



General

This section provides the basic information about the park or trail and the organizations responsible for it.

Park/Trail ID # 17-0196-D	Funding Application 18-008F	Park/Trail Name Duluth Traverse
Last Update June 18, 2018		
Project Name Complete the western half of the Duluth Traverse Trail and make critical trail connections	District 1	Existing Acres or Miles 89.3

Project Description

The Duluth Winnipeg Pacific (DWP) abandoned rail bed is the largest remaining section of trail development in the Duluth Bicycle Trail System as well as one of the most beloved. This DWP gap is a critical connection for the Duluth Traverse (Traverse) as the DWP bridges are the only way for the Traverse to cross two major stream courses and connect the western terminus of the trail system in Mission Creek to the Spirit Mountain trail center. Fairmont Park Neighborhood contains another gap in the Duluth Traverse, an important section as it abuts an existing neighborhood connection and trailhead at Waseca Street that has public parking. The compacted rail grade makes an excellent trail base. The DWP crosses some of the most distinctive natural areas in Duluth, while enabling access to cultural remnants and stunning viewsheds. The DWP provides a unique, high-amenity trail year-round for hikers/walkers, mountain and street bicyclists, equestrians, snowmobilers, skiers, and the disabled and will eventually connect to under-served neighborhoods. Completing the trail is the culmination of many years of planning and is eagerly awaited by visitors and stakeholders alike. This phase (Phase II) is critical and exciting as it means connectivity for multiple user groups including mountain bikers, snowmobilers and equestrians. For equestrians and snowmobilers, the connection creates access and connectivity to a greater network of trails outside city limits. For mountain bikers on the Duluth Traverse Trail, it is the critical missing gap in the Traverse spine necessary to connect Spirit Mountain and Mission Creek. There have been and remain significant investments necessary to safely open the trail for use. Duluth leveraged considerable state and local funds to address significant connectivity and safety issues including restoring the Steward Creek Bridge, replacing failed culverts, repairing stormwater damage, clearing boulders from the trail, and installing gates. The City has invested over \$860,242 in City dollars matching \$696,890 in grant dollars toward the Phase I restoration of the DWP. Attachment A - DWP Work to Date illustrates the work completed (black type) and the work in process (blue type) that will be completed in 2018. Phase II includes restoration of a second scenic rail bridge, Sargent Creek Bridge, a 300-foot tunnel that needs rock fall mitigation, and numerous rock cuts that also require rock fall mitigation. The Sargent Creek rail bridge is in very poor condition, is blocked off as a public safety risk, and thus severs the connection between Mission Creek and the Spirit Mountain Trail Centers. Continuing to defer maintenance will put restoration out of reach and require a full replacement at a much higher cost. Without the bridge, the long awaited connections cannot be made. The bridge restoration provides a critical linkage across a deep stream valley that would otherwise not be traversable. Trail capping with crushed stone

aggregate four to six inches deep over an already hardened railroad bed will provide a very durable 10-foot-wide firm and stable natural surface suitable for physically challenged users, hikers, walkers, and equestrians in the summer, and cross-country skiers, snowshoers, fat-bikers, and winter hikers. It will meet all the requirements set forth by the ABA including a firm and stable surface and running slopes not exceeding 8.3%. Construction of 1.4 miles in Fairmont Neighborhood will close a gap in the Traverse Spine Trail between Green Street and Lake Superior Zoo. Construction will address seeps and perennial wet soil that are needed to ensure a quality user experience and resource protection. This will include surface hardening with stone and gravel, development of raised boardwalk, or trail tread over wetlands. Please see Attachment B - DWP Project Map Duluth expects that a future Phase III will build out trailheads with parking and amenities. The western terminus of the trail will benefit from increased access through trailhead improvements. The development of a formal Becks Road trailhead with parking areas is important to complete access availability and will require safety and accessibility improvements including pavement, appropriate highway ingress and egress, accessible parking, stormwater management, signage and wayfinding, gates, and regulatory information. Phase III will make significant connections to other trails like the Willard Munger State Trail and Western Waterfront trail, as well as connect more West Duluth Neighborhoods, thereby completing a city-wide arterial trail linking users with a wide array of resources and providing year-round recreation opportunities to Duluthians and visitors.

