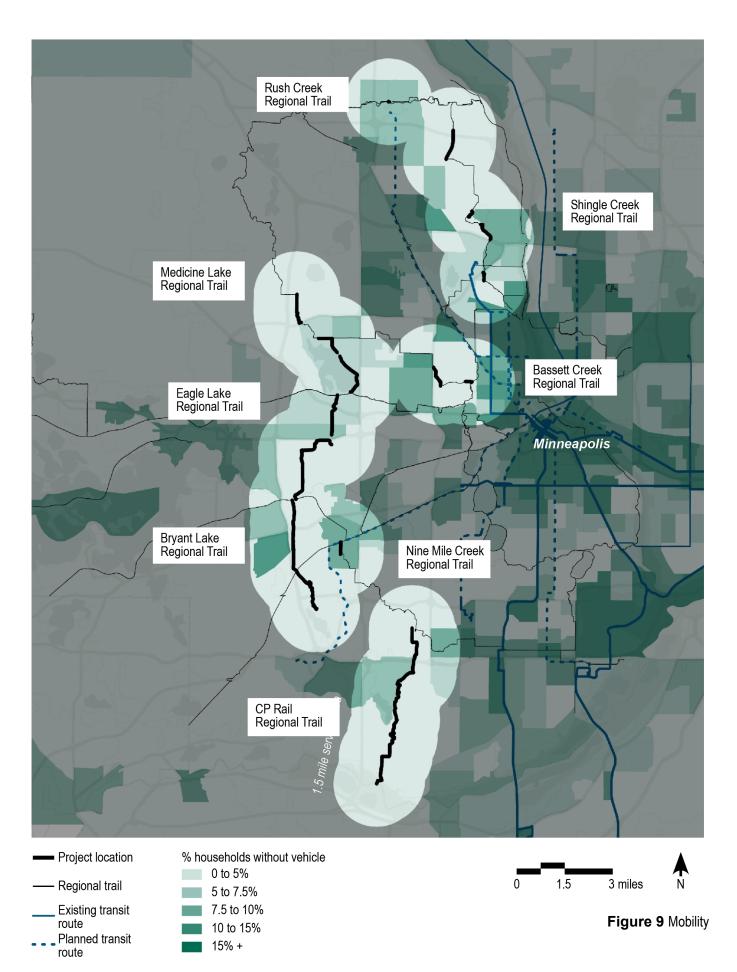
The Project will enhance a sense of place within the main equity communities served. Multiuse trails are community amenities that create public spaces for people. Safe walking and cycling facilities attract people into the public realm, increasing neighborhood safety and sense of community. A recent study found that people who walk more as part of their daily lives, and those that live in more walkable neighborhoods, felt more connected to their communities (as summarized in this report).

MnDOT's <u>Priority Areas for Walking Study (PAWS)</u>, identifies areas where transportation projects should prioritize the comfort and safety of pedestrians over convenience for people using other modes of transportation. Four of eight regional trails included in the Project serve a Tier 1 (highest) priority area for walking or rolling, while all eight serve or are directly adjacent to a Tier 2 priority area for walking or rolling. PAWS scores consider equity, safety, health, and surrounding land use. By connecting high-quality pedestrian facilities to PAWS, the Project will improve safety and walkability in communities throughout the service area.

