

Part 1

Base Information

1. Project Title	Evergreen Lake Trail Improvement	
2. Project <i>Start/End</i> points or Geographic Area <i>Provide a map with submittal, as appropriate</i>	On the north side of Evergreen Lake, along Evergreen Parkway SH-74 at mileposts 7.0-8.0 and west of the SH-74/CR-73 Intersection in downtown Evergreen. See Maps at Att 1.	
3. Project Sponsor (<i>entity that will construct/ complete and be financially responsible for the project</i>)	Evergreen Park & Recreation District	
4. Project Contact Person, Title, Phone Number, and Email	Ellen O'Connor, Executive Director 720-880-1011; eoconnor@eprd.co	
5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, provide applicable concurrence documentation with submittal</i>	
6. What planning document(s) identifies this project?	<input type="checkbox"/> DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FC RTP)	
	<input checked="" type="checkbox"/> Local plan:	Evergreen Lake North Trail Phase II: Planning Study (2018) Evergreen Lake North Trail Preliminary Study (2017) Evergreen Trails Master Plan (2015) at D-2, D-28-29 Evergreen Park & Recreation District Master Plan (2011), pp. 35, 38-39, 50-52 and Trail Recommendation Map C in App C Jefferson County Open Space Master Plan (2014-19), Trails Map 6 Evergreen Area Plan (2015) Jefferson County Bicycle Plan (2012) Jefferson County Pedestrian Plan (2012)
	<input checked="" type="checkbox"/> Other(s):	DRCOG Active Transportation Plan (2019) at Fig 14 (p. 16), Fig 19 (p. 34) and Fig 26 (App p. 36) DRCOG Denver Regional Bicycle Map
<i>Provide link to document/s and referenced page number if possible, or provide documentation with submittal</i>		
7. Identify the project's key elements .		

- Rapid Transit Capacity (2040 FC RTP)
- Transit Other:
- Bicycle Facility
- Pedestrian Facility
- Safety Improvements
- Roadway Capacity or Managed Lanes (2040 FC RTP)
- Roadway Operational

Grade Separation

- Roadway
- Railway
- Bicycle
- Pedestrian
- Roadway Pavement Reconstruction/Rehab
- Bridge Replace/Reconstruct/Rehab
- Study
- Design
- Transportation Technology Components
- Other:

8. Problem Statement What specific Metro Vision-related subregional problem/issue will the transportation project address?

The Evergreen Lake Trail Improvement Project will create a connected multimodal trail on the western edge of the DRCOG Region, where residents and visitors escape the Denver Region’s urban centers to access the Rocky Mountains. The project will secure and improve a critical section of the 1.25-mile loop trail around Evergreen Lake, part of Dedisse Park, a Denver Mountain Park owned by the City & County of Denver, and a focal point for outdoor recreation for residents and tourists from across the Denver Region. The trail section at issue, the North Lake Trail, is an existing soft-surface, multi-use trail of variable 4.5-8’ width, running adjacent to State Highway 74 (SH-74) along the north side of Evergreen Lake. The North Lake Trail is operated by Evergreen Park & Recreation District (EPRD) under a Supplemental Agreement with Evergreen Metropolitan District, which operates a water transmission line underneath the trail corridor. Between steep granite cliffs to the north and Evergreen Lake to the south, the trail and roadway corridor are extremely constrained. The existing trail is supported by a 30-year-old galvanized steel bin gravity wall.

Over the last four years, drainage, run-off and erosion issues at the project site have led to instability and active failures of the steel bin wall underlying the trail, requiring intermittent closures of the trail for safety concerns. In April 2016 the North Lake Trail was closed for over a year and a half due to significant trail failures. Intermittent trail closures lead pedestrians and bicyclists to use the roadway and narrow shoulders of State Highway 74, compounding safety issues at the project site. In fall 2017 Evergreen Park & Recreation District (EPRD) and Evergreen Metro District (EMD) worked together to perform temporary repairs of the trail’s support structure – estimated to last five years – allowing the trail to be reopened in November 2017. See Photos Att 10.

The North Lake Trail in its current state poses safety and security concerns due to its inability to accommodate its multiple and varied users. This creates a high risk of potential conflicts and crashes between trail users and motor vehicles on the narrow, constrained corridor shared by the state highway and the existing multi-use trail, and also poses additional safety concerns arising from inevitable user conflicts on its narrow, multi-use tread. The existing conditions of the North Lake Trail present other Metro Vision-related problems as well. In its current state the trail does not provide a reliable and effective connection to regional trails that converge here. It also presents mobility issues, especially for vulnerable populations.

The ongoing infrastructure failures of the trail’s substrate exacerbate the safety issues at the project site. Complete wall failure could produce catastrophic results threatening the safety of trail users, as well as the stability of the adjacent state highway or the integrity of Evergreen’s main water transmission line (located under the trail), or both. Another urgent safety issue arises whenever the trail is closed for infrastructure repairs, and trail users choose to take to the roadway and narrow shoulders of SH-74.

The Evergreen Lake Trail Improvement Project will create a regional bicycle and pedestrian connection that addresses all of these subregional problems, leverages system investments, and is built on multi-agency collaboration. EPRD is proud to submit an overmatch of 31% (\$1.15 million) in non-DRCOG-allocated

Subregional Share funding for this construction project. We are able to do so because the project has strong support from the public and state, regional, and local partners as discussed in response to Question A.7 below. If project costs and funding contributions are calculated for the entire project, from the initial engineering study into planning/design and through to project completion, the non-DRCOG-allocated funding match jumps to 37% (\$1.56 million) of the estimated total project cost of \$4.17 million. See Estimated Cost & Leveraging Worksheet at Att 7. The Evergreen Lake Trail Improvement is an urgent project. The project is unique because at once it:

- meets multiple visions and goals of the Metro Vision and Regional Transportation Plan;
- reflects local values;
- leverages non-DRCOG project funding sources;
- fosters collaboration with other governments, agencies, and private stakeholders;
- capitalizes on completed planning and design; and
- delivers an excellent return on investment in concert with the adjacent Subregional project to improve JC-73.

With this application we are requesting a \$200,000 allocation toward the Evergreen Lake Trail Improvement project from the Denver Subregional Forum. Your allocation would be used to offset the investment in the project by the Jefferson County Subregion.

We believe this project, and our request to the Denver Subregion for an allocation toward it, is a model for the new Subregional Share approach for distributing DRCOG TIP funding. The stated purpose of the Subregional Share process is “to allow further collaboration and local values of each geographic region to be part of the project recommendation process, while keeping the overall principles of Metro Vision and the Regional Transportation Plan.” DRCOG Policy on TIP Preparation at p. 19. This project reflects years of coordination to plan and raise funds, involving multiple agencies, stakeholders and the public.

Thank you for your consideration of a \$200,000 TIP allocation from the Denver DRCOG Subregion toward the Evergreen Lake Trail Improvement project. Your allocation will meet the \$200,000 contributions of our other agency stakeholders -- CDOT and Evergreen Metropolitan District. It will demonstrate the Denver Subregion's commitment to collaboration with other subregions in the DRCOG system. And it will help further the mission of the Subregional Share approach by allowing projects like this one -- relatively small projects reflecting local priorities and spawned by multi-agency collaboration, but nonetheless serving important Metro Vision/Regional Transportation Plan goals -- to compete in a meaningful way to attain DRCOG TIP funding.

9. Define the *scope* and *specific elements* of the project.

The scope of this project is the improvement of an existing trail by constructing a connected, multimodal trail linkage on the north side of Evergreen Lake. The improved trail will be a two-track bike/ped facility of roughly 1,240 lineal feet. The upper track (near road level) is an off-street, hard surface, accessible trail of 8-10' width that can accommodate bicycles and pedestrians and connects the regional Pioneer Trail with downtown Evergreen. The lower track (lake level) is a 5' wide pedestrian-only trail consisting of a combination of natural surfaces and wooden boardwalks depending on the terrain. The project will include improvements to drainage, roadway characteristics, and support infrastructure at and near the project site.

Three planning and design phases precede this project – an Engineering Study (Phase I), Planning & Preliminary Design (Phase II), and Final Design (Phase III). The first two planning and design phases are complete, and Phase III Final Design currently is in RFP development, with an expected completion in summer 2020. Thus, it is anticipated that all planning and engineering through final design will be completed well before this TIP construction project begins. Please see the Preferred Alternative and timeline described in the Evergreen Lake North Trail Phase II Planning Study.

Phase III Final Design is a \$250,000 design & engineering project administered by CDOT under a \$200,000 TAP grant. Because Phase III Final Design will include extensive Design, ROW and Environmental process elements, we anticipate that the Evergreen Lake Trail Improvement Project primarily will be a construction project, comprised of these elements:

- RFP Development & Contracting;
- Permitting and Clearances (including environmental) (if any, as needed, tbd during Final Design);
- Drainage improvements at and around the project site;
- Changes to shoulder alignment & edge of roadway characteristics of SH-74, such as installing curb and gutter;
- Construction of the Upper Trail, an off-street, multimodal, accessible, hard surface trail of 8-10' treadwidth, near SH-74 but separated by grade and physical barriers from the highway;
- Construction of the Lower Trail, a combination of 5-foot-wide lakeside pedestrian trails, boardwalks, and observation bump-outs depending on terrain;
- Site Restoration; and
- Project Review and Close Out.

Based on the recommendations of our Phase II Planning consultant, it is anticipated that the bulk of the construction project will be conducted in summer 2021, with some additional work on the lower trail portion potentially extending into 2022. Therefore, roughly two-thirds of project funding (\$2,484,424) is allocated to FY2021 and one-third of project funding (\$1,279,478) is allocated to FY 2022. See Worksheet at Att 7.

