



DRCOG FY2022-2025 TIP – Arapahoe County Subregion
Subregional Share Air Quality/Multimodal (AQ/MM)
Application Programming Federal Fiscal Years 2023-2025

APPLICATION OVERVIEW

What: The Subregional Share Call for Projects for the FY2022-2025 TIP, programming fiscal years 2023-2025

Funding Available: \$161,292,000 overall. Target of \$30,016,000 for Arapahoe County (estimated as of the open date)

Application: Air Quality & Multimodal (AQ/MM) eligible projects only

Major Project Eligibility Exceptions: Roadway capacity, roadway reconstruction, bridge, interchange projects

Call Opens: May 2, 2022

Call Closes: June 24, 2022, 3 pm

Application Submittals: submit the items below online through the submittal link on the [TIP Data Hub](#)

1. REQUIRED: a **single PDF document** containing the below. Please **DO NOT** attach additional cover pages, embed graphics in the application, or otherwise change the format of the application form.
 - a. this application
 - b. one location map/graphic
 - c. cost estimate (your own or the CDOT [cost estimate form](#))
 - d. CDOT/RTD concurrence response (if applicable)
 - e. any required documentation based on the application text (i.e., FHWA emissions calculators)
 - f. project support letters and/or [Request for Peer Agency Support](#)
2. OPTIONAL: Submit **one additional** PDF document containing any supplemental materials, if applicable
3. REQUIRED: Submit a zipped GIS shapefile of your project. Requests for assistance with creating a shapefile should be submitted to tipapplications@drcog.org no later than June 3, 2022

Other Notable items:

- **TIP Trainings:** To be eligible to submit an application, at least one person from your agency must have attended one of the two mandatory TIP training workshops ([February 10](#) and [February 16, 2022](#))
- **CDOT/RTD Concurrence:** If required, [CDOT and/or RTD concurrence](#) must be provided with the application submittal. The CDOT/RTD concurrence request is due to CDOT/RTD no later than May 13, 2022, with CDOT/RTD providing a response no later than June 10, 2022. Submit requests to the following: CDOT Region 1 – JoAnn Mattson, joann.mattson@state.co.us; CDOT Region 4 – Josie Hadley, josie.hadley@state.co.us; RTD – Chris Quinn, chris.quinn@rtd-denver.com
- **If a submitted application in Call #1 was not funded,** and you wish to resubmit the same application for this call, please contact DRCOG at tipapplications@drcog.org. In these cases, we can unlock the application, change the title, and save the applicant work in the resubmittal process.
- **Application Data:** To assist sponsors in filling out the application, DRCOG has developed a TIP Data Tool to streamline quantitative analyses requested in the application. A link to the TIP Data Tool and instructions on how to use it are available on the [TIP Data Hub](#). Additionally, sponsors may download datasets to run their own analyses from this same site. Requests for additional data or calculations from DRCOG staff should be submitted to tipapplications@drcog.org no later than June 3, 2022
- **Project Affirmation:** 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
- **TIP Policy:** Further details on project eligibility, evaluation criteria, and the selection process are defined in the [Policies for TIP Program Development](#) document (a [quick-guide](#) is also available for reference)
- **Evaluation Process:** DRCOG staff will review submittals for eligibility and post to the DRCOG website (June 27-July 1). Applications and scoring sheets will then be provided to the individual subregional forums no later than July 1. The forums will then review, score, discuss, and rank the applications and provide a recommended funding list within the funding available by August 5. The forums’ recommendations will then be forwarded to the DRCOG committee process for incorporation into the adopted TIP
- If you have any questions or need assistance, reach out to us at tipapplications@drcog.org

APPLICATION FORMAT

The AQ/MM Subregional Share application contains two parts: *project information* and *evaluation questions*.

Project Information

Applicants enter **foundational** information for the *project/program/study* (hereafter referred to as *project*), including a problem statement, project description, and concurrence documentation from CDOT and/or RTD, if applicable. This section is not scored.

Evaluation Questions

This part includes four sections (A-D) for the **applicant to provide qualitative and quantitative responses** to use for scoring projects. The checkboxes and data entry fields should guide the applicant’s responses. They are not directly scored but provide context as reviewers consider the full response to each question. Applicants may access the TIP Data Tool and additional data resources which applicants may find useful [here](#).

Scoring Methodology: Each section will be scored on a scale of 0 to 5, relative to other applications received. All questions will be factored into the final score, with any questions left blank receiving 0 points. The four sections are weighted and scored as follows:

Section A. Subregional Impact of Proposed Projects..... 30%

Projects will be evaluated on the degree to which they address a significant regional or subregional problem or benefit people throughout the subregion. Relevant quantitative data should be included within narrative responses.

5	The project benefits will substantially address a major regional or subregional problem and benefit people and businesses in multiple subregions.
4	The project benefits will significantly address a major subregional problem primarily benefiting people and businesses in one subregion.
3	The project benefits will either moderately address a major subregional problem or significantly address a moderate -level subregional problem.
2	The project benefits will moderately address a moderate -level subregional problem.
1	The project benefits will address a minor subregional problem.
0	The project does not address a subregional problem.

Section B. Metro Vision Regional Transportation Plan Priorities50%

The TIP’s investments should implement the 2050 Metro Vision Regional Transportation Plan (2050 MVRTP) regional project and program investment priorities, which contribute to addressing the Board-adopted Metro Vision objectives and the federal performance-based planning framework required by the Federal Highway Administration and Federal Transit Administration as outlined in current federal transportation legislation and regulations. Therefore, projects will be evaluated on the degree to which they address the six priorities identified in the 2050 MVRTP: safety, active transportation, air quality, multimodal mobility, freight, and regional transit. It is anticipated that projects may not be able to address all six priorities, but it’s in the applicant’s interest to address as many priority areas as possible. Relevant quantitative data is required to be included within narrative responses. The table below demonstrates how each priority area will be scored.

5	The project provides demonstrable substantial benefits in the 2050 MVRTP priority area and is determined to be in the top fifth of applications based on the magnitude of benefits in that priority area.
4	The project provides demonstrable significant benefits in the 2050 MVRTP priority area.
3	The project provides demonstrable moderate benefits in the 2050 MVRTP priority area and is determined to be in the middle fifth of applications based on the magnitude of benefits in that priority area.
2	The project provides demonstrable modest benefits in the 2050 MVRTP priority area.
1	The project provides demonstrable slight benefits in the 2050 MVRTP priority area and is determined to be in the bottom fifth of applications based on the magnitude of benefits in that priority area.
0	The project does not provide demonstrable benefits in the 2050 MVRTP priority area.

Section C. Project Leveraging (“overmatch”) 10%
 Scores are assigned based on the percent of other funding sources (non-Subregional Share funds).

Score	% non-Subregional Share funds
5	60% and above
4	50-59.9%
3	40-49.9%
2	20-39.9%
1	10.1-19.9%
0	10%

Section D. Project Readiness 10%

Be sure to answer ALL questions. While “Yes” answers will generally reflect greater readiness, opportunities are given to provide additional details to assist reviewers in fully evaluating the readiness of your project.

5	Substantial readiness is demonstrated and all known obstacles that are likely to result in project delays have been mitigated.
4	Significant readiness is demonstrated and several known obstacles that are likely to result in project delays have been mitigated.
3	Moderate readiness is demonstrated and some known obstacles that are likely to result in project delays have been mitigated.
2	Slight readiness is demonstrated and some known obstacles that are likely to result in project delays have been mitigated.
1	Few mitigation or readiness activities have been demonstrated.
0	No mitigation or readiness activities have been demonstrated.

