

2022–2025 Transportation Improvement Program (TIP)

Jefferson County Subregional Share Project Application Form

APPLICATION OVERVIEW

The Call for Projects will open on April 26, 2021, with applications due no later than 3 p.m. on June 21, 2021 to Josh Schwenk, DRCOG, at ischwenk@drcog.org.

- Project sponsors must have attended one of the mandatory <u>TIP submittal training workshops</u> associated with the previous 20-23 TIP back in 2018. If you are aware no one from your agency attended or are unsure, please contact <u>staff</u>.
- Projects requiring CDOT and/or RTD concurrence must provide their official response within their
 application submittal. The CDOT/RTD concurrence request is due to CDOT/RTD no later than May 5,
 with CDOT/RTD providing a response no later than June 4. The concurrence form can be found here.
- Each eligible project sponsor within the subregion may submit a maximum of <u>two</u> applications for consideration. The final panel recommendation will be capped at approximately \$5.9 million in DRCOG funding requests.
- Individual appropriate applications and other data to assist you in filling out your requests can be found here. If applicants need additional data from DRCOG for the completion of their application, they must contact DRCOG staff no later than June 1 with their request.
- The application must be affirmed by either the applicant's City or County Manager, Chief Elected Official (Mayor or County Commission Chair) for local governments, or agency director or equivalent for other applicants.
- Detailed information about sponsor and project eligibility for each share is contained within the 2020-2023 TIP Policy.

APPLICATION FORM OUTLINE

The 2022-2025 TIP Subregional Share application contains three parts: base project information (Part 1), evaluation questions (Part 2), and data calculation estimates (Part 3). DRCOG staff will review each forum's submitted applications for eligibility. Each forum will be responsible for making a comprehensive evaluation of all eligible applications and rank ordering their submittals to determine their recommended projects and waiting lists. Forum recommendations will be forwarded to DRCOG staff for a final recommendation to the TAC, RTC, and DRCOG Board.

Part 1 | Base Information

Applicants will enter **foundational** information for their *project/program/study* (hereafter referred to as *project*) in Part 1, including a Problem Statement, project description, and concurrence documentation from CDOT and/or RTD, if applicable. Part 1 will not be scored.

Part 2 | Evaluation Criteria, Questions, and Scoring

This part includes four sections (A-D) for the applicant to provide qualitative and quantitative responses to use for scoring projects. The outcomes from Part 3 should guide the applicant's responses in Part 2.

Scoring Methodology: Each section will be scored using a scale of *High-Medium-Low*, relative to other applications received. The four sections in Part 2 are weighted and scored as follows:

High	The project will significantly address a clearly demonstrated major subregional problem and benefit people and businesses from multiple subregions.
Medium	The project will either moderately address a major problem or significantly address a moderate-level subregional problem.
Low	The project will address a minor subregional problem.

High	The project will significantly improve the safety and/or security, significantly increase the reliability of the transportation network, and benefit a large number and variety of users (including vulnerable populations*).
Medium	The project will moderately improve the safety and/or security, moderately increase the reliability of the transportation network, and benefit a moderate number and variety of users (including vulnerable populations*).
Low	The project will minimally improve the safety and/or security, minimally increase the reliability of the transportation network, and benefit a limited number and variety of users (including vulnerable populations*).

^{*}Vulnerable populations include: Individuals with disabilities, persons over age 65, and low-income, minority, or linguistically-challenged persons.

Section B. Consistency & Contributions to Transportation-focused Metro Vision Objectives 20% Metro Vision guides DRCOG's work and establishes shared expectations with our region's many and various planning partners. The plan outlines broad outcomes, objectives, and initiatives established by the DRCOG Board to make life better for the region's residents. The degree to which the outcomes, objectives, and initiatives identified in Metro Vision apply in individual communities will vary. Metro Vision has historically informed other DRCOG planning processes, such as the TIP.

	High	The project will significantly address Metro Vision transportation-related objectives and is determined to be in the top third of applications based on the magnitude of benefits.
ı	Medium	The project will moderately address Metro Vision transportation-related objectives and is determined to be in the middle third of applications based on the magnitude of benefits.
	Low	The project will slightly or not at all address Metro Vision transportation-related objectives and is determined to be in the bottom third of applications based on the magnitude of benefits.