Planning and design for this project are fully funded and well underway. The Phase I Engineering Study (funded by DOLA, Evergreen Metro District and Evergreen Park & Recreation District) was completed in July 2017. The Phase II Planning & Preliminary Design Study (funded in part by a \$100,000 grant from Great Outdoors) was completed in September 2018. We are currently working with CDOT to develop the RFP for Phase III Engineering & Final Design (funded in part by a \$200,000 TAP grant administered by CDOT), which we expect to take 12 months. We anticipate Final Design to be completed in summer 2020, so that this construction project will be shovel-ready in FY2021.

10. Would a smaller DRCOG-allocated funding amount than requested be acceptable, while maintaining the original intent of the project?

Yes No

If yes, define smaller meaningful limits, size, service level, phases, or scopes, along with the cost for each.

A smaller DRCOG-allocated funding amount would not allow EPRD to complete both the Upper and Lower Trail portions of the project, a community priority for safety, mobility, and enhanced user experience as revealed in the public processes of the Planning Phase II described above. See Evergreen Lake North Trail Phase II Planning Study at pp. 29, 37 & 43. The plans to create the dual-track system recommended in Phase II Planning will be subject to the review and approval requirements of other agencies. To use leveraged dollars for the project, maximize construction efficiencies, and minimize disruptions to the community from project mobilization and construction, we believe that the Upper and Lower Trails should be constructed in a single phase, if funding and multi-agency planning efforts permit.

Should lesser funds be available, EPRD could consider phasing the project to complete the Upper Trail first. The Phase II Planning Study estimates that Upper Trail construction costs would range from \$2.2-\$2.7 million (\$2.4-\$3.0 million in 2021 dollars at 3% inflation). However, this approach would create uncertainty for future funding and construction of the Lower Trail near the water's edge – the facility that separates users on a multimodal trail system, heightens opportunities to connect to Evergreen Lake, and the one our community desires most – hence compromising the original intent of the project.

A. Project Financial Information and Funding Request

1. Total Project Cost	\$3,763,903	
2. Total amount of DRCOG Subregional Share Funding Request	\$200,000	5% of total project cost
3. Outside Funding Partners (other than DRCOG Subregional Share funds) List each funding partner and contribution amount.	\$\$ Contribution Amount	% of Contribution to Overall Total Project Cost
CDOT	\$200,000	5%
Evergreen Metro District	\$200,000	5%
Evergreen Park & Recreation District	\$150,000	4%
Downtown Evergreen Economic District	\$50,000	1%
Great Outdorrs Colorado	\$550,000	15%
DRCOG (combined Jeffco & Denver Subregional allocations)*	\$2,613,903	69%
Total amount of funding provided by other funding partners <i>(private, local, state, Regional, or federal)</i>	\$3,763,903	

Funding Breakdown (year by year)*	<i>*The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using an inflation factor of 3% per year from 2019.</i>				
	FY 2020	FY 2021	FY 2022	FY 2023	Total

Federal Funds	\$	\$2,284,424	\$329,479	\$	\$2,613,903
State Funds	\$	\$200,000	\$	\$	\$200,000
Local Funds	\$	\$	\$950,000	\$	\$950,000
Total Funding	\$0	\$2,484,424	\$1,279,479	\$0	\$3,763,903
4. Phase to be Initiated <i>Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other</i>	Choose an item	CON	CON	Choose an item	

5. By checking this box, the applicant’s Chief Elected Official (Mayor or County Commission Chair) or City/County Manager for local governments or Agency Director or equivalent for others, has certified it allows this project request to be submitted for DRCOG-allocated funding and will follow all DRCOG policies and state and federal regulations when completing this project, if funded.



Part 2 Evaluation Criteria, Questions, and Scoring

A. Subregional significance of proposed project

WEIGHT **30%**

Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on the subregional significance of the proposed project.

1. Why is this project important to the Denver subregion?

The Evergreen Lake Trail Improvement project is important to the Denver Subregion because the improvement proposed in this project will occur on property owned by the City and County of Denver. Evergreen Lake is a part of the 475-acre Dedisse Park, a Denver Mountain Park owned by the City & County of Denver (Denver). Evergreen Lake is the drinking water supply to Evergreen and other communities across the Denver Region. Evergreen Park & Recreation District (EPRD) manages and operates the Evergreen Lake Trail under a 1987 supplemental agreement with the Evergreen Metro District (EMD), and EMD's northbound water distribution main is located underneath the trail and adjacent State Highway 74.

"The Denver region's quality of life depends in part on the abundant recreational opportunities nearby. Thousands of people travel to and from recreational activities in the mountainous areas of Colorado, both within the Denver region and adjacent to it." Metro Vision Regional Transportation Plan at p. 26.

This project will create better bike/ped facilities, enhance user experiences, and improve aging infrastructure on the loop trail around Evergreen Lake in Dedisse Park. Denver Mountain Park's Master Plan observes:

"Dedisse Park has some of the best designed and highest quality structures, roadwork, and woods and meadows. ... It is a model Denver Mountain Park. At the same time, it is connected to wider, regional amenities through partnerships with EPRD and Jefferson County Open Space. As Evergreen grows, the popularity and programming of large events at the lake increases and trail use also grows, impacting the park. Preserving the natural and cultural resources in the face of increasing use, traffic, and growth is the major challenge at Dedisse. It is an issue facing both Denver Mountain Parks and EPRD." Denver Mountain Parks 2008 Master Plan at p. 114.

In addition, for all residents and visitors from the DRCOG Regions, including the Denver Subregion, the project will: 1) improve the safety of our trail system by creating an off-street, multimodal facility and replacing failing infrastructure; 2) increase the reliability of our trail network by connecting regional trails and filling a gap at a critical hub of our subregion's trail system; 3) improve mobility infrastructure (especially for seniors, youth, and people with disabilities); and 4) enhance user experiences at one of Jeffco's premiere recreational destinations.

It is also important to the Denver Subregion because it will fulfill and implement several existing regional and local plans to create a connected, multimodal trail in this location, including: the DRCOG Active Transportation Plan (2019); Evergreen Trails Master Plan (2015); the Evergreen Park & Recreation District Master Plan (2011); and the Evergreen Area Plan (2015) (see Plan details in Part 1.6).

a) Improving Safety & Security

The first safety improvement of this project will be to create an off-street, multimodal trail to reduce the risk of crashes between vehicles, bicyclists and pedestrians at a key linkage for transportation and recreation in our community. Traffic volume on SH-74 adjacent to the project site – 18,000 AADT -- is extremely high for a two-lane arterial road in a rural setting. See CDOT OTIS 2017 Volume Data, Station 103326 on SH-74 west of CR-73. There have been 36 total vehicle crashes on SH-74 near the project site from 2011 to 2015, including four that involved alcohol. The most common factors contributing to crashes in this segment were driver inexperience (50%), driver preoccupied (33%), and falling asleep at the wheel (8%). The three most common violations cited were following too close (36%), careless driving (32%), and improper driving on mountain highway (10%). See Jefferson County Interactive Crash Map, 2011-15, see Data at Att 9. This data illustrates a substantial risk exposure for bicyclists on SH-74. Although no bicycle/vehicle accidents were identified in the crash data, the lack of shoulder and pattern vehicular accidents adjacent to the project site create heightened risk factors for bicyclists on SH-74.

Most bicyclists along the route choose to ride on the roadway instead of the adjacent trail due to its soft-surface and narrow width. “The only way a cyclist can ride past or along the lake is on Highway 74, or by using the dirt road by the golf course. Hopefully there will be some alternatives for cyclists along the lake with the new North Evergreen Trail.” Phase II Planning Study (Comments at App B at pp. 4). DRCOG Bicycle & Pedestrian Data show two bicycle crashes within 1,200 feet of the project site from 2010-15, to the east on JC-73 just past the intersection of SH-74 & JC-73; and to the west on Upper Bear Creek Road just beyond the North Lake Trail. See Data at Att 9. User tallies conducted at the site in February 2019 confirmed that cyclists generally do not use the current soft-surface trail. Daily average bicycle usage on the adjacent roadway is 180, estimated to be 1% of SH-74’s ADT at the project location. See data at Part 3.B.1 below.

Another crucial safety improvement relates to conditions for bicyclists and pedestrians when the trail is closed for maintenance and infrastructure repairs. Most trail users forego the .8-mile detour around the other side of Evergreen Lake, choosing instead to walk and bike along the curved roadway and narrow shoulders of adjacent Evergreen Parkway (SH-74), which is physically very constrained. See Photos at Att 10.

One more safety improvement will stem from separating users to reduce conflicts on the trail. The soft-surface North Lake Trail section is 4.5 to 8 feet wide, and cannot accommodate its multiple users – including runners, hikers, sightseers, dog-walkers, strollers, and people with disabilities. Tallies conducted in February 2019 showed an estimated average weekend daily pedestrian trail use of 434, with roughly 25% of trail users from vulnerable populations and roughly 10% of trail users walking dogs. See Part 3C1 below, Tallies at Att 8. The 2015 Evergreen Trails Master Plan recommends “As traffic increases on this trail, more user conflicts will result leading to a need to manage modal interactions more aggressively. With a wider trail area, those conflicts can be minimized.” Evergreen Trails Master Plan (2015) at pp. 48-49, see Att 2.

Safety and security also will be improved by replace failing infrastructure arising from a corroding bin wall underlying the existing trail and address drainage issues at the project site. This year, the galvanized steel bin gravity wall that supports the North Lake Trail reached its 30-year life expectancy. Sections of the bin wall have corroded to the point of causing blow-outs and sink holes along the trail, necessitating closure of the trail from July 2016 to November 2017. Temporary stabilization means and regular repairs have allowed EPRD to reopen the trail, but another unexpected bin wall failure could be catastrophic. An improved multimodal trail, supported by a gravity wall designed for the drainage and runoff issues that challenge the site, will provide critical safety and security improvements. See Photos at Att 10.

b) Increasing Reliability and Connecting Regional Trails

This project is important to the Denver Region because it connects regional trails and fills a gap in our Region’s trail system. Jefferson County is a gateway to the foothills of the Rocky Mountains for the DRCOG Region, with 45,000 acres of open space and 252 miles of trails. Jeffco Open Space estimates 6.9 million visitors to its parks and trails each year. Jefferson County Open Space 2017 Annual Report. The DRCOG Active Transportation Plan (2019)(App at pp. 34-35) notes that “Taking care of existing trails is a top priority for the county. ... Jefferson County is known for high levels of recreational bicycling and can build on this characteristic moving forward.”