Project Information

1. Project Title		Lone Tree Creek Trail Undercrossing at Arapahoe Rd	
2. Project Location <i>Provide a map, as appropriate (see Page 1)</i>		Start point: <input type="text"/>	End point: <input type="text"/>
3. Project Sponsor <i>(entity that will be financially responsible for the project)</i>		City of Centennial	
4. Project Contact Person:			
Name	Jeff Dankenbring	Title	Public Works Director
Phone	303-754-3458	Email	jdankenbring@centennialco.gov
5. Required CDOT and/or RTD Concurrence: 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</i>	
6. What planning document(s) identifies this project? <i>Provide link to document(s) and referenced page number if possible, or provide documentation in the supplement</i>	<input type="checkbox"/> DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MVRTP) Provide MVRTP staging period, if applicable capital project:		
	<input checked="" type="checkbox"/> Local/Regional plan:	Planning Document Title: Centennial Trails and Recreation Plan Adopting agency (local agency Council, CDOT, RTD, etc.): Council Provide date of adoption by council/board/commission, if applicable: 2017	
	Please describe public review/engagement to date:	The community engagement process for the Centennial Trails and Recreation Plan (TRP) included five major outreach methods. A TRP Advisory Committee guided the planning team's efforts to engage with larger stakeholder groups including focus groups, community workshops, surveys, Facebook Live events, and participation at community events.	
	Other pertinent details:	Link to plan (please see p. 44): https://www.centennialco.gov/files/sharedassets/public/documents/community-development/centennial_trp_book2_1.pdf	
7. Identify the project's key phases and the anticipated schedule of phase milestones. (phases and dates should correspond with the Funding Breakdown table below)			
Phases to be included:	Major phase milestones:	Anticipated completion date (based on 9/21/2022 DRCOG approval date): (MM/YYYY)	
FOR ALL PHASES	Intergovernmental Agreement (IGA) executed (with CDOT/RTD; assumed process is 4-9 months)	02/2023	
<input type="checkbox"/> Design	Design contract Notice to Proceed (NTP) issued (if using a consultant):	<input type="text"/>	
	Design scoping meeting held with CDOT (if no consultant):	<input type="text"/>	
<input type="checkbox"/> Environmental	Environmental contract Notice to Proceed (NTP) issued (if using a consultant):	<input type="text"/>	

	Environmental scoping meeting held with CDOT (if no consultant):	
<input type="checkbox"/> Right-of-Way	Initial set of ROW plans submitted to CDOT:	
	ROW acquisition completed: Estimated number of parcels to acquire:	
<input checked="" type="checkbox"/> Construction	FIR (Field Inspection Review):	02/2023
	FOR (Final Office Review):	08/2023
	Required clearances:	12/2023
	Project publicly advertised:	01/2024
<input type="checkbox"/> Study	Kick-off meeting held after consultant NTP (or internal if no consultant):	
<input type="checkbox"/> Bus Service	Service begins:	
<input type="checkbox"/> Equipment Purchase (Procurement)	RFP/RFQ/RFB (bids) issued:	
<input checked="" type="checkbox"/> Other: RFR	First invoice submitted to CDOT/RTD:	04/2024

8. Problem Statement: What specific subregional problem/issue will the transportation project address?

The Lone Tree Creek Trail, a regional trail currently under construction, will allow pedestrians, cyclists and other trail users to travel from Cherry Creek State Park to the Dove Valley Metropolitan District and many points in between. The Lone Tree Creek trail was identified by Arapahoe County as a high priority trail project in the 2017 Arapahoe County Bicycle and Pedestrian Master Plan.

The trail as currently being constructed will force users to leave the safety of the trail and cross busy, 8-lane Arapahoe Road at grade. Arapahoe Road is part of DRCOG's High Injury Network, and pedestrians and cyclists could face safety risks if they are forced to cross Arapahoe Road at this location. The nearest marked crosswalk to the west is 375 feet away, and was the site of two crashes. The nearest marked crosswalk to the east is almost half a mile (2,100 feet) away, and was the site of five crashes. More than 60,000 vehicles pass this location daily, and pedestrians must contend with a 100 foot wide right-of-way. Pedestrian and bicycle traffic could also negatively impact vehicle and freight traffic on Arapahoe Road, a Tier 2 route in the DRCOG Regional Highway Freight Vision Network.

9. Identify the project's key elements. A single project may have multiple project elements.

Roadway

Operational Improvements

Grade Separation

Roadway

Railway

Bicycle

Pedestrian

Active Transportation Improvements

Bicycle Facility

Pedestrian Facility

Air Quality Improvements

Improvements Impacting Freight

Multimodal Mobility (i.e., accommodating a broad range of users)

Regional Transit¹

- Rapid Transit Capacity (2050 MVRTP)
- Mobility Hub(s)
- Transit Planning Corridors
- Transit Facilities/Service (Expansion/New)

Safety Improvements

Complete Streets Improvements

Study

Other, briefly describe:

¹For any project with transit elements, the sponsor must coordinate with RTD to ensure RTD agrees to the scope and cost. Be sure to include RTD's concurrence in your application submittal.

10. Define the *scope* and *specific elements* of the project (including any elements checked in #9 above).

DO NOT include scope elements that will not be part of the DRCOG funded project or your IGA scope of work (i.e., adjacent locally funded improvements or the project merits and benefits). Please keep the response to this question tailored to details of the scope only and no more than five sentences.

This project constructs a box culvert pedestrian undercrossing under Arapahoe Road within the Lone Tree Creek Effective Floodplain:

- Culvert Construction - excavation of site for new pedestrian culvert structure and drainage system, construction of a concrete pedestrian trail through the culvert
- Utilities - support and relocation of wet and dry utilities
- Retaining wall - block wall required along pedestrian connection to support surrounding vertical grade difference
- Associated construction activities - Completion of associated construction activities including paving and traffic control
- Construction management/engineering - management and oversight of construction schedule, processes, and personnel

11. What is the current status of the proposed scope as defined in Question 10 above? *Note that overall project readiness is addressed in more detail in Section D below.*

The trail is currently under construction without the undercrossing. The design of the underpass is currently underway.

12. Would a smaller DRCOG-allocation than requested be acceptable, while maintaining the original intent of the project?

Yes No

*If yes, smaller meaningful limits, size, service level, phases, or scopes, along with the cost, **MUST** be defined.*

Smaller DRCOG funding request:

Outline the differences between the scope outlined above and the reduced scope:

Project Financial Information and Funding Request		(All funding amounts in \$1,000s)	
Total amount of Subregional Share Funding Request (in \$1,000's) <i>(No less than \$100,000 and not to exceed 90% of the total project cost)</i> <input type="checkbox"/> Check box if requesting only state MMOF funds (requires minimum 50% local funds) ¹		\$3,881	90.00% of total project cost
Match Funds (in \$1,000's) List each funding source and contribution amount.		Contribution Amount	% Contribution to Overall Project Total
Centennial		\$431	10%
		\$	0%
		\$	0%
		\$	0%
		\$	0%
		\$	0%
Total Match <i>(private, local, state, another subregion, or federal)</i>		\$431	10.00%
Project Total		\$4,312	
Notes:	1. Per CDOT action, the following jurisdictions are only required to provide 25% match on the MMOF funds: Englewood, Jamestown, and Wheat Ridge. The following jurisdictions are not required to provide a match on the MMOF funds: Federal Heights, Lakeside, Larkspur, Sheridan, and Ward. All sponsors will still be required to have 20% match on any added federal funds.		