% of Outside	High	60% and above
Funding (non-Subregional	Medium	30-59%
Share)	Low	29% and below

Part 3 | Project Data – Calculations and Estimates

Based on the applicant's project elements, sponsors will complete the appropriate sections to estimate usage or benefit values. Part 3 is not scored, and the quantitative responses should be used to back-up the applicant's qualitative narrative.

1	Part 1 Base Information					
1.	Project Title Ph			Enhancements, Evergreen Lake Trail Improvement		
2.	Project Start/End points or Geographic Area Provide a map with submittal, as appropriate		milepos	On the north side of Evergreen Lake, along Evergreen Parkway SH-74 at nileposts 7.0-8.0 and west of the SH-74/CR-73 Intersection in downtown vergreen. See Map at Att 1.		
3.	Project Sponsor (enti construct/ complete and responsible for the project	be financially	Evergre	en Park & Recreation District		
4.	Project Contact Pers Phone Number, and			Connor, Executive Director 0-1011; eoconnor@eprd.co		
5.	• •	_	•	nvolve a CDOT roadway, See CDOT concurrence email at Att 2.		
		<u>D</u>	RCOG 2050	RTP		
6.			38-39, 50-52 and Trail Recommendation Map C in App C <u>Jefferson County Open Space Master Plan</u> (2014-19), Trails Map <u>Jefferson County Evergreen Area Plan</u> (2015) <u>Jefferson County Bicycle Plan</u> (2012)			
		□ o	ther(s):	DRCOG Active Transportation Plan (2019) at Fig 14 (p. 16), Fig 19 (p. 34) and Fig 26 (App p. 36)		
	Provide link to a with submittal			ument/s and referenced page number if possible, or provide documentation		
7.	Identify the project's	s key elements	S .			
	 □ Rapid Transit Capacity (2050 FCRTP) □ Transit Other: □ Bicycle Facility □ Pedestrian Facility □ Safety Improvements □ Roadway Capacity or Managed Lanes (2050 FCRTP) □ Roadway Operational 		ŕ	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?

Safety & Security. The Evergreen Lake North Trail in its current state poses safety and security concerns due to the 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 trail. The existing multi-use trail also poses safety concerns arising from inevitable user conflicts on its narrow tread. The ongoing infrastructure failures of the trail's substrate further exacerbate the safety issues at the project site. 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. See Photos at Att 4.

Connectivity & Mobility. In its current state the Evergreen Lake North Trail does not provide a reliable and effective connection to regional trails that converge here, area recreation hubs, commerce in downtown Evergreen, and regional transportation networks, compromising mobility in and around our community.

Equitable Access. The existing, soft-surface Evergreen Lake North Trail presents issues for access and mobility to and around our community's business and recreation center, especially for vulnerable populations including young and old trail users and persons with disabilities.

Reliability & Lifespan. The support structure under the existing soft-surface trail is failing due to years of roadway and stormwater run-off penetrating the 30+ year-old steel bin wall. The trail is often closed for surface and wall repairs – in 2016-17, for over a year. The soft-surface tread also makes it difficult to maintain and plow.

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

Phase 1 construction of the Evergreen Lake Trail Improvement will include a **curb and gutter buffer** between SH-74 and trail users; a **gravity support wall**; the **Upper Trail**, an off-street, multi-use, accessible, hard surface trail of 10' width near SH-74; the **Lower Trail**, a 5-foot-wide soft-surface pedestrian trail with fishing and wildlife viewing areas; and **one drainage inlet** to improve roadway and stormwater run-off into Evergreen Lake.

During Final Design of the Phase 1 construction project, opportunities were identified to enhance the trail system's safety, connectivity, accessibility and reliability. Those enhancements have been incorporated into the project's final design and clearance processes, and will be ready for installation along with the original Phase 1 project elements. The **Phase 2 Enhancements** that are the subject of this request for funding are:

- Safety post & cable rail system replace originally-scoped split rail fence between SH-74 and multi-use trail;
- **East-end access & mobility improvements** extend trail to the east to complete AASHTO and ADA compliant connection to Connector Trail and downtown Evergreen;
- West-end access & mobility improvements extend project limits on west end of trail and create accessible transition between Upper & Lower Trails plus accessible connection from Fisherman's Parking Lot north of SH-74.
- **Lower Trail expansion and accessibility improvements** -- make access to and entire length of the Lower Trail fully accessible and add more bulb-outs for fishing and wildlife viewing; and
- **Better drainage under SH-74 and multi-use trail** increase inlets from one to four to minimize drainage overflows to protect structural integrity of retaining wall and to reduce run-off or sediment into the lake.
- **10.** What is the status of the proposed project?