Project Area Maps

Project Location Map

[http://dms.gmrptcommission.org/uploads/funding/18-008F/DWP Traverse Location Map_9a4825.pdf](http://dms.gmrptcommission.org/uploads/funding/18-008F/DWP%20Traverse%20Location%20Map_9a4825.pdf)

Organization City of Duluth	Lead Contact Full Name Jim	Lead Contact Title Shoberg
Mailing Address 411 West 1st Street	City Duluth	State Minnesota
Zip 55802	Phone 218-730-4316	Email jshoberg@duluthmn.gov

Funding

Development Type Both	Acres of Park Land to be Acquired 0
New Trail Miles to be Acquired 0	Types
New Trail Miles Developed 0	Miles of Trail Restored or Improved 5.8
Trail head facilities developed 0	Number of trail bridges/culverts to be developed/restored 1
Number of Connecting People to the Outdoors Programs created/administered 100	

Project Outcomes

Evaluation of Impact

User metrics

The City of Duluth serves 3.5 million visitors annually; how many of those visitors are using the Duluth Traverse trails has not been quantified. Solid data is necessary to inform future planning and programming decisions.

Deliverable: Number of users of the DWP section of the Duluth Traverse, annually and over the life of the project period.

Performance Measure: Data will be gathered with The TRAFx Infrared Trail Counter. TRAFx counts people walkers, hikers, joggers, inline skaters, horseback riders, cyclists, etc. on trails, paths and sidewalks. It senses and detects the infrared wavelength that people emit. Unlike other trail counters, it does not require a receiving unit or reflector to operate. This results in a very compact, unobtrusive design that reduces risk of vandalism. The TRAFx Infrared Trail Counter also works well in winter conditions on snowshoe, ski and snowmobile trails. This versatile counter has proven itself from Alaska to Australia, from mountains to deserts, and from wilderness areas to urban areas. (Attachment C - TRAFx Trail Counters)

Legacy Pillars:

- Connect People and the Outdoors
- Take Care of What We Have
- Coordinate Among Providers

Connection to Pillars

Connect People and the Outdoors

Scale and magnitude is sufficient to affect a significant number of active and potential program participants, park visitors and/or trail users

Scale: The Traverse is a bike-optimized multi-use natural trail system that includes, when completed, 115 miles of interconnected trails and that passes through 22 parks. The Traverse spine is envisioned as a 40-mile, two-way, single track, that crosses Duluth along its ridgeline connecting neighborhoods to green spaces and parks. The DWP portion of the traverse itself is 5.8 miles. Five trail centers connected to the spine encompass an additional 64 miles of multi-use, single-track trails with a range of skill levels and variety of terrain. Short connectors link Duluth's neighborhoods to the Traverse System and focus on underserved neighborhoods. Inter-city connectors link adjacent communities to the Traverse adding an additional 11 miles.

Groups served: The Traverse provides a high-quality trail experience for cyclists from novice to expert riders and accommodates hiking, snowshoeing, backcountry skiing, winter fat biking, and trail running. When complete, the average distance from any home in Duluth to the Traverse system will be less than a mile. The DWP connection fills a gap in the west Duluth equestrian trail system. Equestrians have only one mile of designated trail in Duluth. The gravel Skyline Parkway may be used by equestrians from Magney Snively to Becks Road, a distance of about four 4 miles (a one-hour trip at the average equestrian walking pace). However, once completed, the DWP will allow equestrian use on an additional 4.5 miles (1 1/4 hours) and connect to Jay Cooke State Park via a proposed trail that connects to Jay Cookes six miles (2 hours) of equestrian trails. The City of Duluth is working toward an additional 3.8 miles (1 hour) of equestrian trail in Magney Snively Natural Area.