The unincorporated, rural community of Evergreen lies near the western border of Jefferson County, just south of the I-70 corridor, providing world-class outdoor recreation opportunities within about a half-hour drive of metro Denver. DRCOG’s Active Transportation Plan identifies the North Lake Trail as part of an Existing Active Transportation Corridor -- one of very few in western Jefferson County. DRCOG Active Transportation Plan 2019 (Fig 26 at App p. 36); see Map Att 1.

The north side of Evergreen Lake is a hub connection point for several regional trails. The North Lake Trail is connected to (and even considered a part of) the regional Pioneer Trail. Via the Pioneer Trail, bicyclists can access the new bike trail along I-70, popular rides up Squaw Pass Road to Denver’s Echo Lake, and the mountain bike trails of Jefferson County’s Elk Meadow Park. The east side of the North Lake Trail is the primary bike/ped access to downtown Evergreen, via the new Connector Trail installed with EPRD, GOCO, and community funds in 2015. The North Lake Trail is the axis of the popular bike route that runs along Bear Creek from Upper Bear

Creek Road, through downtown Evergreen, and all the way to Morrison on JC-74. Moreover, SH-74 (aligned with the trail corridor) is part of the Lariat Loop Scenic Byway, a 40-mile scenic route that is one of 11 America's Byways designated in Colorado. See Photos at Att 10.

The North Lake Trail also is linked to JC-73 on the west side of downtown Evergreen. We understand that Jefferson County Transportation & Engineering is submitting a TIP 2020-23 Subregional Share application for bike/ped improvements on this section of JC-73. The two projects implemented together will significantly improve regional bike/ped connections in the area.

In its current state – a crowded, soft-surface trail of 4.5-8 feet, with conflicting uses and intermittent closures -- the existing trail creates a gap in the extensive trail network surrounding it. This project will fill a critical gap in the region's trail network, by providing an improved, reliable and accessible multimodal trail linkage.

c) Improving Mobility Infrastructure

This project will convert a constrained and crowded multi-use trail, that is currently substandard under AASHTO criteria, into a two-track, multimodal trail system designed to enhance mobility. An accessible and ADA-compliant, hard surface Upper Trail and nature-based Lower Trail with observation areas will improve mobility for everyone, especially more vulnerable populations such as seniors, youth, and people with disabilities. Estimated weekend daily trail usage by vulnerable populations is 109 users per day, or 25% of all trail users. See User Tallies at Att 8.

Local and visiting seniors will benefit from mobility and accessibility improvements with the improved trail. The hard surface Upper Trail will be graded, surfaced, and widened to be ADA-compliant. The Evergreen Lake Trail Improvement also will serve area youth by improving a trail that is widely used by 1,450 students who attend Evergreen High School and Wilmot Elementary, both less than half a mile from the trail.

The project also will improve mobility and experiences for people with disabilities across the Region: "Our organization serves adults with developmental disabilities and their families in Clear Creek, Jefferson, and Park Counties. This project is extremely important to us because we frequently use the Evergreen Lake Trail as an outing destination for our group, in all seasons. An accessible path would make the trail a vital community recreational activity for our group, and many others who use wheelchairs, walkers, and scooters. Plus, there is a wonderful accessible ramp leading from the downtown area to the trail, this gives our group access the lake area from downtown businesses. One of our favorite activities has been to get ice cream at Baskin Robbins and then exercise by walking up to and around the lake. For other folks with disabilities besides our group this would be a major score; to be able to access the whole lake area, whereas now there are many parts that are not passable with any kind of alternative mobility device. ... The lake is such a wonderful Evergreen amenity and huge draw for tourists, and it would be even more wonderful if all who come to enjoy it could access it equally." See Mountain Community Pathways Letter of Support for TAP Final Design grant at Att 5.

More locally, EPRD's INSPIRE program (formerly Special Needs) serves 99 individuals with disabilities each year with educational and recreational services and activities, including frequent visits to the Evergreen Lake Trail (see INSPIRE Letter of Support at Att 5). "This trail will provide new opportunities for handicapped persons to have accessibility to the lake and to be able to enjoy ALL activities. The disabled will be able to enjoy the great outdoors, fishing, boating, wildlife viewing, and a stroll at the lake." Maren Schreiber, Coordinator of INSPIRE Program, see Att 5. EPRD subsidizes our INSPIRE Program because like Jeffco, serving our community's disabled population is a priority.

d) Enhancing User Experiences

This improvement to the Evergreen Lake Trail also will vastly enhance user experiences by providing a lower level boardwalk/trail with fishing bump-outs and viewing areas. It will remove pedestrians from the noise and traffic of the roadside, and connect them to the lake and all the nature-based experiences it permits. The Evergreen Trails Master Plan recommends that "Fishing platforms and piers could be built into this design to provide sustainable fishing opportunities while minimizing bank erosion caused by the current fishing uses and improving water quality. Handicap accessible facilities could be included in the design to provide accessible outdoor recreation

opportunities.” Evergreen Trails Master Plan at pp. 48-49, see Att 2. It also will improve user experiences by separating users (essentially higher speed users from lower speed users) as discussed above.

Phase II Planning confirmed the community’s preference for the dual-track trail system separating users: “We like the idea of decoupling the trail from the road, and the boardwalk idea is consistent with trail areas on the opposite side of the lake. Regarding the growing use of the trail, I wonder if it would be possible to keep the existing trail open for bicycles only so the boardwalk would be for pedestrians. This strategy would allow an accessible connecting trail for bicyclists between the Pioneer/Dedisse paved multi-use trail and downtown Evergreen (and ultimately and hopefully, a trail continuing along Bear Creek towards Morrison.” See Phase II Planning Study at App B.

It is notable that a lower level trail with bump-outs near the water’s edge was the original vision for this area since 1985, when the first master plan for the Evergreen Lake Trail was produced. The 1985 Master Plan calls for a lake-level pedestrian trail, two lake overlooks and a trailside sitting area at the project site. See Evergreen Lake Master Plan (1985) at Attachment 3. In 1987, Barbara Sternberg described this design as “a cool and pleasant trail at lake level.” Sternberg, Evergreen Our Mountain Community, 1987. With this project we have an opportunity to rework the lake trail’s pedestrian user experience as was envisioned 34 years ago.

2. Does the proposed project cross and/or benefit multiple municipalities? If yes, which ones and how?

Because Evergreen has a unique role as a foothills outpost and outdoor recreation hub for the entire Denver Region, this project will benefit multiple municipalities and population centers in the Region. The project will benefit residents from multiple nearby municipalities/population centers identified by DRCOG’s municipal boundary map, including but not limited to Golden, Morrison, Lakewood and Idaho Springs. Other nearby communities in unincorporated Jefferson County – most notably Kittredge, Idledale, Indian Hills, and Conifer – will benefit from the improvement as well. These nearby municipalities and communities will benefit by the addition of a safe, connected, and reliable multimodal trail, and concomitant fixes to failing infrastructure, within less than half an hour’s drive from their population centers. Enhanced accessibility and observation bump-outs will allow their residents to experience nature at Evergreen Lake in a more meaningful way, while enjoying better connectivity among regional trails. See Photos at Att 10.

3. Does the proposed project cross and/or benefit another subregion(s)? If yes, which ones and how?

This project will benefit the Denver Subregion, as described above, and also the Jefferson County Subregion. In creating a connected multimodal transportation system for the Denver Region as a whole, a particular Subregion’s contributions will be based on the Subregion’s unique characteristics and the role it plays in the overall system. Jeffco’s unique environmental characteristics – 45,000 acres of open space, 252 miles of trails, and easy access to the foothills of the Rockies from metro Denver – make it an important hub for outdoor recreation and tourism for the entire Denver Region.

Tourists from across all DRCOG Subregions will capitalize on the greater safety, connectivity, accessibility, and mobility provided by the Evergreen Lake Trail Improvement project. Evergreen is about a half-hour to 45-minute drive from most subregions of the Denver Region. The 5.5-acre park around Evergreen Lake draws an estimated 160,000 visitors each year, primarily from the Denver Region, and offers a myriad of diverse, year-round recreation opportunities for a wide variety of visitors including ice-skating, boating, hiking, fishing, picnicking, wildlife viewing, summer concerts, festivals and events. See Lake Usage at Att 8; Photos at Att 10.

"The Denver region’s quality of life depends in part on the abundant recreational opportunities nearby. Thousands of people travel to and from recreational activities in the mountainous areas of Colorado, both within the Denver region and adjacent to it." Metro Vision Regional Transportation Plan at p. 26.

The Denver Subregion, in particular, will benefit from this project because Evergreen Lake is a part of the 475-acre Dedisse Park, a Denver Mountain Park owned by the City & County of Denver (Denver). Evergreen Lake is the drinking water supply to Evergreen and other communities in the Jefferson County Subregion. Evergreen Park

& Recreation District (EPRD) manages and operates the Evergreen Lake Trail under a 1987 supplemental agreement with the Evergreen Metro District (EMD), and EMD's northbound water distribution main is located underneath the trail and adjacent State Highway 74.

This project will create better bike/ped facilities, enhance user experiences, and improve aging infrastructure on the loop trail around Evergreen Lake in Dedisse Park. Denver Mountain Park's Master Plan observes: "Dedisse Park has some of the best designed and highest quality structures, roadwork, and woods and meadows. ... It is a model Denver Mountain Park. At the same time, it is connected to wider, regional amenities through partnerships with EPRD and Jefferson County Open Space. As Evergreen grows, the popularity and programming of large events at the lake increases and trail use also grows, impacting the park. Preserving the natural and cultural resources in the face of increasing use, traffic, and growth is the major challenge at Dedisse. It is an issue facing both Denver Mountain Parks and EPRD." Denver Mountain Parks 2008 Master Plan at p. 114.