Planning and design for this project are fully funded, and final design is nearly complete. The Phase I Preliminary Study was completed in July 2017. The Phase III Planning Study was completed in September 2018. Phase III Engineering & Final Design is in its last stages under CDOT leadership with stakeholder involvement under a 2016 TAP grant awarded by CDOT. Final Design includes all environmental and historic clearance work, permitting, a traffic control plan, and construction drawings, and is expected to be completed by August 2021. EPRD expects to advertise the project for bid by September 30, 2021. Phase 1 construction is already federalized and fully funded under DRCOG TIP Project #2020-025, found here. EPRD is seeking \$500,000 to add Phase 2 Enhancements to the existing construction project, planned for summer 2022.

	Enhancements to the existing construction project, planned for summer 2	022.	
11.	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.

While we anticipate that the Phase 2 improvements will add roughly \$500,000 to the existing \$3.8M construction project, it is too soon to tell to what extent the project is scalable because project bidding is expected to occur in Fall 2021. EPRD will scale the project according to available funding after bids are received. We expect we will have to forego some of the Phase 2 enhancement elements, and perhaps some Phase 1 elements as well, should we be unsuccessful in securing full funding for these enhancements.

A. Project Financial Information and Funding Request

Total Project Cost For Financial Information on the Evergreen Lake Trail Improvement Project as a whole (both Phases 1 & 2), please see the attached Proposed Financial Package at Att 3, which was submitted to CDOT on May 5, 2021 as part of EPRD's Request for CDOT Support. Total amount of DRCOG Subregional Share Funding Request

\$500,000

2.	Total amount of DRCOG Subregional Share Funding Request	\$400,000	80% 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
	Evergreen Metro District	\$50,000	10%
	Downtown Evergreen Economic District	\$50,000	10%
		\$	
		\$	
		\$	
		\$	
	Total amount of funding provided by other funding partners (private, local, state, Regional, or federal)	\$100,000	20%

Funding Breakdown year)*	(year by	The proposed Junding 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 2021.			
	FY 2022	FY 2023	FY 2024	FY 2025	Total
Federal Funds	\$400,000	\$	\$	\$	\$0
State Funds	\$	\$	\$	\$	\$0
Local Funds	\$100,000	\$	\$	\$	\$0
Total Funding	\$500,000	\$0	\$0	\$0	\$0
4. Phase to be Initiated Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other	CON	Choose an iten	Choose an item	Choose an ite	

*The proposed funding plan is not guaranteed if the project is selected for funding. While

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

40

Provide <u>qualitative and quantitative</u> (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 your subregion?

This Phase 2 Enhancements project is important to the Jeffco Subregion because it will make the Evergreen Lake Trail Improvement safer and more secure, increase connectivity and mobility, improve accessibility for all users, and create a more reliable trail system with easier maintenance and a longer lifespan.

Evergreen lies at 7,500 feet on the far western edge of unincorporated Jeffco. Evergreen Lake is an extremely popular outdoor recreation destination (est. 160,000 visits per year) linked to downtown Evergreen by this trail. It serves as a gateway to outdoor recreation, foothills open space, and mountain main street for all the residents of Jefferson County and visitors from across the Denver Region. As part of the Denver Region's objective to connect people to natural resources and recreational areas, Metro Vision 2040 (p. 63) aims to "improve multimodal linkages to and between parks, open space, and developed areas." And as stated in the DRCOG Active Transportation Plan (2019)(App at pp. 34-35) "Taking care of existing trails is a top priority for [Jefferson] county. ... Jefferson County is known for high levels of recreational bicycling and can build on this characteristic moving forward." For more details about why the original trail improvement project is important to the Jeffco Subregion, please refer to EPRD's application for funded TIP Project #2020-025, found here.

2. Does the proposed project cross and/or benefit multiple municipalities and/or population centers? 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. Bergen Park in North Evergreen is a DRCOG-designated Activity Center, and is connected to the project by the regional Pioneer Trail. The project will also benefit residents from multiple nearby municipalities and 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, accessible and reliable multi-use trail, and concomitant fixes to failing infrastructure, within less than half an hour's drive from their population centers.