The Project will support the development of walkable, transit-oriented communities by improving connections to planned and existing transit routes. It will create protected trail access to all planned and existing bus rapid transit (BRT) and light rail transit (LRT) lines in Hennepin County, including those described below. The Mobility and Community Connectivity section describes how the Project will connect to transit service and increase affordable transportation choices. Two segments of the reconstructed Shingle Creek Regional Trail will improve connections to the Brooklyn Center Transit Center, which is served by the existing METRO C Line BRT, the METRO D Line BRT (opening December 2022), and a dozen other local and express bus routes operated by Metro Transit. The three Areas of Persistent Poverty, an Historically Disadvantaged Community, and several Environmental Justice communities that are within a mile of these Project segments will benefit from protected trail connections to transit. The improved Nine Mile Creek Regional Trail will facilitate connections to the Downtown Hopkins and Shady Oak stations along the METRO Green Line Extension LRT project (under construction). The surrounding neighborhood is identified as an Historically Disadvantaged Community, Opportunity Zone, and Environmental Justice community. The new Eagle Lake Regional Trail will connect to the existing 63-mile Luce Line Regional Trail and the Station 73 park-and-ride served by Plymouth MetroLink. The City of Plymouth is currently developing plans for station area improvements at Station 73. The City's project aims to create a more comprehensive Transit Center to accommodate a planned BRT line on Highway 55, increase transit use, and connect the transit facility to surrounding neighborhood and job centers through improvements in walking and cycling infrastructure. Eagle Lake Regional Trail is an essential component of this strategy and the Station 73 project. The transit-oriented communities served by these three components of the Project are designated as Job and Activity Centers by the Metropolitan Council and support the Council's strategies for creating efficient land use and transportation networks.

The Project reduces transportation and housing cost burdens by linking regional trails with transit-oriented and walkable communities and encouraging supportive public and private development. The Metropolitan Council awards funding to public and private development projects through its competitive annual <u>Transit-Oriented Development</u> grants. The Project aligns with this grant program; maximizing access to trails is an important evaluation criterion of the grant program.

According to data from the United States Department of Housing and Urban Development (HUD) and DOT's Location Affordability Index, the typical moderate-income family living in the Project area spends 52% of their income on housing and transportation. In addition to supporting multimodal communities, the Project will connect areas with comparatively high transportation and housing (H+T) cost burdens to areas with concentrated employment and activity. For example, the Bassett Creek Regional Trail will connect a Golden Valley neighborhood with 56% H+T cost to Minneapolis' Northside neighborhoods and the West Broadway Avenue business and cultural corridor. The Northside is a vibrant but historically underserved, overburdened, and disadvantaged community. The West Broadway corridor is within and surrounded by Areas of Persistent Poverty, Historically Disadvantaged Communities, Opportunity Zones, and a Promise Zone. By connecting these communities with a safe and contiguous trail, the Project will help reduce H+T cost burdens while inviting visitors into and enhancing an equity community.



2022 RAISE GRANT PROPOSAL

Mobility and Community Connectivity

Increasing Affordable Transportation Choices

The Project's trails will offer low-cost alternatives to driving, helping reduce transportation spending in the cost-burdened households served by the Project (as described in Quality of Life section). The <u>2019 Travel Behavior Inventory Household Survey</u> shows that suburban, low-income households spend the most on gas (as a percentage of household income) in the Twin Cities region. The typical moderate-income family living in the Project area spends about 20% of their income on transportation, based on data from the <u>Location Affordability Index</u>.

The Project will create and improve access to transit stops and stations throughout its service area, increasing affordable transportation choices for underserved, overburdened, and disadvantaged communities. Leveraging investments in regional transit, the Project will support "last mile" trips by bike or foot, improving safety and increasing transit service areas. All Project components, representing eight regional trails, are within a half mile of a transit stop. In Fall 2019 (pre-COVID) there were 509 bus stops or stations served by 50 transit routes within a half mile of the Project trail segments. During this same period, there were eight park-and-ride facilities within a mile of the Project -- five of which are in equity or Environmental Justice communities, and five are in a Job and Activity Center. Importantly, the transit service near and connecting to the Project enables affordable transportation choices to and from the Project area and Minneapolis, facilitating both "traditional" and reverse commutes for workers. As summarized in the Quality of Life section, the Project will serve planned BRT and LRT stations in equity communities and support transit-oriented development.

Thriving Communities

The Project will encourage thriving communities for individuals to work, live, and play by creating opportunities to move freely without a car. In the Twin Cities region, 51% of household trips are for everyday activities like healthcare visits, shopping, errands, or picking up and dropping off family members, according to the Metropolitan Council's 2019 Travel Behavior Inventory Household Survey. The Project will enable non-motorized trips for many purposes, including, but not limited to commuting for work. Both zero-vehicle and one-vehicle households are overrepresented in the Project area, according to 2015-2019 American Community Survey 5-Year estimates.