Funding Breakdown (in \$1,000s) (by program year)¹ (Total funding should match the Project Total from above)

	FY 2023	FY 2024	FY 2025	Total
DRCOG Requested Funds	\$ <input type="text"/>	\$2,700	\$1,181	\$3,881
CDOT or RTD Supplied Funds²	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$0
Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)	\$ <input type="text"/>	\$300	\$131	\$431
Total Funding	\$0	\$3,000	\$1,312	\$4,312
Phase to be Initiated	Choose an item	Construction	Construction	
Notes:	<ol style="list-style-type: none"> 1. Fiscal years are October 1 through September 30 (e.g., FY 2023 is October 1, 2022 through September 30, 2023). 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 a recommended 3% inflation factor. 2. Only enter funding in this line if CDOT and/or RTD specifically give permission via concurrence letters or other written source. 			
Affirmation:	By checking this box, the applicant's Chief Elected Official (Mayor or County Commission Chair/City or County Manager/Agency Director) has certified it allows this application to be submitted for potential DRCOG-allocated funding and will follow all local, DRCOG, state, and federal policies and regulations if funding is awarded. <input checked="" type="checkbox"/>			

Evaluation Questions

A. Subregional Impact of Proposed Project

WEIGHT

30%

Provide **qualitative and quantitative** responses to the following questions on the regional impact of the proposed project. Be sure to provide all required information for each question. Quantitative data from DRCOG is available [here](#).

1. Why is this project subregionally important? Relevant quantitative data in your response is required.

Residents of Centennial and greater Arapahoe County, including over 5,800 individuals living within a half mile of the project, will benefit substantially from the connection this project provides between Dove Valley Regional Park and Cherry Creek State Park as well as many important nodes in between those locations. This pedestrian crossing will provide safe access to other parks and trails in the area including Parker Jordan Centennial Open Space, Cherry Creek Ecological Valley Park, and the Centennial Center Park, and the 40-mile Cherry Creek Greenway.

This affordable transportation access to natural areas and recreation opportunities will be especially important to residents who are housing cost burdened, including 716 households (39%) within half a mile of the proposed improvement. The project will also provide opportunities for communities of color (53% of the residents living within half a mile of the project) to safely and comfortably access recreation sites. In addition, business owners along the trail will experience an increase in clientele and cyclists and pedestrians will enjoy a safe way to cross Arapahoe Road even if they do not continue along the trail.

2. How will the proposed project address the specific transportation problem described in the **Problem Statement** (as submitted in Project Information, #8)? Relevant quantitative data in your response is required.

The Lone Creek Trail Arapahoe Road Undercrossing project will allow pedestrians to walk underneath Arapahoe Road conveniently while entirely avoiding vehicular traffic, thereby increasing the safety of travelers using all modes of travel. The project could support as many as 500 bicycle trips and 500 pedestrian trips by 2050, which will represent a dramatic improvement in connectivity and safety for those many users of alternative transportation. In addition, reduced pedestrian crossings at the intersections will also likely improve signal performance on Arapahoe Road.

The Lone Tree Creek Trail Arapahoe Road undercrossing will connect the 3.5 mile Lone Tree Creek trail, a non-motorized trail network between Cherry Creek State Park and Dove Valley Regional Park. This pedestrian undercrossing will be accessible to users of several area parks and trails including Parker Jordan Centennial Open Space, Cherry Creek Ecological Valley Park, the Centennial Center Park, and the 40-mile Cherry Creek Greenway. This critical pedestrian infrastructure reduces safety concerns along Arapahoe Road, part of DRCOG's High Injury Network. The trail will enable pedestrians, cyclists, and other trail users to access Cherry Creek State Park and connect to businesses in Dove Valley Metropolitan District without having to contend with fast-moving (up to 55 mph) vehicular traffic on a major, 100-foot-wide artery for commuters and freight.

3. Does the proposed project benefit multiple municipalities and/or subregions? If yes, which ones and how? Also describe any funding partnerships (*other subregions, regional agencies, municipalities, private, etc.*) established in association with this project.

The project has the potential to benefit areas beyond Centennial as the trail will connect to Cherry Creek State Park and the extensive regional trail network that crosses that significant regional green space. The trail will also support connectivity for areas in unincorporated Arapahoe County. There are no additional funding partners involved in the project.

4. Describe how the project will improve access and mobility for each of the applicable disproportionately impacted and environmental justice population groups identified in the table below. This data is available in the TIP Data Tool.

Completing the below table and referencing relevant quantitative data in your response is required.

	DI and EJ Population Groups	Number within ½ mile	% of Total	Regional %
Use 2015-2019 American Community Survey Data (In the TIP Data Tool, use a 0.5 mile buffer)	a. Total population	5,803	-	-
	b. Total households	1,837	-	-
	c. Individuals of color	3,050	53%	33%
	d. Low-Income households	129	7%	9%
	e. Individuals with limited English proficiency	191	3%	3%
	f. Adults age 65 and over	219	4%	13%
	g. Children age 5-17	988	17%	16%
	h. Individuals with a disability	42	1%	9%
	i. Households without a motor vehicle	7	0%	5%
	j. Households that are housing cost-burdened	716	39%	32%

For Lines c. – i. use definitions in the [DRCOG Title VI Implementation Plan](#). For Line j., as defined in C.R.S. 24-38.5-302(3)(b)(I): “cost-burdened” means a household that spends more than thirty percent of its income on housing.”

Describe how this project will improve access and mobility for each of the applicable groups, *including the required quantitative analysis*: The project is located near a diverse community, with a proportion of individuals of color (53%) that is far higher than average (33%) for the region. In addition, many households in the area are housing cost-burdened, and a fully grade-separated trail will allow those individuals to have a safe alternative to driving in order to access some of the key amenities in their community, including the recreation opportunities of Cherry Creek State Park and nearby businesses. There are also almost 1,000 children in the area who could benefit from easy access to healthy, active transportation opportunities and recreation.

5. How will this project move the region toward achieving the shared [regional transportation outcomes](#) established in [Metro Vision](#)?

- Improve the diversity and livability of communities. The diverse community adjacent to the project area will benefit from improved livability with a continuous, grade-separated pedestrian and bicycle facility connecting them to regional recreational opportunities and local businesses
- Contain urban development in locations designated for urban growth and services.
- Increase housing and employment in urban centers.
- Improve and expand the region’s multimodal transportation system, services, and connections. The undercrossing will be an important addition to the multimodal transportation system in Centennial and surrounding communities by supporting a continuous, grade-separated, safe trail system connecting residents and visitors to recreation and nearby businesses
- Operate, manage, and maintain a safe and reliable transportation system.
- Improve air quality and reduce greenhouse gas emissions. The project has the potential to encourage multimodal transportation and a mode shift from cars to walking and cycling by offering a convenient, safe alternative to reaching Cherry Creek State Park, Dove Valley Regional Park, and other nearby parks and businesses
- Connect people to natural resource and recreational areas. The project allows residents and visitors to easily access Cherry Creek State Park, Dove Valley Regional Park, the Parker Jordan Centennial Open Space, the Cherry Creek Greenway, and many other local and regional recreational and natural areas using alternative transportation
- Reduce the risk of hazards and their impact. The project allows pedestrians and cyclists to avoid crossing a busy roadway at grade while traveling on the regional trail system
- Increase access to amenities that support healthy, active choices. The project improves access to the regional trail system, an impressive network of trails that supports recreation and healthy, active transportation

- Improve transportation connections to health care facilities and service providers.
- Diversify the region’s housing stock.
- Improve access to opportunity. [The project improves access to and from local businesses that could offer employment and needed resources for residents](#)
- Improve the region’s competitive position.

6. Describe how the project will improve access to and/or connectivity between DRCOG-defined urban centers, multimodal corridors, mixed-use areas, Transit Oriented Development (transit near high-density development), or locally defined priority growth areas. Items marked with an asterisk (*) below are available in the TIP Data Tool.