Denver currently is working with EPRD on the project by participating in the steering committee for Phase II Planning and consulting on permitting, environmental, and contracting requirements for Phase III Final Design. With this request for allocation EPRD is reaching out to the DRCOG Subregional Forum in an effort to cooperate on project funding, so that Denver would match CDOT's and EMD's respective \$200,000 contributions to the project. With your allocation, the contribution of the Jeffco Subregion could be reduced from \$2,613,903 to \$2,413,903. The Chairman of the Denver Subregional Forum's Letter of Support for the project is attached at Att 4. In the meantime we will continue to work with Denver on design and contracting requirements for the project.

4. How will the proposed project address the specific transportation problem described in the **Problem Statement (as submitted in Part 1, #8)?**

The transportation problems described in the Problem Statement above were 1) urgent safety and security issues arising from potential conflicts/crashes between trail users and drivers along the narrow corridor shared by the trail and adjacent state highway, as well as ongoing infrastructure failures below the trail; 2) lack of reliability, multimodality, and connectivity for regional trails that converge at the project site; 3) mobility infrastructure issues that impact all users but especially vulnerable populations; and 4) compromised user experiences due to the multi-use trail's adjacency to SH-74 and inevitable user conflicts along its narrow path.

The Evergreen Lake Trail Improvement project will construct a safe, multimodal trail connecting regional trails and improving bike/ped facilities while fixing existing drainage and stability issues under a critical trail linkage and adjacent state highway. The project will split users along a two-tier trail corridor – higher-speed users above on an off-street, hard surface, accessible multi-use trail near the roadway of SH-74, and lower-speed users below on a combination of soft surface trails, boardwalks, and viewing bump-outs near the edge of Evergreen Lake. The project will improve safety by removing pedestrians and most bicyclists from the roadway. At the same time, it will improve system reliability and connectivity, enhance user mobility and experiences, and address ongoing infrastructure issues for the local community and the Denver Region as a whole.

The Evergreen Lake Trail Improvement project is unique among potential TIP projects in several ways. First, it balances two fundamentals of the Regional Transportation Plan: the vision of a connected, multimodal trail system and the need for maintenance and system preservation. In addition, because this project has been spearheaded by the local park & recreation district with extensive public input, it honors local values and furthers local efforts to make crucial infrastructure improvements for our community (see also discussion in response to Question A.5 below). It also creates unique opportunities to leverage project funding already raised and collaborate on project execution, given its multiple partners and stakeholders. Finally, it will produce an excellent return on investment. All engineering, planning, and design will be completed and paid for well before this construction project begins. And in concert with the adjacent Jeffco T&E project (the improvement of JC-73 from downtown Evergreen to Buffalo Park Road), it amplifies safety, reliability, connectivity and mobility gains for an underinvested area in the DRCOG Region.

5. One foundation of a sustainable and resilient economy is physical infrastructure and transportation. How will the

completed project allow people and businesses to thrive and prosper?

In large part, the sustainability and resilience of our Region's economy depend on tourism from across our metropolitan area. In particular, Evergreen's economy relies heavily on tourists who visit to access our high-quality opportunities for outdoor recreation, located in close proximity to I-70 and the Denver Region. A safe, connected, and multimodal trail on the north side of Evergreen Lake is crucial to our community's physical infrastructure and transportation, allowing people and businesses to thrive here.

The public's concern about underinvestment in infrastructure in our unincorporated community has heightened in recent years. In summer 2017, community leader Linda Kirkpatrick published photos of the closed North Lake Trail and other infrastructure issues in downtown Evergreen to show "how a ghost town looks in its early stages of neglect and deterioration." Linda Kirkpatrick, *The Making of a Ghost Town*, July 24, 2017.

The connection between Evergreen's economy and the North Lake Trail was experienced first-hand by local business owners during the trail's closure between April 2016 and November 2017. For example, sales at Seasonally Yours gift shop in Evergreen declined 19% during the trail closure compared to sales for the same 18-month period before and after the closure. See DEED Letter at Att 4.

"The partial closure of [the North Lake Trail] due to repairs over the past two years was felt by business downtown. Businesses reported a noticeable downturn in pedestrian traffic from lakefront visitors. Trail issues have definitely had a detrimental impact on downtown businesses. It precluded visitors spontaneity and affected EDDBA businesses ability to attract potential customers. We are talking about visitors, who in the past would look forward to strolling from summer lake activities to lunch downtown, visitors looking to dine downtown before or after evening Lakefront concerts, and local residents and tourist looking to fully experience major Downtown events like the Dam Duck Derby, the Rodeo Parade and the Holiday walk." Ron Isaacson, owner of Shadow Mountain Gallery, see DEED Letter at Att 4.

Residents have taken action and gotten creative to address infrastructure issues in Evergreen. In 2012, the Downtown Evergreen Economic District (DEED) established the Evergreen Legacy Fund (ELF), a voluntary 1% contribution by local shoppers to help seed projects such as flood clean-ups, art installations, and matching funds for grants toward infrastructure improvements. ELF has pledged \$50,000 toward this project. And an effort is underway to allow Evergreen residents to vote on establishing a local improvement district, ELID, to advance infrastructure projects with a 1% increase to local sales tax. If residents vote to create the local improvement district, "Transportation Infrastructure" and "Trail Connectivity" are the first two entries on ELID's to-do list of improvements.

Once the project is complete, downtown Evergreen businesses will prosper from increased tourism resulting from improved bike/ped connectivity between Evergreen Lake and downtown Evergreen. The local population will benefit from a new active transportation corridor that allows short commutes to work, connections to public transportation, and travel to recreation destinations to be made on foot and bicycles. Visitors from across the the Denver Region also will benefit from improved access, mobility, and better connections to commerce and attractions near the trail.

6. How will connectivity to different travel modes be improved by the proposed project?

Because of Evergreen's vast geography (our rec district covers 78 square miles) and our location in the foothills, residents are far more likely to work from home than the national average (16.7% versus 4.6%), according to 2016 census data. However, Evergreen residents are far less likely to use public transportation (1.2% v. 5.1%), walk (2.1% v. 2.8%) or bike (0% v. 0.6%) to work compared to national averages. 2016 Census data. EPRD recognizes a great opportunity for growth in these areas.

The Evergreen Lake Trail Improvement project will significantly improve conditions for walking and biking to public transportation in Evergreen because the project is less than half a mile along the Pioneer Trail from Evergreen's public transportation hub. For commuters, the Evergreen RTD Station on SH-74 at Christ the King Church (see Map at Att 1) hosts regular bus routes to Denver, a Park-n-Ride parking lot, and a pick-up location for

local FlexRide bus service. RTD Service Performance 2017 data shows there were 83,956 annual daily boardings on the EV bus route in 2017, and that there were 24,337 total FlexRide boardings in Evergreen. For residents who work within the community – 903 people are employed within a mile of the project according to DRCOG figures, see Part 3.B.2 -- the trail improvement will make active transportation to work easier, safer and more pleasant, so that walking and biking to local destinations is increased.

7. Describe funding and/or project partnerships (*other subregions, regional agencies, municipalities, private, etc.*) established in association with this project.

EPRD is proud of its leadership role in engaging project partners, stakeholders, and the community in this effort. There are many governmental stakeholders involved at Evergreen Lake and their respective roles are dictated by a series of intergovernmental agreements signed in the 1980s:

- City & County of Denver (Denver) – owns Evergreen Lake and the land around it, a part of Dedisse Park
- Evergreen Park & Recreation District – operates recreation facilities including Evergreen Lake Trail
- Jefferson County (Jeffco) – home county to the unincorporated Evergreen community & Evergreen Lake
- Colorado Department of Transportation – operates SH-74 along the north side of Evergreen Lake
- Evergreen Metropolitan District – operates Lake’s dam, water source, treatment facilities & distribution main

All of these entities participated in Phase II Planning, and will continue to work together on Phase III Final Design and the construction project that ensues. Their ideas, expertise, and feedback have been invaluable.

CDOT concurred with this DRCOG TIP project on February 8, 2019, and has pledged a project contribution of \$200,000. See CDOT Concurrence Letter at Att 4. CDOT also is the administrator of the \$200,000 TAP grant that will produce the final design for the project. We understand that CDOT will try to incorporate some of the drainage/roadway work of this project into upcoming resurfacing projects.

Other government and agency partnerships provide substantial support to this project as well. Evergreen Metro District (EMD) is contributing \$200,000 to this project and already has provided \$12,500 in funding and extensive consultation to the three planning phases. See EMD Letter at Att 4. The Colorado DOLA provided a matching grant of \$25,000 to kick off the Phase I Engineering Study. And both Jefferson County T&E and Jeffco Open Space have been valuable advisors and active partners in the stakeholder group. See JCOS Letter at Att 5.

Denver is on the project’s planning steering committee and has participated regularly in stakeholder meetings. It has provided EPRD with detailed information about Denver construction permitting and environmental clearance processes, and will continue to consult with EPRD, so that the project can move forward in its complex environment of multiple stakeholders and jurisdictions. The Denver Subregional Forum Chair has written a Letter of Support for the project we submit to the Jeffco Subregional Forum. See Letter at Att 4. We are hopeful that your \$200,000 allocation to the project will further the Subregions' collaboration on the project.

Downtown Evergreen Economic District (DEED) is EPRD’s stalwart local project partner. DEED’s Evergreen Legacy Fund (ELF), which collects voluntary 1% contributions on sales to support local infrastructure projects, will supply \$50,000 toward this project. DEED was early to jump into the project, in summer 2016 when the North Lake Trail first was closed, commissioning conceptual renderings to allow the community to envision the connected, multimodal facility that could be built. See Project Renderings at Att 11 & DEED Letter at Att 4.