Regional trails facilitate and encourage active transportation between and within communities. In addition to linking to Regional Job and Activity Centers served by the Project (see Quality of Life section), the Project's components will enable short trips to community amenities. Table 3 lists the number of community resources located within the Project area, by regional trail. The Project will directly connect to nearly 550 community resources and improve non-motorized access to thousands more via the regional trial network. Additionally, according to HUD data, there are approximately 1,100 public housing or assisted multifamily housing units in the Project area.

	Higher Education	School Program	Gov't Office	Medical Clinic	Cultural Institution	Place of Worship	Total
Bassett Creek Regional Trail	2	35	4	4	3	61	109
Bryant Lake Regional Trail	2	36	6		0	22	66
CP Rail Regional Trail	7	20	11	3	2	30	73
Eagle Lake Regional Trail	2	21	10	1		13	47
Medicine Lake Regional Trail		20	8	2	1	16	47
Nine Mike Creek Regional Trail		22	4		3	19	48
Rush Creek Regional Trail	1	5	1			9	16
Shingle Creek Regional Trail		51	16	2	2	71	142
Project Total	14	210	60	12	11	241	548

Table 3 Community Resources within the Project Area

Source: Minnesota Department of Education, ESRI

Economic Competitiveness and Opportunity

Enabling greater participation in active transportation is key to the Twin Cities region's ability to prosper. In addition to the benefits related to safety, environmental sustainability, health, affordability, mobility, and community connectivity, regional trails contribute to our region's economic competitiveness, opportunity, and prosperity.

The Project will improve the economic strength of partner cities and our region; increasing system connectivity and access to opportunity, especially for equity communities; and expanding high-quality, good-paying jobs and training opportunities.

Regional Economic Prosperity

Prosperity is fostered by investments in infrastructure and amenities that make our region competitive in attracting and retaining successful businesses, a talented workforce, and strong economic opportunities. The Project will make systems-level improvements to the regional trail network in support of the region's economic competitiveness strategy. Greater MSP, the Minneapolis-Saint Paul Regional Economic Development Partnership, promotes the regional trail network when seeking to attract talent and considers efficient and reliable transportation an investment priority.

The economic benefits of walking and cycling are numerous and <u>well-documented</u>. By shifting trips from driving to walking, rolling, and cycling, the Project will <u>support economic development</u> through increased transportation system efficiency (i.e., reduced traffic congestion, parking and auto ownership costs), labor access (i.e., access to education and employment, expanded labor pools), and labor productivity via improved health (see Safety section for quantified health cost savings). As described in the Quality of Life and Mobility and Community Connectivity sections, the Project will increase affordable transportation options, thus increasing <u>economic mobility and resilience</u> for equity communities. The <u>Downtown Brooklyn Center Master Plan</u> exemplifies the importance and influence of the regional trail network in community and economic development. The Project is directly north and south of the new downtown. The Plan calls for up to 1,500 housing units in a mix of price points and densities, with 30% of units planned to be affordable. The City of Brooklyn Center estimates the project to build a new downtown will bring \$40 million in total investment. Shingle Creek Regional Trail is literally the center of the project; trail and park connections were among key organizing concepts for the downtown site, given their ability to connect the new downtown to surrounding amenities and the broader regional trail network.

The Project will support local businesses and industries, including tourism. <u>Lindsey et al. (2015)</u> found that 20% of Central Ohio greenway and trail users spent \$17-\$18 when visiting trails, with cyclists more likely to spend money. MnDOT estimated that in 2015, visitors of bicycle events (i.e., tours, fundraisers, races, etc.) in the state supported \$14.3 million of economic activity, including 150 jobs and \$4.6 million in labor income. However, as summarized by the <u>Victoria Transport Policy Institute</u>, bicycle tourists expect high-quality, safe, and comfortable facilities. The Project's purpose is to provide these types of high-quality trail facilities to our communities and region.

The following comment - received during 30-day public comment period (April – May 2019) for the CP Rail Regional Trail Master Plan - is indicative of what Three Rivers has heard.