- Is there a DRCOG designated urban center within ½ mile of the project limits?*
- Yes No If yes, please provide the name:
- Does the project connect two or more urban centers?*
- Yes No If yes, please provide the names:
- Is there a transit stop or station within ½ mile of the project limits?*
- Bus stop: Yes No If yes, how many? 14
- Rail station: Yes No If yes, how many?
- Is the project in a locally-defined priority growth and development area?
- Yes No
- If yes, provide a link to the relevant planning document:
<https://www.centennialco.gov/files/sharedassets/public/documents/community-development/centennialnext-plan.pdf> (pg2-26)
- If yes, provide how the area is defined in the relevant planning document: [East Arapahoe Road Corridor - Future redevelopment for the Corridor could include transitioning the existing strip commercial to accommodate current retail trends, varied residential housing types, and the creation of mixed use “mini-main streets” at nodes along East Arapahoe Road including adjacent to the Civic Center and Centennial Center Park.](#)
- Is the project in an area with zoning that supports compact, mixed-use development patterns and a variety of housing options?
- Yes No If yes, please provide the zoning district designation(s): [The immediately adjacent zoning is Business Park 100 ft height \(BP100\) with General Commercial \(CG\) south of Arapahoe. A nearby area \(within the buffer\) is zoned Activity Center, the City of Centennial's second-most dense district.](#)

Provide households and employment data*	2020	2050
Households within ½ mile	5,803	6,696
Jobs within ½ mile	27,547	38,866
Household density (per acre) within ½ mile	0.52	0.60
Job density (per acre) within ½ mile	8.49	11.81

Describe how this project will improve access to and/or connectivity between the above identified areas, including the required quantitative analysis:

[The project will connect housing north of Arapahoe Road with office and commercially-zoned areas south of Arapahoe Road, without the need for residents to drive or cross a busy street at grade. With just over 5,800 households but 27,547 jobs within a half mile of the project, this could provide opportunities for residents to commute without using a vehicle.](#)

7. Describe how this project will improve **access** and **connections** to key employment centers or regional destinations, including health services; commerce, educational, cultural, and recreational opportunities; or other important community resources. In your answer, define the key destination(s) and clearly explain how the project improves **access** and/or **connectivity**.

The Lone Tree Creek Trail will connect users to regional destinations including recreational opportunities at Cherry Creek State Park, Dove Valley Regional Park, and the 40-mile Cherry Creek Greenway, as well as other parks and natural areas. In addition, the trail will connect cyclists and pedestrians, including commuters, to businesses in the Dove Valley Metropolitan District.

B. MVRTP Priorities

WEIGHT

50%

- **Qualitative and quantitative** responses are **REQUIRED** for the following items on how the proposed project contributes to the project and program investment priorities in the adopted 2050 Metro Vision Regional Transportation Plan. To be considered for full points, you must fully answer all parts of the question, including incorporating quantitative data into your answer. (see scoring section for details). Quantitative data from DRCOG is available [here](#).
- Checkboxes and data tables help to provide context and guide responses, but do not account for the full range of potential improvements and are not directly scored, but are required to be completed.
- Not all proposed projects will necessarily be able to answer all questions, however it is in the applicant's interest to address as many priority areas as possible.

Multimodal Mobility

Provide improved travel options for all modes.

(drawn from [2050 MVRTP priorities](#); [federal travel time reliability, infrastructure condition, & transit asset management performance measures](#); & [Metro Vision objective 4](#))

Examples of Project Elements: combinations of improvements that support options for a broad range of users, such as complete streets improvements, or a bicycle/pedestrian access to transit, etc.

How does this project help increase mobility choices for people, goods, and/or services? Note that any roadway operational improvements must be on the DRCOG [Regional Roadway System](#) and/or [Regional Managed Lanes System](#).

- What modes will project improvements directly address?
 Walking Bicycling Transit Roadway Operations Other:
- List the elements of this project which will address the above modes (i.e., sidewalk, shared use path, bus stop improvements, signal interconnection, etc.):
- Will the completed project be a complete street as described in the [Regional Complete Streets Toolkit](#)? This data is available in the TIP Data Tool.
 Yes No If yes, describe how it implements the Toolkit's strategies in your response.
- Does this project improve travel time reliability?
 Yes No
- Does this project improve asset management of active transportation facilities and/or transit vehicle fleets?
 Yes No
- Does this project implement resilient infrastructure that helps the region mitigate natural and/or human-made hazards?
 Yes No

Describe how this project increases mobility choices for all users, *include quantitative information, including any items referenced above, in your response:*

The Pedestrian Crossing will serve users including bicyclists and pedestrians, wheelchair users, rollerbladers, scooters, skateboarders and related non-motorized recreational vehicles. The City of Centennial anticipates that the pedestrian crossing will enable a safe mode of transportation for those who use it recreationally and those who use it as a method for commuting. Expected types of users include children, teenagers, adults, and seniors. With over 5,800 residents near the trail, including many households that are housing cost burdened, this will be an important investment for people in the area who want to access opportunities without paying the high cost of driving. These users will access the pedestrian crossing by way of the Lone Tree Creek Trail, which connects to major regional natural areas and recreational opportunities. The trail will also be ADA accessible, accommodating the needs of those in wheelchairs.

Air Quality

Improve air quality and reduce greenhouse gas emissions.

(drawn from [2050 MVRTP priorities](#); [state greenhouse gas rulemaking](#); [federal congestion & emissions reduction performance measures](#); [Metro Vision objectives 2, 3, & 6a](#))

Examples of Project Elements: active transportation, transit, or TDM elements; vehicle operational improvements; electric vehicle supportive infrastructure; etc.

How does this project help reduce congestion and air pollutants, including but not limited to, carbon monoxide, ground-level ozone precursors, particulate matter, and greenhouse gas emissions?

- Does this project reduce congestion?
 Yes No
- Does this project reduce vehicle miles traveled (VMT)?
 Yes No
- Does this project reduce single-occupant vehicle (SOV) travel?
 Yes No

Emissions Reduced (kg/day)	CO	NO _x	VOCs	PM 10
	1.27	0.09	0.08	0.01

Use the [FHWA CMAQ Calculators](#) or a similar reasonable methodology to determine emissions reduced. Base your calculations on the year of opening. Please attach a screenshot of your work (such as the FHWA calculator showing the inputs and outputs) as part of your submittal packet.

Note: if not using the FHWA Calculators, please note your methodology in your narrative below.

Describe how this project reduces air pollutants, *include quantitative information, including any items referenced above, in your response:*

The project will encourage a modal shift from motorized to non-motorized travel, especially cycling and pedestrian travel, on the regional trail system. Users will be able to safely cross the barrier of Arapahoe Boulevard by bicycle, by foot, or by wheelchair or other non-motorized, emissions-free travel modes. This will result in a reduction of harmful emissions and greenhouse gases, including a reduction in .49 kg per day of carbon monoxide and slight reductions in other pollutants.

**Regional
Transit**

Expand and improve the region’s transit network.

(drawn from [2050 MVRTP priorities](#), [Coordinated Transit Plan](#), [RTD’s Regional Bus Rapid Transit Feasibility Study](#))

Examples of Project Elements: transit lanes, station improvements, new/expanded service, etc.

Note: For any project with transit elements, the sponsor must coordinate with RTD to ensure RTD agrees to the scope and cost. Be sure to include RTD’s concurrence in your application submittal.

How does this project improve connections to or expand the region’s transit system, as outlined in the [2050 MVRTP](#)? Note that rapid transit improvements must be on the [Regional Rapid Transit System](#). Items marked with an asterisk (*) below are available in the TIP Data Tool.

- Does this project implement a portion of the [regional bus rapid transit \(BRT\) network](#)?*
 Yes No If yes, which specific corridor will this project focus on?
- Does this project involve a [regional transit planning corridor](#)?*
 Yes No If yes, which specific corridor will this project focus on?
- Does this project implement a mobility hub as defined in the [2050 MVRTP](#)?
 Yes No
- Does this project improve connections between transit and other modes?
 Yes No If yes, please describe in your response.
- Is this project adding new or expanded transit service?
 Yes No If yes, who will operate the service?
- Does this project add and/or improve transit service to or within a DRCOG-defined urban center?*
 Yes No If yes, provide the name of the urban center:

Describe how this project improves connections to or expands the region’s transit system, *include quantitative information, including any items referenced above, in your response:*

This project is within a 5-minute walks of stops on RTD Route 153. RTD's 2019 service report shows 27.15 boardings per hour on this route, for a total of 803,005 riders per year. (<http://www.rtd-denver.com/sites/default/files/files/2020-07/2019-Family-of-Services-Tables-and-Charts.pdf>)

Safety **Increase the safety for all users of the transportation system.**
 (drawn from [2050 MVRTP priorities](#), [Taking Action on Regional Vision Zero](#), [CDOT Strategic Transportation Safety Plan](#), & [federal safety performance measures](#))
 Examples of Project Elements: bike/pedestrian crossing improvements, vehicle crash countermeasures, traffic calming, etc.