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

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. 2040 Metro Vision Regional Transportation Plan at p. 18. Tourists from across all DRCOG Subregions will benefit from this project because 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 year-round recreation opportunities for a wide variety of visitors including ice-skating, boating, hiking, fishing, picnicking, wildlife viewing, summer concerts, festivals and events.

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). EPRD manages recreation around Evergreen Lake under a series of intergovernmental agreements executed in the 1980s.

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

Safety & Security. The project lies on an extremely narrow multimodal corridor on the north side of Evergreen Lake. See photos at Att 4. 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 were 36 total vehicle crashes on SH-74 near the project site from 2011 to 2015. Jefferson County Interactive Crash Map, 2011-15. The originally planned project called for curb and gutter with a split rail fence barrier. Phase 2 enhancements add a safety cable rail to the curb and gutter, reducing the risk of exposure to pedestrians and bicyclists to crashes along SH-74 and also improving user comfort. Renderings of the post and cable railing (as compared to the former split rail fence) are attached at Att 5. Safety is also increased by improving maintainability, with more drainage inlets under the trail and a smooth concrete transition between the roadway and the trail that facilitates better plowing and clearing. Safety for persons with disabilities is improved by adding lower-grade and fully-accessible transitions and a fully-accessible lakeside trail. See Sera Letter of Support at Att 6.

Connectivity & Mobility. The Phase 2 enhancements of this project will extend the trail to the east to complete AASHTO and ADA compliant connection to the Connector Trail and downtown Evergreen, improving connectivity and mobility to our community's commercial center. The design enhancements on the trail's west end will connect the Upper and Lower Trails and also the Fisherman's Parking Lot for more connectivity and mobility gains. See Evergreen Chamber of Commerce and ELF Letters of Support at Att 7 & 8.

Equitable Access. This Phase 2 project improves access to Evergreen Lake for vulnerable populations including youth, seniors, and persons with disabilities, by making the entire length of the Lower Trail fully accessible, and adding more bulb-outs for fishing and wildlife viewing. It also improves accessibility by creating accessible transitions on the project's east and west ends, as discussed above. Letters at Atts 7 & 8.

Reliability & Lifespan. Increasing the drainage inlets from one to four will reduce water and sediment on the trail and its support system, making the trail easier to maintain, and improving the project's reliability and lifespan. (The drainage enhancements will also reduce run-off and sedimentation into Evergreen Lake.) The post and cable railing system will make plowing and trail clearing easier, further improving the system's year-round reliability. See Sera Letter of Support at Att 6.

For a discussion of how the construction project as a whole addresses these issues, please refer to EPRD's application for the Evergreen Lake Trail Improvement TIP Project #2020-025, found here.

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?

"The economy of Evergreen is highly dependent on tourism with the Evergreen Lake being the centerpiece. It draws tourists for boating and walking in the summer and ice fishing and skating in the winter." See attached Chamber Letter of Support at Att 7. A reliable bike and pedestrian connection between downtown Evergreen, Evergreen Lake and transportation hubs is critical for our residents and businesses to thrive and prosper. As our community grows with the Denver Region, employment in downtown Evergreen is predicted to increase by 37% between 2020 and 2050. DRCOG Small Area Employment Forecasts 2020 v. 2050 for GID 1082, ZONE 752. 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.

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

This project will make connectivity and reliability improvements to the multimodal transportation corridor through the heart of our community, connecting different travel modes in these ways:

Vehicle travel. State Highway 74 runs south from I-70 into downtown Evergreen and then heads east down Bear Creek back to Red Rocks and Morrison. It is shown on the Metro Vision 2050 Road Network and is part of the

scenic Lariat Loop. Traffic volume at the project site – 18,000 AADT – is extremely high in a rural, mountain setting. <u>CDOT OTIS 2017 Volume Data, Station 103326</u> on SH-74 west of CR-73.