Finally, EPRD has been invited to submit the Evergreen Lake Trail Improvement project for the final round of GOCO’s Connect Initiative Program, a five-year strategy aimed at increasing access to outdoor experiences through the construction of trails of local, regional, and statewide significance, which runs from April to September 2019. Our request for \$550,000 in non-federal GOCO funds (15% total project cost) will be leveraged to support this project. We feel confident our project will compete well for construction funding from GOCO, as it was the highest ranking project in GOCO’s last round of Connect Initiative Planning Grants, and earned a \$100,000 in funding to conduct Phase II Planning for this project.

In all, from the initial engineering study into planning/design and through to project completion, non-DRCOG

funding will account for \$1.56 million (37%) of estimated total project costs of \$4.17 million. See Project Cost & Leveraging Worksheet at Att 7. This coordinated effort to plan and fund the Evergreen Lake Trail Improvement project, involving multiple agencies, stakeholders and the public, aligns well with the purpose of the Subregional Share approach to TIP funding allocation, “to allow further collaboration and local values of each geographic region to be part of the project recommendation process, while keeping the overall principles of Metro Vision and the Regional Transportation Plan.” DRCOG Policy on TIP Preparation at p. 19.

B. DRCOG Board-approved Metro Vision TIP Focus Areas and Specific Denver Goals

WEIGHT **30%**

Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on how the proposed project addresses the three DRCOG Board-approved Focus Areas (in bold).

VULNERABLE POPULATIONS AND EQUITY

1.A. Describe how the project will **improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services)** as defined in the [Adopted 2020-2023 TIP Policy](#):

An accessible, hard surface Upper Trail and nature-based Lower Trail with observation areas will improve mobility infrastructure for everyone, especially more vulnerable populations such as seniors, youth, and individuals with disabilities. Addressing mobility issues for everyone, especially our most vulnerable populations, are priorities for EPRD and the Denver Region alike, as discussed in detail in response to Question A.1. This project's primary impact for mobility and access will be to make outdoor recreation experiences and close-in local attractions more accessible and increase usage for vulnerable populations. Estimated weekend daily trail usage by vulnerable populations is 109 users per day, or 25% of all trail users. Based on user tallies conducted in February 2019, estimated annual trail usage by youth, seniors, and members of the disabled population is about 14,000 per year. See Tallies at Att 8.

Local and visiting seniors will benefit because the hard surface Upper Trail will be ADA-compliant and graded to make it accessible for wheelchairs and walkers. Area youth will be served by the creation of an off-street, connected, multimodal trail for the use of roughly 1,450 students who attend Evergreen High School and Wilmot Elementary, which are less than half a mile to the Evergreen Lake Trail. And people with disabilities, including the hundreds of patrons with disabilities served each year by Mountain Community Pathways and EPRD's INSPIRE program, will enjoy improved accessibility, mobility, and experiences at Evergreen Lake (see textbox to the right, response to Question A.1, and MCP and INSPIRE letters at Att 5).

The Evergreen Lake Trail Improvement project also will improve mobility infrastructure by creating an active transportation link to public transportation (the RTD hub at Christ the King Church is less than half a mile from the trail improvement); local schools (Evergreen High School and Wilmot Elementary are less than half a mile away); commerce and tourism (downtown Evergreen abuts this trail improvement); and community services (Evergreen Library and the Jeffco Sheriff & Motor Vehicle offices are less than half a mile away along JC-73). Another major improvement for mobility infrastructure in the area will come with Jefferson County's planned improvements for JC-73 from the intersection of SH-74 to Buffalo Park, a project also under consideration for Jeffco Subregional Share, and a project that we avidly support. The planned JC-73 improvement is less than a quarter mile from the Evergreen Lake Trail Improvement project, and the two projects are linked by the new Connector Trail on the west side of downtown Evergreen, constructed in 2015. Together, these complementary projects will significantly improve mobility, access and connectivity in the area.

As discussed above, this project's mobility infrastructure improvements relate primarily to making outdoor recreation experiences and close-in local destinations more accessible to all, especially vulnerable populations. Evergreen is geographically vast (78 square acres), and access to goods and services is somewhat limited in our rural community. Consequently, many residents drive to goods and services, especially health care, "down the hill" in metro Denver. Because there are only two health facilities within a mile of the project, it is not anticipated that the trail improvements will significantly increase access to health care for vulnerable populations. See Part 3.D.8 below

1.B. Describe how your project is consistent with **Denver's commitments to Equity principles** as defined below, and discussed in more detail in Chapter 4, Access to Opportunity, in the [Blueprint Denver \(Public Review Draft August 6,](#)

2018).

Equity is providing everyone with access to opportunity regardless of income level, race, ethnicity, gender, ability, or age.

Access to opportunity is the hallmark of Blueprint Denver's commitment to Equity principles. This project's improvements primarily relate to the opportunity to connect and access key regional recreational and tourism amenities, many of them owned by the City and County under the Denver Mountain Parks system. In fact, the goal of providing equitable access to the outdoors drove the very formation of Denver Mountain Parks for the enjoyment of all citizens of the City and County of Denver nearly 100 years ago. We are pleased to present a project that will further this goal by improving opportunities to access the outdoors, at one of the Region's favorite recreation destinations, Denver Mountain Park's Dedisse Park.

The Evergreen Lake Trail Improvement project will expand the modalities and improve the accessibility of the trail around Evergreen Lake, in Dedisse Park, reducing any health-related disparities in its use for all users, including vulnerable populations as described in response to Questions A.1 and B.1. Dedisse Park is a free recreational amenity that is open to the public, as is the trail around Evergreen Lake operated by EPRD. With the access and mobility improvements of this project, EPRD seeks to operate the trail so that opportunity disparities do not impact its enjoyment by residents and visitors from across the Denver Region. EPRD prohibits discrimination in all its operations, programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital or family status.

RELIABILITY OF THE MULTIMODAL TRANSPORTATION NETWORK

2.A. Describe how the project will **increase reliability of existing multimodal transportation network** as defined in the ***Adopted 2020-2023 TIP Policy***:

The existing North Lake Trail currently presents a connectivity gap in the area's trail network. This project will increase reliability in our transportation network in several ways. First, this project will convert a 4.5-8' wide, soft-surface, multi-use trail into a 8-10' wide, off-street, multimodal trail system that accommodates bicycles, pedestrians, and persons with disabilities. It will eliminate the trail system's gap and create new multimodal connections, as discussed in detail in response to Questions A.1 above and C.2 below. Moreover, it will replace aging infrastructure and relieve drainage problems that have led to sporadic wall failures, blow-outs and sink holes along the trail, necessitating intermittent and long-term trail closures. The trail has been temporarily repaired and is now open, but storm events, winter snow-loading, spring runoff, drainage problems, erosion, and further corrosion of the steel bin wall will continue to challenge the reliability of the short-term repair. An improved multimodal trail, supported by a gravity wall designed for the drainage, runoff, and erosion issues that challenge the site, will provide critical reliability improvements to infrastructure.

2.B. Describe how the project will meet the goals of the **[Denver Mobility Action Plan](#)**.

This project will support the transportation and recreation choices people want to make when they visit Dedisse Park and Evergreen Lake. It will allow them to use the trail corridor for active transportation to and from their work, commerce, and services. It will allow visitors from across metro Denver to walk a complete loop around Evergreen Lake (1.25 miles) on a safe, accessible, multimodal trail. And it will permit users to make bicycle and pedestrian connections to other regional trails and recreation destinations more effectively. The project's multiple improvements for mobility choices, safety, environment, health, and accessibility are discussed in detail above, and align perfectly with the goals of the Denver Mobility Action Plan.

2.C. If applicable, describe how the project will **increase multimodal person-trip capacity and access** as described in the **[Denver Strategic Transportation Plan \(2008\)](#)**.

This project will serve the vision of the Denver Strategic Transportation Plan by providing safe pedestrian linkages to regionally significant destinations for recreation and tourism (Evergreen Lake and downtown Evergreen, among

others). It will create an off-street bicycle route so that bicyclists can safely ride to regional cycling trails that converge at the project location. And it will improve the failing substrate of the trail corridor -- which leads to intermittent trail closures for maintenance and repair -- to provide efficient and well-maintained infrastructure. As discussed above, the Evergreen Lake Trail Improvement project will create a connected multimodal trail system, for transportation and recreation, that vastly improves accessibility to recreation and the outdoors for all its users.

TRANSPORTATION SAFETY AND SECURITY

3A. Describe how the project will **improve transportation safety and security as defined in the *Adopted 2020-2023 TIP Policy***:

Beyond addressing failing infrastructure, this project's first and most urgent transportation safety improvement is to effectively separate motorists from pedestrians and bicyclists along the constrained corridor of SH-74. First it will provide a separated path for cyclists and pedestrians from the traffic lanes of Evergreen Parkway, SH-74. It will also eliminate the extreme safety risks that arise under current conditions, when the trail needs to be closed for repair or maintenance. Most would-be trail users choose to walk and bike alongside eastbound vehicles on a narrow and curved section of Highway 74 with virtually no shoulder, as discussed above. See Photos at Att 10. Traffic volume on State Highway 74 adjacent to the project site – 18,000 AADT -- is extremely high for a two-lane arterial roadway in a rural setting. CDOT OTIS 2017 Volume Data for Station 103326 on SH-74 west of CR-73.

There have been 36 total vehicle crashes on SH-74 near the project site from 2011 to 2015, including four that involved alcohol. The most common factors contributing to crashes in this segment were driver inexperience (50%), driver preoccupied (33%), and falling asleep at the wheel (8%). See Jefferson County Interactive Crash Map, 2011-15 data, results at Att 9. As discussed above, the lack of shoulder and pattern vehicular accidents adjacent to the project site create heightened risk factors for bicyclists on SH-74. This project will reduce crash risks at the project location for both bicyclists and pedestrians.

Another safety and security improvement will be to fix the infrastructure issues of this active transportation corridor – primarily drainage, roadway characteristics, and support substrate -- and to protect Evergreen Metro District's water distribution line that runs underneath the corridor. Because of the corridor's regional significance for active transportation, recreation, and trail connectivity (see responses to Question A.1 and A.3 above), this safety improvement is paramount to the Evergreen community and the Denver Region as a whole. See DRCOG Active Transportation Plan (2019) Fig 26 at App p. 36.