"As a young professional and one half of a married couple who's looking to buy a home and start a family in the coming years, living in an area with bicycle-friendly infrastructure is extremely important to me. Because being able to bike to work is a top priority, we are only considering purchasing a home in places with bike lanes and paths. Plus, in considering future children, we'd like to live in a neighborhood with infrastructure where we don't have to worry about distracted drivers or our kids' safety as they learn to ride.

The creation of [CP Rail Regional Trail] opens up suburbs I previously hadn't considered living in and will absolutely have my cyclist friends and I patronizing businesses along the trail on weekend training rides. I hope that this project moves forward!"

Connectivity and Access to Opportunity

As described in the Quality of Life and Mobility and Community Connectivity sections, the Project will increase affordable transportation options, thus <u>increasing economic mobility and resilience</u> for equity communities. It will close gaps in the regional trail network, connecting users to opportunities including employment, education, healthcare, public transit, and social services.

Employment and Training

The Project will support high-quality, good-paying jobs. Constructing cycling and pedestrian infrastructure produces more jobs than other roadway capital projects. According to a <u>2011 study</u>, for every \$1 million in capital investment, off-street multiuse trails generate 9.6 jobs, while roadway projects without bicycle or pedestrian elements generate 7.8 jobs.

Three Rivers is an Equal Employment Opportunity Employer and encourages applications from women, racial and ethnic minorities, and other protected classes. In 2021, Three Rivers employed 2,313 people through full-time, part-time, or seasonal work, with cumulative annual gross wages totaling nearly \$33 million. Most Three Rivers employees live in its service area. Nearly 70% of employees live in Hennepin County, contributing over \$18 million in gross wages in 2021. Another 22% of employees live elsewhere in the Twin Cities region. Three Rivers offers comprehensive benefits to eligible employees, paying on average \$20,800 in benefits per eligible employee in 2021. Over 150 staff are represented by one of three unions: Teamsters Local 320, and LELS Locals 142 and 296.

Three Rivers' <u>Pathways internship program</u> offers paid internship opportunities for youth and young adults who face barriers to employment. The Three Rivers Park District Foundation enables participation through transportation scholarships to interns without reliable transportation. Information on the agency's incorporation of private sector entities, including Disadvantaged Business Enterprise (DBE) firms, is listed in the Partnerships and Collaboration section.



State of Good Repair

The Project, on its segments alone, is projected to support 768,000 trips per year by 2040. Ensuring the regional trail system remains in state of good repair is critical to its usefulness. Rather than focusing entirely on building new trails, the Project proposes complete reconstruction of 8.2 miles of existing trails and sidewalks, and improved wayfinding and amenities along eight miles of existing trail.



Address System Vulnerabilities

Figure 10 Shingle Creek Regional Trail Seasonal Flooding

Climate change is projected to increase the frequency and duration of flooding throughout Minnesota. Two segments of Shingle Creek Regional Trail currently experience significant annual flooding, closing them to most users. Shingle Creek Regional Trail's service area includes two Historically Disadvantaged Communities and four Areas of Persistent Poverty. As referenced in the Quality of Life section, multiuse trails remove barriers to active transportation and increase access to opportunities. The Project will realign and reconstruct the trail segments that flood, ensuring that the regional trail network continues to serve these communities.

Restore and Modernize Core Infrastructure Assets

The existing regional trail network has been built in segments since the 1970s, by various agencies with differing standards. Some segments are only 6' or 8' wide (rather than the minimum of 10' for safe two-way travel) and many fail to comply with ADA standards. Others are at the end of their useful life.

The Project will reconstruct 8.2 miles of existing trails and sidewalks on five regional trail alignments, upgrading them to current regional trail design standards

Table 4 Existing Condition of Trail Reconstruction Segments

	Condtion
Bassett Creek Regional Trail	Bassett Creek Regional Trail: 0.25 miles narrow sidewalk with substandard curb; 0.7 miles end-of-life local trail – pavement cracking, occasional flooding, does not meet ADA
Eagle Lake Regional Trail	1.5 miles end-of-life local trail: substandard, 6-8' wide, does not meet ADA
Medicine Lake Regional Trail	1 mile end-of-life regional trail: 8' wide, pavement in poor condition
Nine Mile Creek Regional Trail	0.4 miles end-of-like local trail: mix of concrete and bituminous
Shingle Creek Regional Trail	0.5 miles of regional trail flood annually; 0.5 miles end-of-life regional trail; 0.84 miles end of life concrete sidewalk: 6' wide, intersections do not meet ADA requirements

In 2019, these five trails supported a combined 1.7 million trips per year. Their service areas include eight Historically Disadvantaged Communities and 13 Areas of Persistent Poverty. Reconstructing and upgrading these trail segments to current design standards will ensure they continue to provide safe, accessible routes for these communities.