Bicycle & Pedestrian Use. The project area is an existing DRCOG Active Transportation Corridor and is shown as a hub for bicycle travel on the DRCOG Bicycle Facilily Inventory. The project area connects bike routes north up the regional Pioneer Trail to Elk Meadow and Squaw Pass Road, west along Upper Bear Creek Road to Mount Evans Wilderness, east along Bear Creek to Morrison, and south along CR-73 to Conifer. CDOT bicycle counts show an average of 748 daily bicycle trips on SH-74 through downtown Evergreen on weekends in August and September 2017. CDOT Non-Motorized Traffic Data at Station ID B70377, data found here. Pedestrian usage of the existing trail is estimated to be at least 434 average daily trail users on weekend days in winter, with at least double that usage in summer. See Part 3.C.1.

Public transportation. The 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.

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, and our leveraging of project contributions to make this project possible. 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:

Evergreen Park & Recreation District – operates recreation facilities including Evergreen Lake Trail

Colorado Department of Transportation (CDOT) – operates SH-74 along the north side of Evergreen Lake

City & County of Denver (Denver) – owns Evergreen Lake and the land around it, a part of DMP's Dedisse Park

Jefferson County – home county to the unincorporated Evergreen community & Evergreen Lake

Evergreen Metropolitan District – operates Lake's dam, water source, treatment facilities & distribution main

All of these entities participated in project planning and design and will continue to work together on this construction project. Letters of Support from these stakeholders and others were attached to EPRD's application to DRCOG TIP for Phase 1 construction funding, found here; the Letters of Support attached to this application focus on the Phase 2 Enhancements project only.

CDOT contributed \$200,000 in RPP funds to the Phase 1 construction project in 2019, along with awarding a \$200,000 TAP grant for Final Design in 2016. We have asked CDOT for an additional \$100,000 in conjunction with this Phase 2 Enhancements project. **Denver** is on the project's steering committee and continues to collaborate with EPRD on Denver construction permitting and environmental clearance processes. **Jefferson County** T&E has been a valuable project advisor in the areas of planning construction logistics and traffic detour routing. **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. Other contributions toward the project include a \$550,000 Colorado the Beautiful grant from **Colorado Parks & Wildlife** and \$50,000 from the **Downtown Evergreen Economic District** (DEED) from the Evergreen Legacy Fund (ELF). See ELF Letter at Att 8.

For the Phase 2 Enhancements project, we intend to leverage overmatch from the Phase 1 TIP construction project to meet the 20% match requirement for Phase 2. This will be comprised of \$50,000 from EMD and \$50,000 from DEED. The total state and local match for the combined Phase 1 & Phase 2 construction project is \$1,250,000, which is **29.3%** of the total estimated project cost of **\$4,264,000**. For more details, see the attached Proposed Financial Package submitted with EPRD's Request for CDOT Support, at Att 3.

B. DRCOG Board-approved Metro Vision TIP Focus Areas

WEIGHT

30

Provide <u>qualitative and quantitative</u> (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).

 Describe how the project will improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services).

Specific to Phase 2 Enhancements, this project will add elements to the original trail design to improve mobility infrastructure for vulnerable populations by:

- linking the trails' east end to the Connector Trail and downtown with a 10-ft wide, fully-accessible connection;
- creating a fully-accessible and lower-grade transition from the Upper and Lower trails on the west end; and
- redesigning the Lower Trail to be fully-accessible with more bulb-outs for fishing and wildlife viewing.

More generally, the Evergreen Lake North Trail Improvement project will improve mobility infrastructure for everyone, especially more vulnerable populations such as seniors, youth, and individuals with disabilities. Jeffco has the largest population of residents 60-and-older in the state, and nearly 10% of Jeffco's population has a disability. Jefferson County White Paper on Human Services Transportation (2014). DRCOG Vulnerable Populations by Tract ACS 2015-19 data confirms that the tracts immediately adjacent to the project site have higher than average 65+ and youth populations compared to the rest of the Denver Region.

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. Local and visiting seniors will benefit because the Upper and Lower Trails will be ADA-compliant and graded to make them accessible for wheelchairs and walkers. Area youth will be served by the creation of an off-street, connected, multi-use 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. The 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); 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).

Because Evergreen is geographically vast (78 square acres), many residents drive to 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.

2. Describe how the project will increase reliability of existing multimodal transportation network.

The Phase 2 Enhancements of this project will improve maintainability and expand the lifespan of the trail system, thus increasing the reliability of the existing multimodal transportation network, by:

- Adding a post and cable rail system and smooth concrete transition between SH-74 and the trail (formerly a
 grass buffer with a split rail fence) to make trail clearing and plowing much easier and more effective;
- Adding three drainage inlets below the Upper Trail and state highway to improve conditions on the trail and reduce the damage caused by highway/stormwater runoff that compromised the lifespan of the existing trail.