How does this project implement safety improvements (roadway, active transportation facility, etc.), particularly improvements in line with the recommendations in [Taking Action on Regional Vision Zero](#)? Note that any improvements on roadways must be on the DRCOG [Regional Roadway System](#). Items marked with an asterisk (*) below are available in the TIP Data Tool.

- Does this project address a location on the [DRCOG High-Injury Network or Critical Corridors](#) or corridors defined in a local Vision Zero or equivalent safety plan?*
 Yes No
- Does this project implement a safety countermeasure listed in the [countermeasure glossary](#)?
 Yes No

Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians* <i>(using the 2015-2019 period – in the TIP Data Tool, use a 0.02 mile buffer of your project)</i> <i>NOTE: if constructing a new facility, report crashes along closest existing alternative route</i>		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices (e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology).
Fatal crashes	0	
Serious Injury crashes	0	
Other Injury crashes	0	
Property Damage Only crashes	0	
Estimated reduction in crashes <u>applicable to the project scope</u> <i>(per the five-year period used above)</i>		Provide the methodology below:
Fatal crashes reduced	0.00	No Crash Modification Factors were found for a trail underpass.
Serious Injury crashes reduced	0.00	
Other Injury crashes reduced	0.00	
Property Damage Only crashes reduced	0.00	

Describe how this project will improve safety, *include quantitative information, including any items referenced above, in your response:*

Between 2013 and 2017, two fatal crashes and fifteen injury crashes occurred within one mile of this site. Five collisions at the intersection of E Arapahoe Rd and S Potomac St, including with pedestrians and bicyclists, indicate opportunities for safety improvements. The Lone Tree Creek Trail will provide an alternative to biking on E Caley Ave and S Revere Pkwy, the sites of two vehicle-bicyclist crashes, one of which was fatal.

The nearest marked crosswalk to the west is 375 feet away, and was the site of two crashes. The nearest marked crosswalk to the east is 2,100 feet away, and was the site of five crashes. Up to 65,000 vehicles pass this location daily (60,000 to 65,000 AADT), and pedestrians must contend with a 100-foot wide right-of-way. The speed limit on Arapahoe Road is very high, with 55 mph the posted limit in some locations and many motorists traveling even faster.

Construction of a pedestrian culvert will provide anticipated users (non-motorized, multimodal users) with a safe crossing under Arapahoe Road. Storm water will continue to be conveyed through the existing culvert. This new pedestrian crossing will reduce safety concerns during high flows and crossing Arapahoe Road at grade. Entirely separating pedestrians and bicyclists from vehicles will provide the safest crossing of this busy, high-speed road.

Freight

Maintain efficient movement of goods within and beyond the region.

(drawn from [2050 MVRTP priorities](#); [Regional Multimodal Freight Plan](#); [Colorado Freight Plan](#), [federal freight reliability performance measure](#); [Metro Vision objective 14](#))

Examples of Project Elements: roadway operational improvements, etc.

How does this project improve the efficient movement of goods, specifically improvements identified in the [Regional Multimodal Freight Plan](#)? Note that any improvements on roadways must be on the DRCOG [Regional Roadway System](#). Items marked with an asterisk (*) below are available in the TIP Data Tool.

- Is this project located in or impact access to a [Freight Focus Area](#)?*
 Yes No If yes, please provide the name:
- Is the project located on the [Tier 1 or Tier 2 Regional Highway Freight Vision Network](#)?*
 Yes No
- If this project is located in a [Freight Focus Area](#) does it address the relevant Needs and Issues identified in the Plan (see text located within each Focus Area)?
 Yes No If yes, please describe in your response.
- Check any items from the [Inventory of Current Needs](#) which this project will address:
 Truck Crash Location Rail Crossing Safety ([eligible locations](#))
 Truck Delay Truck Reliability
Please provide the location(s) being addressed:
- Does this project include any innovative or non-traditional freight supportive elements (i.e., curb management strategies, cargo bike supportive infrastructure, etc.)?
 Yes No If yes, please describe in your response.

Describe how this project will improve the movement of goods, *include quantitative information, including any items referenced above, in your response:*

Arapahoe Road is a Regional Highway Freight Vision Network Tier 2 route, and this project will allow freight traffic to continue unhindered along Arapahoe without interruptions from pedestrian and bicycle traffic traveling along the Lone Tree Creek Trail. If the project is not built, increased traffic from the completed trail could lead to slow downs for freight movement along Arapahoe Road.

Active Transportation	Expand and enhance active transportation travel options. <small>(drawn from 2050 MVRTP priorities; Denver Regional Active Transportation Plan; & Metro Vision objectives 10 & 13) Examples of Project Elements: shared use paths, sidewalks, regional trails, grade separations, etc.</small>
------------------------------	--

How does this project help expand the active transportation network, close gaps, improve comfort, and/or improve connections to key destinations, particularly improvements in line with the recommendations in the [Denver Regional Active Transportation Plan](#)? Items marked with an asterisk (*) below are available in the TIP Data Tool.

- Does this project close a gap or extend a facility on a [Regional Active Transportation Corridor](#) or locally-defined priority corridor?*
 Yes No
- Does this project improve pedestrian accessibility and connectivity in a [pedestrian focus area](#)?*
 Yes No
- Does this project improve active transportation choices in a [short trip opportunity zone](#)?*
 Yes No
- Does this project include a high-comfort bikeway (like a sidepath, shared-use path, separated bike lane, bicycle boulevard)?
 Yes No If yes, please describe in your response.

Bicycle Use

NOTE: if constructing a new facility, report bike usage along closest existing alternative route

1. Current Average Single Weekday Bicyclists:		90
Bicycle Use Calculations	Year of Opening	2050 Weekday Estimate
2. Enter estimated additional average weekday one-way bicycle trips on the facility after project is completed.	140	500
3. Enter number of the bicycle trips (in #2 above) that will be diverting from a different bicycling route. <i>(Example: {#2 X 50%} or other percent, if justified on line 10 below)</i>	70	250
4. = Initial number of new bicycle trips from project (#2 – #3)	70	250
1. Enter number of the new trips produced (from #4 above) that are replacing a trip made by another non-SOV mode (bus, carpool, vanpool, bike, etc.). <i>(Example: {#4 X 30%} or other percent, if justified on line 10 below)</i>	21.00	75.00
5. = Number of SOV trips reduced per day (#4 - #5)	49.00	175.00
6. Enter the value of {#6 x 2 miles} . (= the VMT reduced per day) <i>(Values other than 2 miles must be justified by sponsor on line 10 below)</i>	98.00	350.00
7. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	93.10	332.50
8. If values would be distinctly greater for weekends, describe the magnitude of difference: This will likely be a highly-used recreational route and use is anticipated to be higher on weekends.		
9. If different values other than the suggested are used, please explain here: These data come from Strava, multiplied by an estimation factor developed by CDOT because Strava does not capture all trips.		