The Project's inclusion of trail reconstruction and improvements (rather than exclusively new trails) draws from field experience and user feedback. Three Rivers practices strong stewardship of its infrastructure to avoid deferred maintenance and trail closure. The agency's Capital Improvement Program (CIP) prioritizes preserving existing assets and preventing interruptions in trail service. About one-third of the Project trail milage addresses existing regional trail assets overseen by Three Rivers.



Figure 11 Discontinuous surface on CP Rail Regional Trail



Figure 12 Cracking and pothole on Medicine Lake Regional Trail

Routine cack sealing; safety projects as needed							
YEAR 0	YEAR 6-8	YEAR 13-15	YEAR 20-22	YEAR 30			
Trail Constructed	Microsurfacing*	Microsurfacing*	Microsurfacing*	Reconstruction			

*Includes pre-repair project to correct settlement, root damage, seal cracks, and general surface distortions

Figure 13 Preventative Maintenance Plan

Three Rivers extends the life of their trail pavement by 50% – from 20 years to 30 years – through pavement treatments in years 7, 14, and 21 (see Figure 14). They actively monitor all trails using PASER (University of Wisconsin-Madison), PAVEMENT View Plus (Cartegraph), and an in-house geospatial database, combined with annual field inspections. These practices will be employed for all segments of the Project.

In 2014, Three Rivers conducted one of the first studies on user satisfaction as it relates to trail surface condition. The study found that satisfaction levels are very high for a PASER rating of 5 or above, decline slightly from 5 to 3.5, and then drop into unacceptable levels for rating at or below 3.5. This data helps determine when trails are at end-of-life. Project components were identified in part based on these data.

Partnerships and Collaboration

The Project was developed through close coordination with local, county, regional, state, and national partners, with the understanding that transportation networks do not adhere to political boundaries. Agency partners include MnDOT, Metropolitan Council, Metro Transit and its project offices, Hennepin County, nine cities (Golden Valley, Plymouth, Minnetonka, Eden Prairie, Hopkins, Brooklyn Park, Brooklyn Center, Edina, Bloomington), and the Minneapolis Park and Recreation Board. The 32 letters of support from these Project partners and other public and private community organizations and businesses are available <u>here</u>.



Figure 14 Project Partners

Ensuring Equity Considerations are Meaningfully Integrated

For each of the regional trail master plans informing the Project, Three Rivers conducted extensive community outreach through events, surveys, focus groups, interactive mapping, and targeted listening sessions. In total, they engaged thousands of people at dozens of events while developing the regional master plans that inform the Project.

Three Rivers has a dedicated Community Engagement and Liaison Team, staff who work to engage and build relationships with underrepresented community groups. The team is purposefully reflective of these targeted groups and has strong ties within their communities. One of their tasks is to understand and remove barriers to trail use. The Project used feedback from this team to prioritize which interventions to apply where in the system. Three Rivers is also kicking off its Parks to People master planning effort for the first tier communities that will include robust community engagement efforts with the help of hired cultural/community liaisons to determine opportunities for Three Rivers to better serve this area which will likely include additional enhancement and investment in areas directly adjacent to the regional trail network. Three Rivers' 5-year CIP allocates \$1 million per year for the outcomes of this planning effort in 2024, 2025 and 2026.

Advancing Opportunities for Disadvantaged Business Enterprise (DBE)

Three Rivers is committed to advancing equitable opportunities for DBE firms, to ensure that those providing goods and services to Three Rivers are representative of the area's communities. Most recently, when seeking a pool of consultants through a request for qualifications (RFQ) process, the agency intentionally targeted DBE firms. Staff reached DBE firms with direct invitation, recruiting through the MN Black-Owned Business Directory, MN Minority Goods & Services Association (MMGSA), and via the networks of our public partners who serve our region's most diverse communities. The final pool has 34% DBE representation (goal 10%). Of the nearly 200 RFQ holders, 48% were DBE firms, up from 14% DBE firms five years prior.