More generally, the trail improvement project as a whole 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, tandem trail system that accommodates bicycles, pedestrians, and persons with disabilities. It will replace aging infrastructure and relieve drainage problems that have led to sporadic wall failures and blow-outs along the trail, necessitating intermittent and long-term trail closures. Storm events, winter snow-loading, spring runoff, drainage problems, erosion, and further corrosion of the steel bin wall will continue to challenge the integrity of the existing trail until the reliability improvements of this project are implemented.

3. Describe how the project will improve transportation safety and security.

Specific to the Phase 2 safety improvements, a safety post and cable railing system will replace the originally-scoped split rail fence between the state highway and the multiuse trail. See Renderings at Att 5. This improvement reduces the risk of exposure to pedestrians and bicyclists to crashes along SH-74 (and improves user comfort). The smooth concrete transition between the roadway and the trail, plus added drainage, improve the trail's maintainability, further improving safety for trail users.

More generally, the trail improvement project as a whole will produce substantial improvements for transportation safety and security in our community. The most imperative safety concern is the risk of crashes between vehicles, bicyclists and pedestrians at a key linkage for transportation and recreation in our community. Most bicyclists along the route choose to ride on the roadway instead of the existing trail due to its soft-surface and narrow width. Traffic volume on SH-74 adjacent to the project site is 18,000. See CDOT OTIS 2017 Volume
Data, Station 103326 on SH-74 west of CR-73. There were 36 total vehicle crashes on SH-74 near the project site from 2011 to 2015. Jefferson County Interactive Crash Map, 2011-15. This data illustrates a substantial risk of exposure for bicyclists and pedestrians. An ongoing safety concern arises from failing infrastructure under the existing trail. And safety is further compromised when the existing trail is closed for infrastructure repairs, because most trail users take to the state highway instead of traversing the .8-mile detour. See Photos at Att 4.

C. Consistency & Contributions to Transportation-focused Metro Vision Objectives

WEIGHT

20%

Provide <u>qualitative and quantitative</u> 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.

MV objective 2

Contain urban development in locations designated for urban growth and services.

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*

X Yes		No
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Evergreen, like the rest of the Denver Region, is experiencing tremendous growth. Since the COVID pandemic, housing demand in Evergreen has exploded as people are finding smaller communities near major cities to be ideal for both tele-commuting and access to traditional workplaces and transportation centers. Redfin housing demand trends for Evergreen show 51% more houses sold in May 2021 compared to May 2020, with prices up 49% over the same period. Employment in downtown Evergreen continues to grow steadily as well – DRCOG employment data for downtown Evergreen shows 19% growth in employment from 2010-2020 and forecasts another 17% growth between 2020 and 2040. See <u>DRCOG Small Area Employment Forecasts</u> Zones 752 & 753.

While Evergreen is part of unincorporated Jeffco, Evergreen is considered a census "urban area." Downtown Evergreen is considered a "Village Center" in the Jeffco Comprehensive Master Plan, and Bergen Park in North Evergreen (connected to the project site by the regional Pioneer Trail) is a designated a DRCOG "Activity Center." Plans for Evergreen's growth and infrastructure are underway locally and at the County. Evergreen and Jeffco recently have partnered to create the Evergreen Local Improvement District (ELID), which will fund local infrastructure projects with a voluntary contribution on sales in Evergreen. 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 Evergreen Lake North Trail and the section of JC-73 between downtown Evergreen and Buffalo Park Road, another approved TIP project in the Jeffco subregion.

By improving our primary Active Transportation Corridor, increasing connectivity and mobility, and expanding equitable access to recreation and commerce, this project will facilitate the growth we are already seeing and the infrastructure expansions we are already planning.