Pedestrian Use

NOTE: if constructing a new facility, report pedestrian usage along closest existing alternative route

2. Current Average Single Weekday Pedestrians (including users of non-pedaled devices such as scooters and wheelchairs):		250
Pedestrian Use Calculations	Year of Opening	2050 Weekday Estimate
3. Enter estimated additional average weekday pedestrian one-way trips on the facility after project is completed	250	500
4. Enter number of the new pedestrian trips (in #2 above) that will be diverting from a different walking route <i>(Example: {#2 X 50%} or other percent, if justified on line 10 below)</i>	125	250
5. = Number of new trips from project (#2 – #3)	125	250
6. Enter number of the new trips produced (from #4 above) that are replacing a trip made by another non-SOV mode (bus, carpool, vanpool, bike, etc.). <i>(Example: {#4 X 30%} or other percent, if justified on line 10 below)</i>	37.50	75.00
7. = Number of SOV trips reduced per day (#4 - #5)	87.50	175.00

8. Enter the value of {#6 x .4 miles}. (= the VMT reduced per day) (Values other than .4 miles must be justified by sponsor on line 10 below)	35.00	70
9. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	33.25	66.50
10. If values would be distinctly greater for weekends, describe the magnitude of difference: 		
11. If different values other than the suggested are used, please explain here: Current pedestrian count is 2021 average daily traffic at the Arapahoe Trailhead of Cherry Creek Trail. This parallel route is located one mile east of this project location.		

Describe how this project will expand the active transportation network, close gaps, improve comfort, and/or improve connections to key destinations, *include quantitative information, including any items referenced above, in your response:*

The Lone Tree Creek Trail Arapahoe Undercrossing project will allow pedestrians, cyclists, and other trail users to comfortably and safely travel to and from major regional destinations such as Cherry Creek State Park, the Dove Valley Regional Park, and businesses in the Dove Valley Metropolitan District. Without the undercrossing, the Lone Tree Creek Trail will have a key gap at Arapahoe Road, where pedestrians and cyclists will compete with traffic at busy intersections on a 100-foot-wide roadway. The project has the potential to support up to 500 pedestrians and 500 cyclists each day, with higher usage on weekends due to heavy recreational use.

C. Project Leveraging		WEIGHT	10%
What percent of outside funding sources (non-Subregional Share funding) does this project have? <i>(number will automatically calculate based on values entered in the Funding Request table)</i>	10.00%	60%+ outside funding sources 5 pts 50-59.9% 4 pts 40-49.9% 3 pts 20-39.9% 2 pts 10.1-19.9% 1 pt 10%..... 0 pts	

D. Project Readiness		WEIGHT	10%
<i>Provide responses to the following items to demonstrate the readiness of the project. DRCOG is prioritizing those projects that have a higher likelihood to move forward in a timely manner and are less likely to experience a delay.</i>			

Section 1. Avoiding Pitfalls and Roadblocks

a. Has a licensed engineer (CDOT, consultant, local agency, etc.) reviewed the impact the proposed project will have on utilities, railroads, ROW, historic and environmental resources, etc. and have those impacts and pitfalls been mitigated as much as possible to date before this submittal?
 Yes No N/A (for projects which do not require engineering services)

If yes, please type in the engineer's name below which certifies their review and that impacts have been evaluated and mitigated as much as possible before your application is submitted:
 Jeff Dankenbring (PE#33911) reviewed potential impacts and included time and plans for mitigation, which will be further developed and implemented with progress of the pre-construction phase of the project.
 Please describe the status to date on each, including 1) anticipated/known pitfalls/roadblocks, and 2) mitigation activities taken to date:

- Utilities: Located Xcel gas main on north side of road through adjacent City construction project (05/2022)
- Railroad: N/A
- Right-of-Way: Identified area of need, conversations with property owner have taken place
- Environmental/Historic: Floodplain considerations adjacent to Lone Tree Creek Trail
- Other: Arapahoe Road (SH-88) is a CDOT facility in this location. Traffic control and alternative build methods will be strongly considered.

b. Is this application for a single project phase only (i.e., design, environmental, ROW acquisition, construction only, study, bus service, equipment purchase, etc.)?
 Yes No

If yes, are the other prerequisite phases complete? Yes No N/A

If this project is for construction, please note the NEPA status: **Not Started**

c. Has all required ROW been identified? Yes No N/A
 Has all required ROW already been acquired and cleared by CDOT? Yes No N/A

d. Based on the current status provided in Project Information, question 11, do you foresee being able to execute your IGA by October 1 of your first year of funding (or if requesting first year funding, beginning discussions on your IGA as soon as possible), so you can begin your project on time?
 Yes No

Does your agency have the appropriate staff available to work on this project? Yes No

If yes, are they knowledgeable with the federal-aid process? Yes No

e. Have other stakeholders in your project been identified and involved in project development?

Yes No N/A

If yes, who are the stakeholders? Southeast Metro Stormwater Authority (SEMSWA)

Please provide any additional details on any of the items in Section 1, if applicable.

Section 2. Local Match

a. Is all the local match identified in your application currently available, and if a partnering agency is also committing match, do you have a commitment letter?

Yes No

Please describe:

Centennial is committed to the TIP Call and funding the project in the subsequent years identified.

b. Is all funding for this project currently identified in the sponsor agency's Capital Improvement Program (CIP)?

Yes No

Please describe:

Design is currently funded in FY22 for the City, and the construction budget is planned for the City's Open Space and Public Works department to contribute towards

Section 3. Public Support

a. Has the proposed project previously been through a public review process (public comment period, public hearing, etc.)?

Yes No

b. Has the public had access to translated project materials in relevant languages for the local community?

Yes No

Please describe:

The community engagement process for the 2017 Centennial Trails and Recreation Plan (TRP) included five major outreach methods. A TRP Advisory Committee guided the planning team's efforts to engage with larger stakeholder groups including focus groups, community workshops, surveys, Facebook Live events, and participation at community events.