Facilities: The Traverse provides a variety of experiences and appeals to many skill sets and riding styles including cross country, downhill, freeride, enduro, cyclocross, and all-weather biking. Cross-country trails appeal to the majority of users and offer a progression of difficulty from beginner to advanced with varying terrain, distances, and ride experiences. All-weather trails are open when others are closed due to wet

conditions. Downhill, enduro, and freeride emphasize technical challenge.

Skill areas and a bike park are part of the system and include progressive skill dirt jumps and pump tracks. Skills areas provide an emphasis on balance development, bike handling skills, and progression in riding capabilities. Skills areas are typically smaller scale, often centralized, and found within an existing park facility. The Spirit Mountain Bike Park emphasizes skills and progression. Both appeal to a wide market, from youth to the National Interscholastic Cycling Association (NICA), and can cater to competitions and racing.

Has attainable goals and objectives accompanied by a well-developed outreach and marketing plan

Attainable goals: The Traverse is nearly connected in the manner it was originally planned. Trail Connectivity is the primary goal and the DWP reconstruction is critical to achieving this goal. The connectivity created by the DWP will significantly improve opportunities for equestrians and snowmobiles, a long awaited goal for citywide trail plans. Protection of the trail corridor and its natural resources is addressed by capping the trail and ensuring safe crossings at the streams. The section of spine trail in the Fairmount Neighborhood will be hardened and utilize boardwalk structures for long term sustainability and low impact to the environment.

Marketing: The Traverse provides public access for visitors to otherwise inaccessible vistas and natural landscapes across the length of Duluth. These trails are destinations unto themselves, and provide iconic views of the canal and lift bridge utilized in marketing and branding campaigns by Visit Duluth, Outdoors Duluth, the Duluth Experience, Outdoor Magazine, International Mountain Bike Association, and other sites that promote outdoor adventure.

Utilizes existing program models with a proven record of effectiveness and best practices, or melds successful models into new, innovative, or unique approaches with reasoned justification

Youth Outdoors Duluth is a new service collaborative that emerged after a needs analysis showed that underserved youth were not accessing the broad opportunities in outdoor recreation available in Duluth. The collaborative works to provide access to a progression of nature-based experiences through community-wide coordination of resources and expertise.

Is deliberate and intentional in inviting, welcoming, and engaging diverse populations, and has a well-developed plan to do so

The Duluth Trail and Bikeway Plan builds on existing and planned trails to connect the system and provide trails in underserved areas. West Duluth below Grand Avenue lacks appropriate connections to the rich trail system on the ridge line present in other parts of the City. The City's long-term, comprehensive vision for the St. Louis River Corridor supports trail connections that link western Duluth neighborhoods to other recreation opportunities. The restored Sargent Creek Bridge is an important link providing residents of Duluth's underprivileged Gary-New Duluth neighborhood with access to the full DWP multiuse trail and the Elys Peak trail center.

Cyclists of Gitchee Gumees Shores (COGGS), Duluth Cross Country Ski (DXC), the Superior Hiking Association (SHTA), youth-serving agencies, schools, and other community organizations sponsor programs to build biking skills and get families outdoors and moving. Many programs encourage underserved groups to participate by providing scholarships and equipment. DXC provides year-round programming to build Nordic ski skills, strength, technique and comfort including programs that build these skills on grass or roller skis.

Identifies barriers to visitation/participation and has specific strategies to address Diversity and barriers:

DT Master Plan Guiding Principle: Maximize accessibility for all users by ensuring the Traverse spine trail is green (easy) level designated. Be respectful to adjacent landowners, neighbors, and other outdoor recreation users in the area. Connect underserved neighborhoods and explore methods to reduce barriers to mountain biking for all residents.

Additionally to the outreach noted in programs above, COGGS, DXC, Youth Outdoor Collaborative, the YMCA, and Spirit Mountain all provide reduced rate or free access to equipment and programming that introduce youth and families to outdoor activities. For example, Outdoor Adventure Camps, a program of St. Michaels Church and DXC, collects bikes for kids enrolled in camp. When the Spirit Mountain Bike Park is complete, it will have bikes available for rent or loan to programs or families based on need.