One more transportation safety improvement will be to provide separation for higher-speed and lower-speed uses, to reduce user conflicts on the existing 4.5-8' trail corridor, which cannot accommodate its multiple users. "As traffic increases on this trail, more user conflicts will result leading to a need to manage modal interactions more aggressively. With a wider trail area, those conflicts can be minimized." Evergreen Trails Master Plan at pp. 48-49, see Att 2; see also response to Question A.1.

3B. Describe how the project will meet the goals of [Denver's Vision Zero Action Plan](#).

This project will help meet Denver's goals in the Denver Vision Zero Action Plan by reducing the exposure of bicyclists and pedestrians to the risks of collisions and crashes along the narrow corridor shared by the trail and SH-74. Traffic volume on SH-74 adjacent to the project site – 18,000 AADT -- is extremely high for a two-lane arterial road in a rural setting. See CDOT OTIS 2017 Volume Data, Station 103326 on SH-74 west of CR-73.

There have been 36 total vehicle crashes on SH-74 near the project site from 2011 to 2015, including four that involved alcohol. The most common factors contributing to crashes in this segment were driver inexperience

(50%), driver preoccupied (33%), and falling asleep at the wheel (8%). The three most common violations cited were following too close (36%), careless driving (32%), and improper driving on mountain highway (10%). See Jefferson County Interactive Crash Map, 2011-15, see Data at Att 9. This data illustrates a substantial risk exposure for bicyclists on SH-74. Although no bicycle/vehicle accidents were identified in the crash data, the lack of shoulder and pattern vehicular accidents adjacent to the project site create heightened risk factors for bicyclists on SH-74.

Most bicyclists along the route choose to ride on the roadway instead of the adjacent trail due to its soft-surface and narrow width. “The only way a cyclist can ride past or along the lake is on Highway 74, or by using the dirt road by the golf course. Hopefully there will be some alternatives for cyclists along the lake with the new North Evergreen Trail.” Phase II Planning Study (Comments at App B at pp. 4). DRCOG Bicycle & Pedestrian Data show two bicycle crashes within 1,200 feet of the project site from 2010-15, to the east on JC-73 just past the intersection of SH-74 & JC-73; and to the west on Upper Bear Creek Road just beyond the North Lake Trail. See Data at Att 9. User tallies conducted at the site in February 2019 confirmed that cyclists generally do not use the current soft-surface trail. Daily average bicycle usage on the adjacent roadway is 180, estimated to be 1% of SH-74’s ADT at the project location. See data at Part 3.B.1 below.

Another crucial safety improvement relates to conditions for bicyclists and pedestrians when the trail is closed for maintenance and infrastructure repairs. Most trail users forego the .8-mile detour around the other side of Evergreen Lake, choosing instead to walk and bike along the curved roadway and narrow shoulders of adjacent Evergreen Parkway (SH-74), which is physically very constrained. See Photos at Att 10.

C. Consistency & Contributions to Transportation-focused Metro Vision and Denver Plans, Goals, and Objectives	WEIGHT 30%
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*Provide **qualitative and quantitative** responses (derived from Part 3 of the application) to the following items on how the proposed project contributes to Transportation-focused Objectives (in bold) in the adopted Metro Vision plan. Refer to the expanded Metro Vision Objective by clicking on links. In addition, provide information related to the consistency with Denver goals, objectives, plans, and priorities.*

MV objective 2	Contain urban development in locations designated for urban growth and services.
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- | | |
|--|---|
| <p>1. Will this project help focus and facilitate future growth in locations where urban-level infrastructure already exists or areas where plans for infrastructure and service expansion are in place?
Describe, including supporting quantitative analysis</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
|--|---|

Because downtown Evergreen serves primarily as the tourism and commerce center for our rural community, downtown Evergreen is designated a “Village Center” (an area of higher economic activity) in the Jeffco Comprehensive Master Plan. The community’s goal for this area is to preserve its small-town character and charm while maintaining and improving infrastructure to support the enjoyment of residents and tourists. Plans for infrastructure to improve the area’s trail network are already in place, under the Evergreen Trails Master Plan of 2015. The Master Plan recommends improvements to both the North Lake Trail and the section of JC-73 between downtown Evergreen and Buffalo Park Road, a project also up for consideration in this Jeffco Subregional Share process. Combined with the adjacent JC-73 project, which we avidly support, the Evergreen Lake Trail Improvement project will help focus and facilitate future growth in the area because together the two projects will incorporate local values, leveraged funding, and coordinated planning to deliver significant mobility, connectivity and safety gains to Evergreen.

"Many of the community's concerns centered on preserving the existing quality of the mountain area environment, including water, air, and wildlife habitat. Another major concern was the protection of the unique natural qualities of the study area and its role as a buffer between the urban area of the plains and the wilderness of the federal lands along the Continental Divide. ... Future growth should respect the unique characteristics of this area. New development and redevelopment should be of a scale and design appropriate for a rural community, should provide for a diversity of housing and services, and should be sensitive to issues such as availability of water, steep slopes, wildfire, visual resources, wildlife, historic structures, transportation." Evergreen Area Plan (2015) at p. 4-5.

[MV objective 3](#)

Increase housing and employment in urban centers.

2.A. Will this project help establish a network of clear and direct multimodal connections within and between urban centers, or other key destinations?

Yes No

Describe, *including supporting quantitative analysis*

The Evergreen Lake Trail Improvement project will help establish clear and direct multimodal connections between the Evergreen Lake/downtown Evergreen area to all points north along SH-74, including Bergen Park (a Metro Vision urban center), because the regional Pioneer Trail begins in Bergen Park and ends at the project site of the Evergreen Lake Trail Improvement. To the east, the project will help establish multimodal connections to Morrison (also a Metro Vision urban center) along the regional Bear Creek Trail. To the south, the project will help establish a multimodal connection to Conifer (another nearby Metro Vision urban center) along JC-73. See DRCOG Active Transportation Plan (2019) Fig 26 at App p. 36.

The 2012 Jefferson County Bicycle and Pedestrian Plans confirm a vision for developing active transportation corridors in all directions from the project site: to the north, the existing Pioneer Trail to Bergen Park; to the west, a proposed shared-use path to Evergreen High School; to the south, a proposed paved shoulder along JC-73 to Conifer; and to the east, a proposed paved shoulder along JC-74/Bear Creek Road (SH-74) to Morrison. Jefferson County Bike Plan (2012); Jefferson County Pedestrian Plan (2012). The Jefferson County Open Space Master Plan (2014-2019) similarly shows a potential connection (or gap in existing networks) from the project area eastward to Morrison and southward to Conifer. Jeffco Open Space Master Plan (2014-2019) Map 6.

The project also helps establish clear and direct multimodal connections to the following key destinations for tourism, recreation, transportation, commerce and education in the community:

- Downtown Evergreen (adjacent)
- Evergreen Lake (adjacent)
- Evergreen Golf Course (1/4 mile away)
- Evergreen Nature Center (1/4 mile away)
- Evergreen Library (1/4 mile away)*
- Jeffco Sheriff & Motor Vehicle offices (1/4 mile away)*
- Senior Resource Center (1/2 mile away)*
- Wulf Recreation Center (1/2 mile away)*
- Evergreen High School (1/2 mile away)*
- Wilmot Elementary School (1/2 mile away)*
- RTD Station on SH-74 (1/2 mile away)
- Hiking along the regional Pioneer Trail to the north (connected)
- Road rides up Upper Bear Creek Road to the west (potentially connected)
- Road rides down Bear Creek Road (JC-74) to the east (potentially connected)
- Regional and local Parks potentially connected to the project by the Pioneer Trail include:
 - o Dedisse Park (Denver)
 - o Elk Meadow Park (Jeffco)
 - o Stagecoach Park (EPRD)

- o Buchanan Park (EPRD)
 - o Bergen Park (Denver)
- * A network of clear and direct multimodal connections to these locations will be achieved by this project in complement with Jeffco T&E’s project for improving JC-73 between SH-74 and Buffalo Park Road, as discussed in response to B.1 and C.1 above.

2.B. How does this project focus or serve desired growth in areas identified on the Places map (Chapter 5, p. 126) in the [Blueprint Denver \(Public Review Draft August 6, 2018\)](#)?

The Neighborhood Context and Future Places maps in Blueprint Denver do not include Denver Mountain Parks land. However, this project will serve the access to opportunity and quality-of-life goals that Denver has for all its citizens, in all of Denver's neighborhoods, as discussed above.

MV objective 4

Improve or expand the region’s multimodal transportation system, services, and connections.

3.A. Will this project help increase mobility choices within and beyond your subregion for people, goods, or services?

Yes No

Describe, *including supporting quantitative analysis*

The Evergreen Lake Trail Improvement project will help increase mobility choices within and beyond the Jeffco Subregion by improving multimodal transportation connections for community members and visiting tourists. State Highway 74 is the main street of downtown Evergreen, and the east end of the North Lake Trail connects to the sidewalks of main street via a new Connector Trail installed in 2015. The project will provide off-street, ADA-compliant bike/ped access to downtown, where many community members work (903 people work within a mile of the project, see Part 3.C.1). Mobility choices for local residents will be increased because the project expands the safe route options for non-drivers, including youth, seniors, and individuals with disabilities. Data shows that 549 youth, seniors or individuals with disabilities live within a mile of the project site (Part 3.D), and trail use tallies indicate roughly 25% of trail use by vulnerable populations (see Tallies at Att I). The trail is less than a mile from important community destinations including Evergreen High, Wilmot Elementary, the Senior Resource Center, Evergreen Public Library, and the RTD Station on SH-74 at Christ the King Church. Please refer to the responses to Questions A.1, A.6, B.1 and C.2 above for further discussion.