The ways in which the Project will support the creation or expansion of high-quality, good-paying jobs is discussed in the Economic Competitiveness and Opportunity section.

Innovation

Three Rivers is intentional and innovative in meeting the needs of today while anticipating and protecting the needs of tomorrow. The agency embraces new ideas, thinks big, takes risks, and learns from their mistakes. This approach is essential to the Project, which will highlight innovation in design and maintenance with climate in mind, effectively and efficiently monitoring trail usage and patterns, and research to best serve equity populations.

Today, Three Rivers incorporates several innovative elements and practices in their trail and park facilities and programs throughout the system, including: solar power generation, geothermal heating, rectangular rapid flashing beacons (RRFBs), permeable pavement (where conditions support it), adaptive programming and partnerships, among many others. Several innovative elements were included in the Project based on Project goals, community engagement, and to highlight and inspire further innovation by our partner agencies at the state, regional, and local levels.

Monitoring Use and Identifying Patterns through Research

Three Rivers has an internal research team to identify and monitor use patterns, better understand their communities, identify needs and opportunities, and enable innovative practices. The Project leverages insights from this team.

The Project includes installation of five Eco Counter automatic trail counters – one each at Bassett Creek, Bryant Lake, Eagle Lake, Medicine Lake, and Shingle Creek Regional Trails. These automatic trail counters supplement existing counters installed throughout the Three Rivers regional trail system. Establishing accurate visitation counts is critical to Three Rivers' regional trail network, as visitation counts dictate the funding received from the State of Minnesota and the Metropolitan Council. Including the five automatic trail counters in the Project contributes to the ongoing maintenance of the Project's trails and Three Rivers' part in the regional trail network.

During the COVID-19 pandemic, the existing automatic counters provided real-time user numbers, which helped Three Rivers focus resources on addressing potential over-crowding and social distancing issues on trails. The counters also provided measurements of the direct impact of the pandemic on trail use, with counters registering between 200 to 400% increases in trail use between the summers of 2019 and 2020.

Designing for a Harsh and Changing Climate

The Project will implement innovative cold-weather pavement design to ensure that the regional rail network remains functional year-round.

While the Twin Cities are known for long, harsh winters, bicycle and pedestrian <u>counts by MnDOT</u> show that people both cycle and walk for transportation year-round. Households in underserved, overburdened, and disadvantaged communities are more likely to rely on trails for transportation. Three Rivers' trails are designed for cold-weather climates, with <u>robust pavement</u> and adequate depth to withstand the freeze-thaw cycle for a 30-year lifespan, and grading to avoid icing over during the freeze/thaw cycle. The Project will implement this pavement design in all segments it constructs or reconstructs. <u>54 inches</u> of snow fall on the Twin Cities region in an average year, and winter precipitation is <u>projected to increase</u> over 20% due to climate change. Through innovative and site- and climate-specific engineering, the Project will provide safe and resilient routes for the underserved, overburdened, and disadvantaged communities in its service area.

Research to Best Serve Disadvantaged Communities

As described in the Partnerships and Collaboration section, Three Rivers incorporates feedback from the disadvantaged communities in their service area into all trail design and planning. Their engagement processes with these communities are innovative and thorough, ensuring that Project elements will improve safe and equitable trail access to underserved, overburdened, and disadvantaged communities.