Enlists partners among community groups and recreation industry sectors for mutual benefit, to advance delivery strategies, and to maximize return on public investments

Duluth has successfully implemented a public/private stewardship model that draws upon multi-sector collaboration and resources. For example, the Superior Hiking Trail Association maintains 45 miles of hiking trail in the City and COGGS is building and maintaining over 100 miles of Traverse trails. User groups have brought hundreds of thousands of dollars to facility development and provide on-going maintenance for trails and facilities. COGGS has raised \$800,000 for Traverse trails and donates over 4,000 hours of volunteer time each year. They employ a full-time seasonal Trail Crew (4 to 5 employees) and 25% of their time is dedicated to maintenance. Spirit Mountain (an independent City Authority) provides all maintenance on trails located within the recreation area while the City of Duluth has a dedicated full-time trail maintenance unit embedded in parks maintenance.

Able to provide trained and effective leadership with the proven ability to deliver high-quality outdoor recreation experiences

Without the exemplary leadership of Duluth's user groups, the Traverse, the Superior Hiking Trail and the extensive cross-country ski, equestrian, and snowmobile trails within the city would not exist. Volunteers, interns, neighborhood associations and user groups are critical to the success of the entire Duluth Parks systems and the St. Louis River Corridor Initiative, a project to improve economic and health outcomes in western Duluth. The City works in collaboration with scores of stakeholders and groups, providing leadership, logistics and facilities support, equipment, and expertise. Two citizen commissions, the Parks Commission and the Urban Forest Commission, advise the city. Duluth Parks staff facilitate many community initiatives such as the Duluth Traverse, the Grand Avenue Nordic Center, and the St. Louis River Water Trail.

Demonstrates an enduring impact through short-term, intensive interventions, or has a plan for ongoing implementation outside of Legacy funding

Enduring impact: Completion of the Traverse will realize Duluth's longstanding dream to connect neighborhoods across the city with a trail along the ridgeline that enforces Duluth's standing as an outstanding natural resource asset and outdoor recreation hub; connecting neighbors and residents in a way previously not possible; encouraging improved physical and mental health for all who use it; and building lasting cooperative partnerships between diverse sectors who love and work to sustain the resource and protect the lands beneath the trail in perpetuity for future generations to enjoy.

Intensive interventions: Educational programs provided by partners such as COGGS and DXC are intensive interventions that build skills and confidence. These skills, as well as ongoing program opportunities with partners, and the trails urban location with many local connections, enable users to confidently hit the trails again and again. Trail connections and the DWPs wide and firm trail bed make the trail eminently accessible.

Sustainability: The Traverse and other recreation developments throughout Duluth are key drivers in the City's economic development plans. Benefits of recreation facilities include attracting tourists, businesses, and retirees, enhanced real estate values/increased property tax revenues, and stimulation of equipment sales. COGGS has contributed over \$800,000 to the Traverse development and has a maintenance and operations plan in place with the City of Duluth that lays out the responsibilities of both parties to ensure the quality of experience is maintained in perpetuity.

Take Care of What We Have:

The DWP has been a popular resident and visitor destination for many years because it travels some of the most unique and breathtaking terrain in the Midwest. The North Shore Highlands along Lake Superior's north shore provide more elevation, topography, and scenic views than anywhere else in Minnesota. The Sargent Creek bridge offers majestic views of the St. Louis River Estuary. The DWP will pass the Magney Snively Natural Area, an old-growth northern hardwoods forest. The dramatic views over the St. Louis River Estuary from the bridge transform the DWP from a great connector of wild places to a destination itself.

Coordinate Among Partners

Duluth has successfully implemented a public/private stewardship model that draws upon multi-sector collaboration and resources. For example, the Superior Hiking Trail Association maintains 311 miles of hiking trail and COGGS is building and maintaining over 100 miles of Traverse trails. User groups have brought hundreds of thousands of dollars to facility development and provide on-going maintenance for trails and facilities. Non-profit community-based organizations provide youth and family programming, and support local parks through business development and infrastructure upgrades.