3.B. If applicable, describe how this project is consistent with Denver’s specific alternative mode and/or project priorities contained in one or more of **Denver’s modal plans linked below or small area plans** (Neighborhood Planning Initiative, corridor plans, station area plans, Next Steps Studies, etc.). See Denvergov website: denvergov.org search bar and specific plan links below:

NOTE: The application does not need to address numerous plans. Provide documentation for the most applicable or relevant document(s) or plan(s).

Examples are listed below:

- Denver Moves: Transit
<https://www.denvergov.org/content/denvergov/en/denveright/transit.html>
- Denver Moves: Pedestrian and Trails
<https://www.denvergov.org/content/denvergov/en/denveright/pedestrians-trails.html>
- Denver Moves: Bicycles
https://www.denvergov.org/content/dam/denvergov/Portals/708/documents/FINAL_Denver_Moves.pdf
- Transit Oriented Development (TOD) Strategic Plan
https://www.denvergov.org/content/dam/denvergov/Portals/193/documents/TOD_Plan/TOD_Strategic

[Plan_FINAL.pdf](#)

- Small area plans (Neighborhood Planning Initiative, corridor plans, station area plans, Next Steps studies, etc.)

Among the many Denver plans that exist, Denver Mountain Parks Master Plan of 2008 probably provides goals and objectives most relevant to this project. Denver Mountain Park's Master Plan observes: "Dedisse Park has some of the best designed and highest quality structures, roadwork, and woods and meadows. ... It is a model Denver Mountain Park. At the same time, it is connected to wider, regional amenities through partnerships with EPRD and Jefferson County Open Space. As Evergreen grows, the popularity and programming of large events at the lake increases and trail use also grows, impacting the park. Preserving the natural and cultural resources in the face of increasing use, traffic, and growth is the major challenge at Dedisse. It is an issue facing both Denver Mountain Parks and EPRD." Denver Mountain Parks 2008 Master Plan at p. 114.

This project presents an opportunity for Denver and EPRD (along with CDOT, Jeffco, and EMD) to collaborate to face this challenge head-on, by creating better bike/ped facilities, enhance user experiences, and improve aging infrastructure on the loop trail around Evergreen Lake in Dedisse Park. In this way, it meets the goals of the DRCOG Subregional Share process to encourage multi-agency collaboration to solve issues that present mutual challenges.

[MV objective 6a](#)

Improve air quality and reduce greenhouse gas emissions.

4.A. Will this project help reduce ground-level ozone, greenhouse gas emissions, carbon monoxide, particulate matter, or other air pollutants?

Yes No

Describe, including supporting quantitative analysis

The Evergreen Lake Trail Improvement project will increase bicycling and walking, potentially reducing the carbon-based vehicle miles traveled. Calculations from Part 3.B.9 and 3.C.8 suggest that at least 129 pounds of GHG emissions will be reduced when the project is completed. Part 3 data also suggests that the trail will help reduce vehicle trips and hence the ADT (currently 18,000) on the adjacent state highway.

The project will make other environmental improvements as well. In the Phase II Planning process, minimizing environmental impacts to Evergreen Lake and the project site were important criteria considered in selecting the recommended alternative. The project is planned to improve the environment and quality of Evergreen Lake by incorporating drainage and storm water management systems to reduce roadway runoff, storm water runoff, and sediment into the lake. In addition, fishing platforms and piers along the Lower Trail will "minimiz[e] bank erosion caused by the current fishing uses and improve water quality." Evergreen Trails Master Plan (2015) at pp. 48-49, see Att 2. For a more detailed discussion of environmental benefits and mitigation of the project, please see the Phase II Planning Study at pp. 29 & 66-68.

4.B. If applicable, describe how this project is consistent with, or helps implement, Denver's [80x50 Climate Action Plan](#), which set the City's target to **reduce greenhouse gas emissions to 80% below 2005 levels by 2050**, and/or Denver's [2020 Sustainability Goals](#).

At this time, we do not believe this project will have quantifiable impact on the City of Denver's target to reduce gas emissions according to the 80x50 Climate Action Plan and the 2020 Sustainability Goals.

4.C. If applicable, describe if this project contains **water quality and green infrastructure** consistent with project types and focus areas identified in Denver's [Green Infrastructure Implementation Strategy](#):

The project is planned to improve the environment and quality of Evergreen Lake by incorporating drainage and storm water management systems to reduce roadway runoff, storm water runoff, and sediment into the lake. In addition, fishing platforms and piers along the Lower Trail will “minimiz[e] bank erosion caused by the current fishing uses and improve water quality.” Evergreen Trails Master Plan (2015) at pp. 48-49, see Att 2. For a more detailed discussion of environmental benefits and mitigation of the project, please see the Phase II Planning Study at pp. 29 & 66-68.

[MV objective 7b](#)

Connect people to natural resource or recreational areas.

5.A. Will this project help complete missing links in the regional trail and greenways network or improve other multimodal connections that increase accessibility to our region’s open space assets?

Yes No

Describe, including supporting quantitative analysis

Besides addressing urgent safety concerns, connecting people to natural resources/recreation areas is the strong suit of this project. “The Denver region’s quality of life depends in part on the abundant recreational opportunities nearby. Thousands of people travel to and from recreational activities in the mountainous areas of Colorado, both within the Denver region and adjacent to it.” Metro Vision Regional Transportation Plan at p. 26. Because the project is located at a hub for the Region’s trail, open space, and recreation systems, it will increase access to our Region’s open space/recreation assets by completing missing links and providing multimodal trail connections. The Evergreen Lake Trail Improvement project completes these missing links:

- Pedestrian: accessible, off-street pedestrian pathway to nearby recreation facilities in Dedisse Park, which is owned by the City & County of Denver, including Evergreen Lake (fishing & boating), Evergreen Lake House (community events), Evergreen Lake Loop Trail and Dedisse Park trails (hiking), Evergreen Nature Center (environmental education programming), and Evergreen Golf Course (golf and cross-county skiing)
- Bicycle: off-street bicycle route to above locations, as well as road rides up Upper Bear Creek Road to the west and down Bear Creek Road (SH-74) to the east

The project will make these regional trail connections:

- The regional Pioneer Trail to the north
- The proposed multimodal trail on JC-73 to the south
- Rides west on Upper Bear Creek Road to US Forest Service’ Mount Evans Wilderness area
- Rides east on Bear Creek Road (SH-74) to Red Rocks Park and Morrison
- Rides north on SH-74 to connect to rides on Squaw Pass Road and Denver's Genesee Trail
- Rides south on JC-73 to Conifer to the east

Beyond linking to the nearby outdoor recreation facilities listed above, the project will improve access to these open space assets in Evergreen, via Dedisse Park trails (owned by the City & County of Denver) and/or the Pioneer Trail:

- Alderfer/Three Sisters Park (Jeffco)
- Elk Meadow Park (Jeffco)
- Stagecoach (EPRD)
- Buchanan Park (EPRD)
- Bergen Park (Denver)

5.B. If applicable, describe how your project meets the goals, objectives and priorities of the Denver Department of Parks and Recreation’s [Game Plan for a Healthy City \(Public review draft 2018\)](#).

“Denver's mountain parks are a unique asset for residents of the city and region. Proposed by the City as a method for preserving the magnificent beauty of the Rocky Mountains within the city's viewshed, the Olmsted brothers

identified the best acreage for the mountain park system in 1912. The system now includes 22 accessible parks and 24 conservation areas that extend across four counties, range in altitude from 6,000 to 13,000 feet and encompass more than 14,000 acres. These diverse landscapes are home to six main plant communities and abundant wildlife, including two healthy bison herds, elk, and mountain goats.” Game Plan at p. 175.

Denver Parks & Recreation's Game Plan for a Healthy City has set as a priority strategy to "Expand access, amenities, programs, and ease of use to improve the experience of the mountain parks to encourage more use by Denver residents." Game Plan at p. 159. This project puts that priority in motion at Dedisse Park by expanding access and ease of use of the trail around Evergreen Lake in Dedisse Park.

[MV objective 10](#)

Increase access to amenities that support healthy, active choices.

6. Will this project expand opportunities for residents to lead healthy and active lifestyles?

Yes No

Describe, *including supporting quantitative analysis*

“The Denver region’s quality of life depends in part on the abundant recreational opportunities nearby. Thousands of people travel to and from recreational activities in the mountainous areas of Colorado, both within the Denver region and adjacent to it.” Metro Vision Regional Transportation Plan at p. 26.

Because this project will provide a connected, off-street, multimodal trail for walking and biking in the heart of Evergreen, at a regional hub for outdoor recreation, the project vastly expands opportunities for our residents and visitors to lead healthy and active lifestyles. First, the Evergreen Lake Trail Improvement project will improve active recreational opportunities for all of its users – bicyclists, hikers, runners, strollers, dog walkers, and individuals with disabilities. User tallies conducted in February 2019 showed an estimated average weekend daily pedestrian trail use of 434, translating to an estimated 56,000 trail users per year. See data at Part 3.C.1 below, see estimated Trail Use at Att 8. It also will enhance users connections to nature (and thereby enhance health and well-being) by adding a lake-level path and bump-outs for fishing and wildlife viewing.

Its connections to other recreation outlets and community destinations also support healthy and active choices for its users. It will expand bike/ped access to the skating, boating, fishing, hiking, gathering spaces, and events available throughout the year at Evergreen Lake Park, which enjoys an estimated 160,000 visits annually. It will improve bike/ped connections to other nearby outdoor recreation facilities, trails and open space described above in response to Question C.5. And it will vastly improve conditions for residents to walk and bike to the community destinations discussed above in response to Question C.2.

"Trails connect us to nature, and can provide for healthy unstructured exercise. With the increase in use by larger and a more health minded population we will need more trail opportunities for uses that have differing requirements. While multiple use trails have served the masses well for many years, it is time to explore more alternating use, directional use, and single use trails to enhance the experience and safety for hikers, runners, equestrians and mountain bikers." Jeffco Open Space Master Plan 2014-19, p. 20.