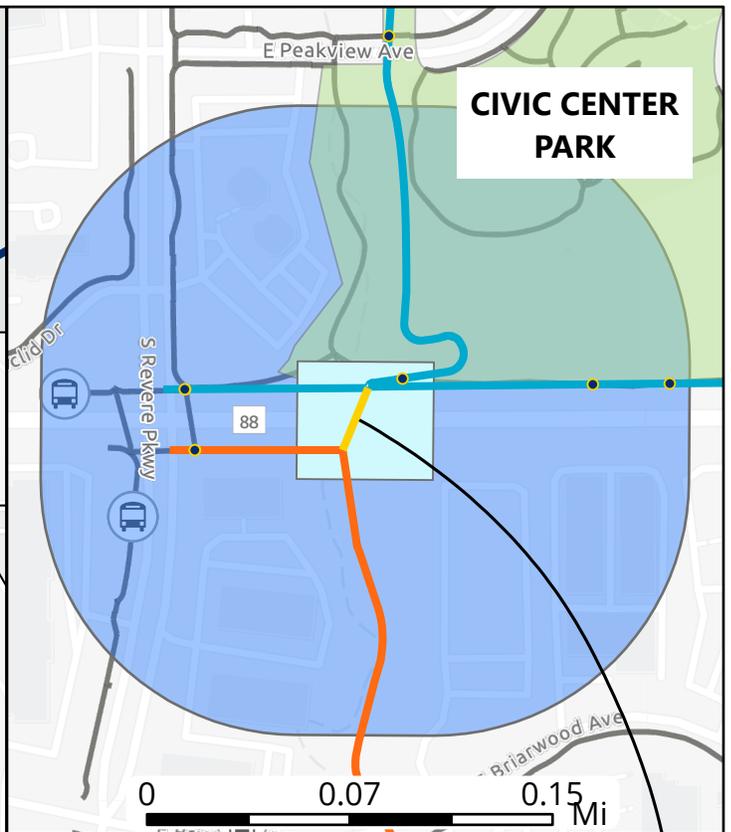
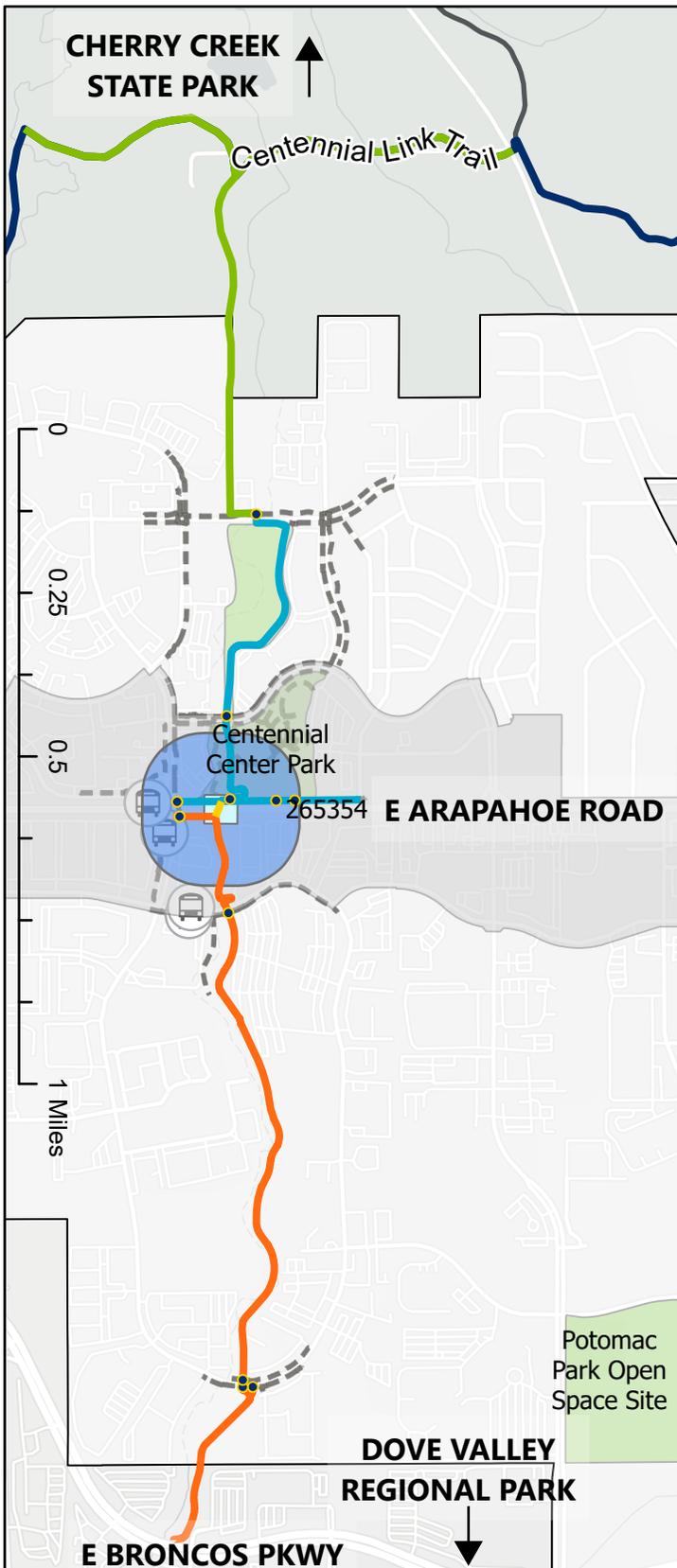
c. Have any adjacent property owners to the proposed project been contacted and provided with the initial project concept?

Yes No N/A

Please provide any additional details on the items in Section 3, if applicable.

Through the Lone Tree Creek Trail construction process on both the north and south side of Arapahoe, and with recent redevelopment on the south east corner of the project area, surrounding neighbors and stakeholders are aware of the project intentions and potential impacts.

Submit completed applications through the [TIP Data Hub](#) no later than 3pm on June 24, 2022.



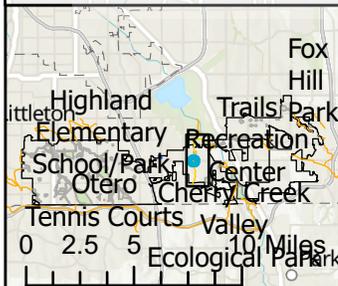
PRELIMINARY DESIGN



NOT FOR CONSTRUCTION

LEGEND

- | | | | |
|-------------------------|--|-------------------------------|---------------------------|
| LTC Phase 3 - In Design | LTC Phase 1B - Under Construction | Pedestrian Underpass Location | Sidewalk Connection |
| LTC Phase 2 - Design | Centennial Link Trail - Design | Underpass - 500' Buffer | City of Centennial |
| LTC Phase 1A - Complete | Centennial Parks Trails and Open Space | Nearby Bus Stops | Other Jurisdiction Trails |
| | Existing Sidewalk | | Arapahoe Road Corridor |



LONE TREE CREEK TRAIL
Phase 3 - Pedestrian Underpass



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Coordinate System: NAD 1983 2011 StatePlane Colorado Central FIPS 0502 Ft US



**Lone Tree Creek Trail Undercrossing
at Arapahoe Road
Estimate of Construction Costs**



Date Prepared: **June 24, 2022**

Item		Unit Cost	Quantity	Extended Cost	Notes
1	Clearing and Grubbing	LS	\$10,000.00	1	\$10,000
2	Removal of Curb and Gutter	LF	\$30.00	84	\$2,500
3	Removal of Sidewalk	SY	\$110.00	84	\$9,200
4	Removal of Structure (Wall)	LF	\$300.00	30	\$9,000
5	Removal of Guardrail	LF	\$60.00	60	\$3,600
6	Earthwork (CIP)	CY	\$30.00	1,000	\$30,000
7	Aggregate Base Course (Class 6)	Ton	\$50.00	180	\$9,000
8	Hot Mix Asphalt	Ton	\$150.00	200	\$30,000
9	Structural Concrete	CY	\$1,600.00	175	\$280,000
10	Handrail	LF	\$150.00	100	\$15,000
11	12' x 10' RCBC	LF	\$3,000.00	170	\$510,000
12	Concrete Trail	SY	\$95.00	845	\$80,300

10 foot wide and 6 inches thick

Total Major Items \$988,600

		% of Major Item Cost			
Total Major Items				\$988,600	A
Removals / Resets	% of A	5.0%		\$49,500	B-1
Landscaping	% of A	20.0%		\$197,800	B-2
Erosion Control	% of A	10.0%		\$98,900	B-3
Drainage / Dewatering	% of A	20.0%		\$197,800	B-4
Traffic Control / Detour	% of A	35.0%		\$346,100	B-5
Traffic - Striping	% of A	3.0%		\$29,700	B-6
Mobilization	% of A	12.0%		\$118,700	B-7
Misc. - Lighting/Commercial Signs/Curb Ramps	% of A	10.0%		\$98,900	B-8
Total of Bid Construction Items				\$2,126,000	B
Force Account Items	% of B	20.0%		\$425,200	C-1
Minor Contract Revisions	% of B	10.0%		\$212,600	C-2
Total of Bid Construction Items & Force Account Items				\$2,763,800	C
Construction Management/Materials Testing	% of C	20.0%		\$552,800	D-1
Total Construction Cost				\$3,316,600	D
Utility Relocations	% of D	10.0%		\$331,700	E-1
Contingency (Total Construction Cost)	% of D	20.0%		\$663,400	E-2
Total Project Cost Estimate				\$4,311,700	E

Opinion of Probable Construction Costs

In providing opinions of probable construction cost, the City has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinions of probable construction costs provided herein are to be made on the basis of our qualifications and experience. The City makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.



June 10, 2022

Jeff Dankenbring
Public Works Director, City of Centennial
13133 E. Arapahoe Road
Centennial, CO 80012

RE: CDOT Region 1 Support Request for DRCOG TIP Subregional Call FY22-FY25

Dear Mr. Dankenbring,

This letter is to inform you that the Colorado Department of Transportation (CDOT) Region 1 concurs with the following City of Centennial application for the Denver Regional Council of Governments (DRCOG) Subregional FY22-25 Transportation Improvement Program (TIP) Call. This concurrence applies only for the Bicycle/Pedestrian Undercrossing at Lone Tree Creek Trail and Arapahoe Road project, in the event this project is selected by DRCOG as a subregional project on or around August/September 2022. If this subregional project is awarded DRCOG funds at a later date, the local agency will need to submit a separate request for CDOT's concurrence at that time. The project as constructed will be maintained by the local agency, and not by CDOT. CDOT anticipates that this project will need a new or amended IGA specific to pedestrian structures.