Connection to a Regionally Substantial Component of the Master Plan

The Duluth Traverse Master Plan, the Duluth Trail and Bikeway Master Plan, Cross City Trail Master Plan, and the Western Duluth Trails Corridor Plan build on existing and planned trails to connect the system in underserved areas and to provide trails for specific recreational uses. The trail provides a crucial connection from Spirit Mountain west to Becks Road and the Magney Snively Forest Preserve, eventually connecting with Mission Creek Park, the Willard Munger State Trail, Jay Cooke State Park, and direct access to equestrian and snowmobile trails and facilities outside of Duluth.

The goals of the Traverse master plan are to complete the trail and associated multi-use connection trails that allow mountain bikes; propose an operations and management plan for long-term sustainability; engage stakeholders and public to build consensus and unify the vision; balance recreation needs, environmental protection, safety, scenic value, and access; develop infrastructure to support trail usage; create synergies and connections to other outdoor recreation projects throughout Duluth, and provide high-quality opportunities for local residents and regional users. Of the original 104-mile vision for the Traverse, 82% of the trail is complete. The Operations & Management Plan is complete. The DWP restoration is necessary to realize the span from Spirit Mountain to Becks Road and connect two significant Traverse segments: Magney Snively and Spirit Mountain.

Project Readiness

Project Lead

Jim Shoberg, BLA with emphasis on Landscape Construction and Technology, BS, Environmental Design. Mr. Shoberg is a Registered Landscape Architect and a Senior Parks Planner with the City of Duluth Parks and Recreation Department. He has extensive experience in project management including planning, design, budget management, contract document preparation, coordination of interdisciplinary teams and working knowledge of construction practices. Planning and designing experience on a diversity of habitat restoration projects including mineland reclamation, pit lake shoreland restoration, creek restoration, grassland restoration, wetland mitigation and delineation, as well as experience in stormwater management.

This project is construction ready. The required land authorizations and use agreements are complete or in process. Final field design and plan sheets for construction can be completed within three months of award. Preliminary State of Minnesota regulatory and permit requirements are completed or in process. Construction includes repair of the existing Stewart Creek railroad trestle. The City will apply for a DNR Public Waters Work Permit since the existing bridge spans a water of the state that requires substantial streambed restoration. The City completed an Environmental Analysis Worksheet (EAW) and an Environmental Analysis Statement (EAS) pursuant with Minnesota Rules, Chapter 4410, received a no effect finding from the State

Historic Preservation Officer.

Implementation Timeline

July 2019 Grant agreements in place
July/Aug 2019 Design bridge and DWP restoration
Oct 2019 Regulatory and informational signage installed on DWP
Jan 2019/2020 DWP & bridge restoration projects out for bid
Feb 2020 Award DWP & bridge restoration projects
May/June 2020 DWP restoration, and bridge restoration begins
Nov 2020 Construction complete
Nov2020 Advertise wayfinding project for bid
Dec 2021 Award wayfinding contracts
June 2021 Begin installation of signs
July 2021 Sign installation complete
August 2021 Final inspection and grand opening

Availability for Public Use

The trail is used informally and will be immediately open to expanded users when the bridge restoration is completed. The DWP will be open to all users during all typical trail hours with the exception of equestrian riders who will be restricted to use from the Clyde Connector west. (See Attachment B)) Snowmobilers will have access to the western mile of the DWP as well as full access to the mile Clyde connector trail.

No fees.

Design Standards

The DWP Multiuse Trail is a former railroad bed that is wide and flat with relatively few and easy inclines. The final finished trail will be an accessible compacted blue stone aggregate surface along its entire length and will be ten feet wide. It will meet all the requirements set forth by the ABA, including a firm and stable surface and running slopes not exceeding 8.3% at the bridge and connecting trails.

The DWP Multiuse Trail is the culmination of years of planning to connect trails within Duluth to important horse trails outside of Duluth and beyond. For horse riders, the bridge railings have been specifically designed to ease horse crossings, and mounting blocks will be installed at each end of the bridge to allow dismounting by riders not comfortable with bridge crossings.