[MV objective 13](#)

Improve access to opportunity.

7.A. Will this project help reduce critical health, education, income, and opportunity disparities

Yes No

by promoting reliable transportation connections to key destinations and other amenities?

Describe, including supporting quantitative analysis

This project's improvements primarily relate to connectivity and access to key community and regional recreational/tourism amenities for visitors from the Denver Region. The Evergreen Lake Trail Improvement project will expand the modalities and improve the accessibility of the trail, reducing any health-related disparities in its use for all users, including vulnerable populations as described in response to Questions A.1 and B.1. The Evergreen Lake Trail and the park around Evergreen Lake are free recreational amenities that are open to the public. EPRD strives to operate these amenities so that education, income or opportunity disparities do not impact their enjoyment by residents and visitors from across the Denver Region. EPRD prohibits discrimination in all its operations, programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital or family status

7.B. Describe how your project addresses the neighborhood inequities related to transportation as depicted and mapped in the **Denver Neighborhood Equity Index** which was produced by the Denver Department of Public Health and Environment, which helps to inform decision makers about where city investment and resources are needed most for those living in Denver's underserved neighborhoods?

General information on the Neighborhood Equity Index is on the Denvergov website:

<https://www.denvergov.org/content/denvergov/en/environmental-health/community-health/health-in-all-policies.html>

See the interactive map, by opening this [link](#) in a new window. The source of each indicator is described in the map. Click on each individual link and see specific map layers; for example, in Built Environment, there is information on "Access to Parks" separately.

This project falls outside of the Denver Neighborhood Equity Index. Equity gains for all Denver residents by improving accessibility and mobility to one of the Denver Region's premiere recreation destinations is discussed above in response to Question B.1.B.

MV objective 14

Improve the Denver Subregion's competitive position.

8. Will this project help support and contribute to the growth of the subregion's economic health and vitality?

Yes No

Describe, including supporting quantitative analysis

This project will support and contribute to the Denver Region's economic health and vitality by boosting tourism and commerce in Evergreen. The North Lake Trail provides the non-motorized entryway to downtown Evergreen, which is a regional tourist destination. A recent study of sales by zip code by one downtown business confirmed that 44% of sales were made to customers from outside of Evergreen. See DEED Letter at Att 4. The connection makes it possible for a family to boat, skate, hike or attend an event at the lake, stroll into downtown Evergreen for a meal and shopping, and return to the lake again, in a span of three hours or over the course of a day.

"We are talking about visitors, who in the past would look forward to strolling from summer lake activities to lunch downtown, visitors looking to dine downtown before or after evening Lakefront concerts, and local residents and tourist looking to fully experience major Downtown events like the Dam Duck Derby, the Rodeo Parade and the Holiday walk." Ron Isaacson, Board member of Evergreen Downtown Business Association (EDBA), see DEED Letter at Att 4.

Anecdotal information from local business owners highlight the North Lake Trail's positive impact to commerce in Evergreen (and conversely, the trail closure's negative impact). For example, sales at Seasonally Yours gift shop

in Evergreen declined 19% during the trail closure compared to sales for the same 18-month period before and after the closure. Id at Att 4. “Businesses reported a noticeable downturn in pedestrian traffic from lakefront visitors. Trail issues have definitely had a detrimental impact on downtown businesses. It precluded visitors spontaneity and affected EDDBA businesses ability to attract potential customers.” Id at Att 4

D. Project Leveraging

WEIGHT 10%

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?

31%

60%+ outside funding sources High
 30-59% Medium
 29% and below Low

Part 3

Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1. Current ridership weekday boardings	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	0	0	0
2040	0	0	0

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. (Using 50% growth above year of opening for 2040 value, unless justified) <i>Provide supporting documentation as part of application submittal</i>	0	0
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. (Example: {#3 X 25%} or other percent, if justified)	0	0
5. Enter number of the new transit boardings (from #3 above) that were previously using other non-SOV modes (walk, bicycle, HOV, etc.) (Example: {#3 X 25%} or other percent, if justified)	0	0
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	0	0
7. Enter the value of {#6 x 9 miles} . (= the VMT reduced per day) (Values other than the default 9 miles must be justified by sponsor; e.g., 15 miles for regional service or 6 miles for local service)	0	0
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	0	0
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. If different values other than the suggested are used, please explain here:		

B. Bicycle Use

1. Current weekday bicyclists	180
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	1,923	903	2,826

2040	2,274	974	3,248
Bicycle Use Calculations		Year of Opening	2040 Weekday Estimate
3.	Enter estimated additional weekday one-way bicycle trips on the facility after project is completed.	90	135
4.	Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: {#3 X 50%} or other percent, if justified)	9	14
5.	= Initial number of new bicycle trips from project (#3 – #4)	81	121
6.	Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: {#5 X 30%} (or other percent, if justified)	24	36
7.	= Number of SOV trips reduced per day (#5 - #6)	57	85
8.	Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	114	170
9.	= Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	108	161
10.	If values would be distinctly greater for weekends, describe the magnitude of difference: The bicycle use calculation is based on ADT at the project location. Because the facility is primarily a recreational trail, use is highly variable due to weather, season, and weekend v. weekday. We believe these values would be at least doubled if measured on weekend days.		
11.	If different values other than the suggested are used, please explain here: See above. Because the facility is primarily a recreational trail, use is highly variable due to weather, season, and weekend v. weekday. We believe these values would be at least doubled if measured on weekend days.		

C. Pedestrian Use

1.	Current weekday pedestrians (include users of all non-pedaled devices)	434
2.	Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	19,230	9,030	28,260
2040	22,740	9,740	32,480

Pedestrian Use Calculations		Year of Opening	2040 Weekday Estimate
3.	Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed	87	131
4.	Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: {#3 X 50%} or other percent, if justified)	9	13
5.	= Number of new trips from project (#3 – #4)	78	118

6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: {#5 X 30%} or other percent, if justified)	23	35
7. = Number of SOV trips reduced per day (#5 - #6)	55	83
12. Enter the value of {#7 x .4 miles} . (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor)	22	33
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	20	31
9. If values would be distinctly greater for weekends, describe the magnitude of difference: Estimated daily counts on winter weekends were used. Therefore, values shown are for average daily use on winter weekend day. Summer trail use values would be distinctly greater.		
10. If different values other than the suggested are used, please explain here: Estimated daily counts on winter weekends were used. Therefore, values shown are for average daily use on winter weekend day. Summer trail use values would be distinctly greater.		

D. Vulnerable Populations

Use Current Census Data	Vulnerable Populations	Population within 1 mile
	1. Persons over age 65	
2. Minority persons		74
3. Low-Income households		34
4. Linguistically-challenged persons		4
5. Individuals with disabilities		91
6. Households without a motor vehicle		9
7. Children ages 6-17		222
8. Health service facilities served by project		02

E. Travel Delay *(Operational and Congestion Reduction)*

Sponsor must use industry standard Highway Capacity Manual (HCM) based software programs and procedures as a basis to calculate estimated weekday travel delay benefits. *DRCOG staff may be able to use the Regional Travel Model to develop estimates for certain types of large-scale projects.*

1. Current ADT (average daily traffic volume) on applicable segments	18,000
2. 2040 ADT estimate	19,800
3. Current weekday vehicle hours of delay (VHD) (before project)	0

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	0
5. Enter value of {#3 - #4} = Reduced VHD	0
6. Enter value of {#5 X 1.4} = Reduced person hours of delay (Value higher than 1.4 due to high transit ridership must be justified by sponsor)	0

<p>7. After project peak hour congested average travel time reduction per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). <i>If applicable, denote unique travel time reduction for certain types of vehicles</i></p>	0
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8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.

9. If different values other than the suggested are used, please explain here:

F. Traffic Crash Reduction

<p>1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians <i>(most recent 5-year period of data)</i></p>		<p>Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices <i>(e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology)</i>.</p>
<p>Fatal crashes</p>	0	
<p>Serious Injury crashes</p>	7	
<p>Other Injury crashes</p>	29	
<p>Property Damage Only crashes</p>	36	
<p>2. Estimated reduction in crashes <u>applicable to the project scope</u> <i>(per the five-year period used above)</i></p>		
<p>Fatal crashes reduced</p>	0	
<p>Serious Injury crashes reduced</p>	0	
<p>Other Injury crashes reduced</p>	0	
<p>Property Damage Only crashes reduced</p>	0	

G. Facility Condition

Sponsor must use a current industry-accepted pavement condition method or system and calculate the average condition across all sections of pavement being replaced or modified.
Applicants will rate as: Excellent, Good, Fair, or Poor

Roadway Pavement

<p>1. Current roadway pavement condition</p>	Fair
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2. Describe current pavement issues and how the project will address them.

Regarding request for crash reduction estimates above, this project will reduce exposure to potential crashes as discussed in response to Question A.1. Based on the project area and scope, it is difficult to calculate a statistical impact on certain crash types at the intersections on either end of the project, and along the project corridor there is not an identifiable motor vehicle/ped/bike collision pattern to affect.

Regarding current pavement issues at the project area, drainage along SH-74 within the project area is poor. The project will include drainage improvements to protect the investment in the trail and minimize necessary maintenance on SH-74.

<p>3. Average Daily User Volume</p>	18,000
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Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Poor
5. Describe current condition issues and how the project will address them. Existing facility is narrow, soft-surface trail. Its trail width and railing are substandard, and the trail's supporting wall structure is failing. See Photos at Att 10.	
6. Average Daily User Volume	434

H. Bridge Improvements

1. Current bridge structural condition from CDOT	
2. Describe current condition issues and how the project will address them.	
3. Other functional obsolescence issues to be addressed by project	
4. Average Daily User Volume over bridge	0

I. Other Beneficial Variables *(identified and calculated by the sponsor)*

1.	
2.	
3.	

J. Disbenefits or Negative Impacts *(identified and calculated by the sponsor)*

1. Increase in VMT? <i>If yes, describe scale of expected increase</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Negative impact on vulnerable populations	
3. Other:	