	MV objective 3	Increase housing and employment in urban centers.				
2.	• •	elp establish a network of clear and direct multimodal connections within n centers, or other key destinations?	⊠ Yes ☐ No			
	Describe, including supporting quantitative analysis					
	Transportation Plan (2019) Fig 26 at App p. 36. It will also make multimodal connections between downto Evergreen and the nearby RTD transportation center at Christ the King Church, less than 1/2 mile to the project also helps establish clear and direct multimodal connections to the following key destinations 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: Dedisse Park (Denver) Elk Meadow Park (Leffco) Stagecoach Park (EPRD) Buchanan Park (EPRD) Buchanan Park (EPRD)					
MV objective 4 Improve or expand the region's multimodal transportation system, services, and connections.						
3.		elp increase mobility choices within and beyond your subregion for people,? Describe, including supporting quantitative analysis	⊠ Yes □ No			

The Evergreen Lake Trail Improvement will help increase mobility choices within and beyond the Subregion by improving multimodal transportation connections for community members and visiting tourists. State Highway 74 is part of the Lariat Loop, a part of DRCOG Metro Vision 2050 Road Network, and a designated DRCOG bicycle facility. The project site is a recognized ATP Active Transportation Corridor. State Highway 74 is the main street of downtown Evergreen, and the east end of the project 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. The trail is less than a mile from important community destinations including Evergreen High, Wilmot Elementary, Evergreen Public Library, Jeffco Sheriff and Motor Vehicle, and the RTD Station on SH-74 at Christ the King Church.

MV objective 6a Improve air quality and reduce greenhouse gas emissions. Will this project help reduce ground-level ozone, greenhouse gas emissions, carbon monoxide, particulate matter, or other air pollutants? 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 316 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 also 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, designated fishing areas along the Lower Trail will "minimiz[e] bank erosion caused by the current fishing uses and improve

MV objective 7b

Connect people to natural resource or recreational areas.

5. 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?

Describe, including supporting quantitative analysis

water quality." Evergreen Trails Master Plan (2015) at pp. 48-49.

Besides addressing urgent safety concerns, connecting people to natural resources/recreation areas is the strong suit of this project. Because the project is located at a hub for Jeffco's trail, open space, and recreation systems, it will increase access to our Region's open space/recreation assets by completing missing links and improving trail connections.

The Evergreen Lake Trail Improvement project completes these *missing links*:

- Pedestrian: accessible, off-street pedestrian pathway to nearby recreation facilities including Evergreen
 Lake (fishing & boating), Evergreen Lake House (community events), Evergreen Lake Loop Trail and trails in
 Denver's Dedisse Park (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 the 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 and/or the Pioneer Trail:

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

	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 Evergreen Lake Trail Improvement will improve active recreational opportunities for all of its users – bicyclists, hikers, runners, strollers, dog walkers, seniors, youth, 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. It also will enhance users connections to nature (and thereby enhance health and well-being) by adding a lake-level path and bulb-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 Dedisse Park around Evergreen Lake, 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 at Question C.2.				
	MV objective 13	Improve access to op	portunity.		
7.	by promoting relia	elp reduce critical health, ed ble transportation connecti In supporting quantitative ar	ions to key destinat		⊠ Yes □ No
	This project's improvements primarily relate to connectivity and access to key community and regional recreational/tourism amenities. 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. 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. MV objective 14 Improve the region's competitive position.				
8.	Will this project help support and contribute to the growth of the subregion's economic health and vitality? Describe, including supporting quantitative analysis				⊠ Yes □ No
	This project will support and contribute to Jeffco's economic health and vitality by boosting tourism and commerce in Evergreen. The Evergreen 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. 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. The dependency between the Evergreen Lake Trail and downtown Evergreen tourism is discussed in the Evergreen Chamber of Commerce Letter of Support at Att 7.				
D.	Project Levera	ging			WEIGHT 10%
9.	(non-DRCOG-allocation funding) does this	ncial Package for EPRD's	20% Phase 2 (29.3% for combined Phases 1 & 2)	60%+ outside funding 30-59% 29% and below	Medium

Part 3

Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1. Current ridership weekday boardings n/a

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

	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) Provide supporting documentation as part of application submittal	n/a	n/a
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)		
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)		
6.	= Number of SOV one-way trips reduced per day $(#3 - #4 - #5)$		
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)		
8.	= Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)		

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 (CDOT Non-Motorized Traffic Data Station ID B70377, 7/28/2017-9/25/2017, found here.)
493

2. Population and Employment

Total Pop and Employ within 1 n	Employment within 1 mile	Population within 1 mile	Year
2,826	903	1,923	2020
3,248	974	2,274	2040

	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 (#1x50% for 1st year; x1.5 for 2040)	247	740
4.	Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (#3 X 10% due to unique location & connectivity of North Lake Trail)	25	74
5.	= Initial number of new bicycle trips from project (#3 – #4)	222	666
6.	Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. {#5 X 30%}	67	200
7.	= Number of SOV trips reduced per day (#5 - #6)	155	466
8.	Enter the value of {#7 x 2 miles} . (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor)	310	932
9.	= Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	295	885

10. If values would be distinctly greater for weekends, describe the magnitude of difference:

CDOT data used (CITE) showed weekend rider counts double or more of weekday counts.