For example, the Project components on Medicine Lake and Shingle Creek Regional Trails were identified through the Nine Regional Trails Master Plan – an innovative planning effort focused on increasing enjoyment, safety, and comfort for underrepresented and new users on existing regional trails. A user survey on Medicine Lake Regional Trail found that people under 18, over 75, black adults, and members of low-income households are underrepresented on the trail compared to their percentage of its service area population. Three Rivers designed a comprehensive engagement plan to connect directly with these groups and better understand what they need from regional trails. Innovative and targeted strategies included: resident meetings at mobile home, affordable housing, and retirement communities; a listening session with a senior walking group; and in-person tabling at community events close to the Project and well-attended by families with children, people of color, and low-income households. They heard that users under 18 and over 75 need smooth, stable trail surfaces and accessible roadway crossings. All underrepresented groups cited the fear of getting lost as a significant barrier to trail use. The Project responds directly to this feedback by replacing degraded, narrow pavement with a contiguous 10' wide bituminous surface, improving trail crossings at six roadway intersections, and improving wayfinding throughout Medicine Lake Regional Trail.

Three Rivers will continue to engage equity populations throughout design development and after construction, to make sure Project components are serving trail users as intended. This feedback loop of engagement is an innovative practice that exceeds industry standards to ensure that the Project achieves its quality of life, connectivity, and sustainability goals.



V. PROJECT READINESS

Three Rivers is prepared to deliver the Project in accordance with the project schedule.

Technical Assessment

Three Rivers has extensive experience with trail construction, reconstruction, and maintenance. The Project's trail segments will conform to their established standards for trail design, wayfinding, etc.

All trail segments in the Project were identified through multi-year master planning efforts conducted in partnership with communities along the trail corridors. This demonstrates the Project will effectively meet the needs of regional trail users and interface smoothly with bicycle and pedestrian infrastructure of the surrounding communities.

Project Schedule

The Project schedule demonstrates that funds can be obligated in advance of the RAISE funding deadline of September 30, 2026. Three Rivers anticipates construction will begin in April 2028 and be completed in July 2030. All RAISE funds will be expended by September 30, 2030. All property and right-of-way acquisitions will be completed in accordance with 49 CFR Part 24, 23 CFR part 710, and other Federal regulations. Three Rivers has experienced planning, engineering, and ROW acquisition staff who have been actively involved in the Project development process. The Project will continue public engagement to seek community input, particularly engaging environmental justice and equity communities, as described in the preceding Partnerships and Collaboration and Innovation sections. In addition, over the past ten years, Three Rivers has built five regional trail projects funded in part by the Federal STIP program and has extensive experience working with federal projects.

Three Rivers will continue to work through the municipal consent process to obtain local approval of project schedule, design, and construction plans. Cities have already been active and supportive partners on previous master planning efforts, and, in many cases, agreements are already in place authorizing the Projects.

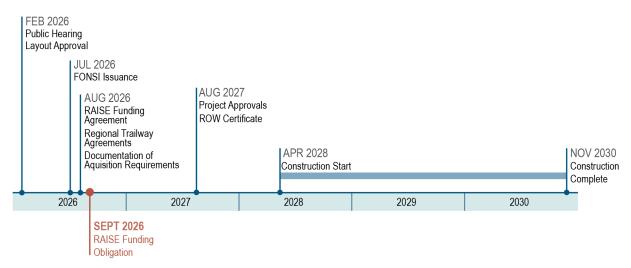


Figure 15 Project Schedule

Detailed project schedule available here.

Required Approvals

Environmental Approvals

Environmental review phase of the Project will begin in early 2025 with a NEPA process toward an anticipated Findings of No Significant Impacts (FONSI) issuance and conclusion of the formal NEPA process by July 2026. Three Rivers will conduct agency reviews and determinations (i.e., Section 106, Section 7 ESA, etc.), Level 2 wetland delineation, environmental assessment and documentation, MnDOT/ FHWA review, public comment period, among other activities. Project staff will coordinate closely with all necessary federal, state and local agencies during the review, design, approval, and permitting processes.

State and Local Approvals

The Project will seek state and local environmental and planning approvals and permits, and coordinate with MnDOT and FHWA as required. Project approvals are anticipated to be complete by August 2025. There is a broad base of state, regional, and local support for the project, as indicated by the 17 letters of support submitted for this application from public partner agencies.

Three Rivers' staff have decades of combined experience with similar approval processes. The Project will complete all federal transportation requirements affecting state and local planning, such as inclusion in relevant state, regional, and local planning documents. The Project is not currently included in a relevant planning document, however, the letter of support from the Metropolitan Council (metropolitan planning organization) includes the following statement: "The Metropolitan Council is committed to amending the Transportation Improvement Program and long-range transportation plan, as needed, to include this project."