Project Cost Breakdown

Bridge restoration: Cost \$700,000. Cash in hand \$450,000. Closes a gap on the west side of the DWP for Duluth Traverse and equestrians. Addresses a significant public safety concern as well as addresses natural resource degradation in the stream bed improving habitat and water quality.

Trail restoration: Rock scaling and trail capping. Cost: \$516,000. Rock scaling addresses safety and access issues. The rail tunnel and cliff faces are inspected for loose rock, which is then removed or secured. Fallen rock is removed from the trail. Trail capping preserves and improves the rail bed surface to enhance access by the disabled as well as provide a firm and stable surface for all users.

New Fairmont single track trail: Cost \$105,980. The Traverse Fairmont segment closes another gap on east side of the DWP. Ensures natural resources protection and trail sustainability by employing best practices that harden or bridge wet areas.

Funding Request Breakdown

Grant Funding Request

\$889,980

Local Match #1

\$110,000

Funder #1

0

Local Match #2

0

Funder #2

0

Local Match #3

0

Funder #3

0

Local Match #4

0

Funder #4

0

Local Match #4

0

Funder #5

0

Non-Eligible Local Match

1875007

Non-Eligible Item Description

Ely Peak Trails - In-Kind Volunteer Labor 154000

Sargent Creek 555000

F RTP Infrastructure DWP 300000

Clyde Connector 300000

Stewart Creek Bridge RTP 518132

City Staff Time 15000

Consultants 32875

Total Funding

\$999,980

Percentage of local match

0.11

Completion Timeframe

Phase 1 construction completed 2018. Phase II by August 2021.

Funder #1

City of Duluth

Funder #1 Resolutions

Duluth Resolution

http://dms.gmrptcommission.org/uploads/funding/18-008F/City of Duluth Resolution DT_64f689.pdf

Funder #2

None

Funder #3

None

Funder #4

None

Funder #5

None

Budget Worksheet

DWP Traverse Budget Worksheet

http://dms.gmrptcommission.org/uploads/funding/18-008F/FINAL DWP Project Budget_74ff88.xlsx

Attachments

Doc Name	Description	Url
Additional Attachment	DWP Project map	http://dms.gmrptcommission.org/uploads/funding/18-008F/FINAL Project Map DWP DT_0f7a23.pdf
Additional Attachment	Existing Facilities Map	http://dms.gmrptcommission.org/uploads/funding/18-008F/DWP Existing Facilities Map_8a0162.pdf
Additional Attachment	Attachment A Work to Date	http://dms.gmrptcommission.org/uploads/funding/18-008F/Attachment A - DWP Work to date_b7cc19.pdf
Additional Attachment	Attachment B Project Maps	http://dms.gmrptcommission.org/uploads/funding/18-008F/Attachment B DWP Traverse Project_b94c8c.pdf
Additional Attachment	Project Location Map	http://dms.gmrptcommission.org/uploads/funding/18-008F/DWP Location Map_4a40e6.pdf
Additional Attachment	Bridge Engineering Report	http://dms.gmrptcommission.org/uploads/funding/18-008F/Sargent Creek Bridge Engineering Report_73da24.pdf
Additional Attachment	DWP Project area map	http://dms.gmrptcommission.org/uploads/funding/18-008F/FINAL DWP Project Area_b089e2.pdf
Budget Worksheet	DWP Traverse Budget Worksheet	http://dms.gmrptcommission.org/uploads/funding/18-008F/FINAL DWP Project Budget_74ff88.xlsx
Funder Resolution One	Duluth Resolution	http://dms.gmrptcommission.org/uploads/funding/18-008F/City of Duluth Resolution DT_64f689.pdf
Additional Attachment	Attachment C TRAFx Counters	http://dms.gmrptcommission.org/uploads/funding/18-008F/Attachment C TRAFx Counters_0a477e.pdf
Additional Attachment	Wayfinding Budget Detail	http://dms.gmrptcommission.org/u

Project Area Map

Project Location Map

[ploads/funding/18-008F/Wayfinding Budget Detail_95bc1b.pdf](#)

http://dms.gmrptcommission.org/uploads/funding/18-008F/DWP Traverse Location Map_9a4825.pdf