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

Use is highly variable due to weather, season and weekday/weekend. We believe weekend use is at least double weekday use.

C. Pedestrian Use

1. Current weekday pedestrians (include users of all non-pedaled devices) on winter weekend day, estimated based on weekend day pedestrian tallies conducted 2-9-19 & 2-17-19 (total use counted for 4 hour period on 2-9-19 was 289; total use for 2.5 hour period on 2-17-19 was 312. Estimated daily use was based on assumption that user tallies were conducted at peak usage time (11:15 am – 3:15 pm), so reduced number of users were estimated for morning and evening periods. The two estimated daily use numbers were then averaged. See User Tallies attached to EPRD DRCOG TIP application.

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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

Pedestrian Use Calculations	Year of Opening	2040 Weekday Estimate
 Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed (#1x20% for 1st yr; x1.5 for 2040) 	87	131
4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route {#3 X 10% due to unique location & connectivity of trail)	9	13
5. = Number of new trips from project (#3 – #4)	78	118

replacing an SOV	the new trips produced (from #5 above) that are trip. 7 trip. 9%} or other percent, if justified)	23	35
7. = Number of SO	trips reduced per day (#5 - #6)	55	83
	f {#7 x .4 miles}. (= the VMT reduced per day) miles must be justified by sponsor)	22	33
8. = Number of pou	nds GHG emissions reduced (#8 x 0.95 lbs.)	21	31

9. If values would be distinctly greater for weekends, describe the magnitude of difference:

Estimated daily counts on winter weekends were used. Values shown are for average daily use on winter weekend day. Estimated summer usage would be double or more winter usage.

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

Estimated daily counts on winter weekends were used. Values shown are for average daily use on winter weekend day. Estimated summer usage would be double or more winter usage.

D. Vulnerable Populations

Use Current Census Data

Vul	nerable Populations	Population within 1 mile
1. Persons over age 65		236
2. Minority persons		74
3. Low-Income househousehousehousehousehousehousehouse	olds	34
4. Linguistically-challen	ged persons	4
5. Individuals with disal	pilities	91
6. Households without	a motor vehicle	9
7. Children ages 6-17		222
8. Health service faciliti	es served by project	2

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 (CDOT OTIS 2017 Station 103326)	18,000
2.	2040 ADT estimate (CDOT OTIS 2040 Projection Station 103326)	18,567
3.	Current weekday vehicle hours of delay (VHD) (before project)	

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	n/a
5. Enter value of {#3 - #4} = Reduced VHD	
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 justi	

7. After project peak hour congested average travel time reduction per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). If applicable, denote unique travel time reduction for certain types of vehicles

n/a

- **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

1.	Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians (Jefferson County Interactive Crash Map, 2011-15).		
	Fatal crashes	0	
	Serious Injury crashes		
	Other Injury crashes 7		
	Property Damage Only crashes 29		
2.	2. Estimated reduction in crashes <u>applicable to the project scope</u> (per the five-year period used above)		
	Fatal crashes reduced	n/a*	
	Serious Injury crashes reduced		
	Other Injury crashes reduced		
	Property Damage Only crashes reduced		

*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.

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

1. Current roadway pavement condition

FAIR

2. Describe current pavement issues and how the project will address them.

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.

3. Average Daily User Volume

18,000

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.

6. Average Daily User Volume (*weekend* day) (estimate based on weekend day pedestrian tallies conducted 2-9-19 & 2-17-19, see Part 3.C.1

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н.	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.		
3.		
J.	Disbenefits or Negative Impacts (identified and calculated by the sponsor)	
1.	Increase in VMT? If yes, describe scale of expected increase	☐ Yes ⊠ No
2.	Negative impact on vulnerable populations	
3.	Other:	