Risks and Mitigation Strategies

Three Rivers has conducted years of master planning and project development that inform their risk assessment and mitigation strategies for the Project. The most likely unexpected events to affect Project readiness are a delay in right-of-way acquisition and determination that the Project has a significant impact on the surrounding environment. Three Rivers has extensive experience designing and implementing similar projects to minimize impact on sensitive ecosystems, and private, public, and community assets. Moreover, these are low level risks given their experience and the design, environmental, and planning work completed to-date. Loss of partner or stakeholder support is unexpected for these same reasons and considering the 17 letters of support from public partner agencies. The non-federal local match for the Project will come from Three Rivers through its General Obligation Bonds, as committed by resolution from the Board of Commissioners and reiterated in this letter from the Superintendent and Chief Financial Officer.

Three Rivers will continue to manage these risks through adherence to a Project scope involving minimal encroachment on the surrounding communities, efficient and effective ROW acquisition, and continued use of the municipal and county consent processes. Three Rivers will manage project delivery risks through robust and ongoing public engagement and by coordinating construction administration with connecting local trail facilities (whenever relevant).



VI. BENEFIT-COST ANALYSIS

The objective of a benefit-cost analysis (BCA) is to bring all the direct effects of a transportation investment into a common measure (dollars), and to account for the fact that benefits accrue over an extended period while costs are incurred primarily in the initial years. The primary elements monetized in this analysis are quality of life, remaining capital value, air quality, operating cost savings and maintenance costs. The results of the BCA are briefly summarized below. A detailed technical memorandum of the analysis is available here.

No Build Alternative

The No Build Alternative includes leaving the Three Rivers Park District trail system in its current configuration and operational state. Regional trails that are undergoing reconstruction under the Build Alternative were assumed to receive minimal maintenance under No Build conditions and were assumed to be unavailable (closed) to users once the end of their expected service lives are reached.

Build Alternative

The Build Alternative assumes numerous additions and improvements to the regional trail network. The Project will construct 7.2 miles of new regional trail, reconstruct 8.2 miles of existing trails and sidewalks, improve wayfinding and amenities along 8.5 miles, improve 51 trail crossings, and add 5 automatic trail counters. However, the Build Alternative in this analysis does not account for improvements to wayfinding, amenities, trail crossings, or the addition of trail counters.

BCA Methodology

The following is an overview of the methodology and assumptions used for the Project BCA. The main components analyzed included:

- Vehicle operating costs (vehicle miles traveled)
- · Air quality and emissions
- · Quality of life benefits:
 - ° Bicyclists' mobility
 - ° Bicyclists' and walkers' health
 - ° Bicyclists' and walkers' recreation
 - ° Reduced auto-use: congestion, emissions, and vehicle operating costs
 - Facility and amenities
- Initial capital costs
- · Remaining capital value: value of improvement beyond the analysis period
- · Maintenance and rehabilitation costs: These costs include scheduled rehabilitation activities and annual routine maintenance

Project Costs

The total Project cost (including past ineligible expenses) in year 2022 dollars is \$33.8 million. The Project cost deflated back to year 2020 (BCA base year) is about \$31.7 million. The 2020 project costs discounted at a rate of 7 percent are approximately \$17.3 million.

BCA Results

The BCA provides an indication of the economic desirability of a scenario, but results must be weighed by decision-makers along with the assessment of other effects and impacts. Projects are considered cost-effective if the benefit-cost ratio is greater than 1.0. The larger the ratio number, the greater the benefits per unit cost. Results of the benefit-cost analysis are shown for the project in Table 5 below. The complete BCA workbook is available <u>here</u>.

Table 5 Benefit Cost Analysis

Scenario	Project Benefits	Initial Capital Cost	Benefit-Cost Ratio	Net Present Value
	(2020 Dollars)	(2020 Dollars)	(7% Discount Rate)	(2020 Dollars)
No Build v.s Build	\$77.1 million	\$17.3 million	4.5	\$59.8 million