Projects impacting state highways should assume that CDOT will manage the project and that the local agency is responsible for payment of CDOT's work, including indirect charges. An accurate project cost estimation, that accounts for cost escalation, is vital to the success of a project. Please note that per the DRCOG TIP Policy, if project costs increase on DRCOG-selected projects or the cost estimate is low, sponsors must make up any shortfalls. Regardless of CDOT's concurrence or support, sponsors should have no expectation of CDOT funding being available to help cover any funding shortfalls.

This concurrence is conditionally granted based on the scope as described. CDOT does, however, retain final decision-making authority for all improvements and changes within CDOT's right of way. As the project progresses the local agency will need to work closely with CDOT Region staff to ensure CDOT's continued concurrence.

This project must comply with all CDOT and/or Federal Highway Administration (FHWA) requirements including those associated with clearance for Right of Way, Utilities, and Environmental. All costs associated with clearances including right of way acquisition, utilities relocation, and environmental mitigation measures must be included in the project costs. CDOT staff will assist you in determining which clearances are required for your project. The CDOT Local Agency Manual includes project requirements to assist with contracting, design, and construction, which can be accessed at:

https://www.codot.gov/business/designsupport/bulletins_manuals/2006-local-agency-manual

Should you have any questions regarding this concurrence or if your agency would like to schedule time to meet with CDOT specialty units, please contact JoAnn Mattson at (303) 757-9866.

Sincerely,

Jessica Myklebust
CDOT Region 1 Transportation Director





Bicycle and Pedestrian Improvements

This calculator will estimate the reduction in emissions resulting from improvements to bicycle and pedestrian infrastructure and associated mode shift from passenger vehicles to bicycling or walking, including but not limited to sidewalks, dedicated bicycle infrastructure, improved wayfinding, mid-block crossing installations, bike share systems, and bike parking improvements.

Navigator

Bicycle and Pedestrian Improvements

INPUT

(1) What is your project evaluation year?

(2) Estimate the shift in daily motorized passenger vehicle trips to non-motorized travel due to the bicycle and pedestrian project.

Daily Passenger Vehicle Trips		
Before	After	Change
<input type="text" value="65000"/>	<input type="text" value="64864"/>	<input type="text" value="136"/>

(3a) Select the data type used for entering the typical one-way trip distance of passenger vehicles below:

Trip Distance Source

(3b) If you selected "Average" above, enter the typical one-way trip distance. If you selected "Distribution" above, enter the typical distribution of one-way trip distances.

Typical Trip Distance (miles one way)	Distribution of Trip Distances (daily fraction per mileage bin)					Sum
	$x < 1$	$1 \leq x < 2$	$2 \leq x < 3$	$3 \leq x < 4$	$4 \leq x \leq 5$	
<input type="text" value="2.494"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

OUTPUT

EMISSION REDUCTIONS

Pollutant	Total
Carbon Monoxide (CO)	1.269
Particulate Matter <2.5 μm (PM _{2.5})	0.004
Particulate Matter <10 μm (PM ₁₀)	0.013
Nitrogen Oxide (NOx)	0.089
Volatile Organic Compounds (VOC)	0.079
Carbon Dioxide Equivalent (CO ₂ e)	114.443
Total Energy Consumption (MMBTU/day)	1.489

*Units in kg/day unless otherwise noted



COLORADO

Parks and Wildlife

Department of Natural Resources
Cherry Creek State Park
4201 South Parker Road
Aurora, CO 80014
P 303.690.1166 | cherry.creek.park@state.co.us

June 17, 2022

RE: DRCOG FY2022-2025 TIP Arapahoe County Sub Region - Lone Tree Creek Trail Undercrossing at Arapahoe Road - City of Centennial

Dear Review Committee:

Please accept this letter demonstrating Cherry Creek State Park's support for the Arapahoe Road Undercrossing application submitted by the City of Centennial. Cherry Creek State Park provides unparalleled recreational opportunities with an 880-acre reservoir and 35 miles of shared-use trails. In 2020, the Park was visited by roughly two million visitors.

We support this project which will benefit the City of Centennial, the Cherry Creek State Park and the South Metro area communities. Cherry Creek State Park is committed to being an involved partner supporting the Lone Tree Link Trail and the Arapahoe Road Undercrossing project. Arapahoe Road presents a significant barrier to multi-modal users attempting to access the Park from the south. The Undercrossing project will eliminate this barrier and create a comfortable and safe connection for bicyclists and pedestrians of all ages and abilities to access the Park's 35 miles of trails. On behalf of Cherry Creek State Park, we hope you will consider supporting the proposed Arapahoe Road Undercrossing project.

Sincerely,

Jason Trujillo Park Manager





June 17, 2022

RE: DRCOG FY2022-2025 TIP Arapahoe County Subregion – Lone Tree Creek Trail Undercrossing at Arapahoe Road – City of Centennial

Dear Grant Selection Committee:

Arapahoe County Open Spaces wishes to express its full support for the Arapahoe Road Undercrossing project. This effort is vital to establish a regional connection for the Lone Tree Creek Trail and will improve safety for users of the new trail. Upon completion, the undercrossing will benefit the south metro-area communities, businesses, and visitors by improving pedestrian connectivity across Arapahoe Road between residential neighborhoods, schools, recreation areas, and employment centers. This trail and undercrossing will also enhance the regional trail system by adding an important north-south linkage under Arapahoe Road, connecting Centennial's City Center Park & Cherry Creek State Park to the north and Dove Valley Regional Park to the south.

Arapahoe County Open Spaces has been a committed partner in the project since its inception, having participated in initial stakeholder meetings and planning efforts. Our intent is to continue participation through the planning phases.

On behalf of Arapahoe County Open Spaces, we encourage you to consider funding the grant request. Our businesses and residential communities are excited to see this project move forward, and ultimately to enjoy the benefits of safe, convenient pedestrian access throughout the area.

Sincerely,



Arapahoe County Open Spaces

FIND YOUR SPACE

6934 South Lima Street, Centennial, CO 80112

d 720-874-6540

f 720-874-6743

e open_space@arapahoegov.com

w arapahoegov.com/openspaces



DOVE VALLEY
Metropolitan District

June 17, 2022

RE: DRCOG FY2022-2025 TIP Arapahoe County Subregion – Lone Tree Creek Trail Undercrossing at Arapahoe Road – City of Centennial

Dear Review Committee:

The Dove Valley Metropolitan District support(s) the grant application submitted by the City of Centennial to fund the Arapahoe Road Undercrossing of the Lone Tree Creek Trail. Arapahoe County, the City of Centennial, and the Dove Valley Metropolitan District have invested significantly in the design and construction of the Lone Tree Creek Trail, a 3.5-mile multi-use, non-motorized trail between Cherry Creek State Park and Dove Valley Regional Park. These investments are anticipated to bring pedestrians and bicyclists into this area, but Arapahoe Road presents a major barrier for users of this trail system. The proposed grade-separated crossing will ensure this major arterial continues to function safely and efficiently for travelers using all transportation modes, increasing accessibility to and from our regional parks and Centennial's Civic Center.

The Arapahoe Road Undercrossing will be a focal point of the regional trail system within the City of Centennial, and throughout Arapahoe County. Therefore, on behalf of the Dove Valley Metropolitan District, we hope you consider funding the proposed grant for the Arapahoe Road Undercrossing.

Regards,

David Solin
District Manager
Dove Valley Metropolitan District