



DRCOG FY2022-2025 TIP – Boulder 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 \$16,000,000 for Boulder 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 Projects25%

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 Priorities60%

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”)5%
 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 Readiness10%

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		CO 119 & Airport Rd Bus Rapid Transit, Safety and Mobility Improvements	
2. Project Location <i>Provide a map, as appropriate (see Page 1)</i>		Start point: CO 119: MM 52.75 End point: CO 119: MM 53.25 OR Geographic Area:	
3. Project Sponsor <i>(entity that will be financially responsible for the project)</i>		Boulder County	
4. Project Contact Person:			
Name	Alex Hyde-Wright	Title	Principal Transportation Planner
Phone	303-441-4910	Email	ahyde-wright@bouldercounty.org
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 checked="" type="checkbox"/> DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MVRTP) Provide MVRTP staging period, if applicable capital project: 2030-2039, but all project components are non regionally significant for air quality purposes		
	<input checked="" type="checkbox"/> Local/Regional plan:	Planning Document Title: Boulder County Transportation Master Plan; City of Boulder Transportation Master Plan; Envision Longmont, Northwest Area Mobility Plan, CDOT 10 Year Plan (links are provided in supplemental PDF) Adopting agency (local agency Council, CDOT, RTD, etc.): Boulder County Commissioners; Boulder City Council; Longmont City Council, RTD Board of Directors, CDOT Transportation Commission Provide date of adoption by council/board/commission, if applicable: 2-18-20; 9-17-19; 6-28-16; 8-14-14; December 2019	
	Please describe public review/engagement to date:	During the planning phase for this project, three rounds of in-person meetings were held in Boulder, Longmont, and Niwot between 2017 and 2019 using both the “open house” and “public hearing” formats. RTD also hosted pop-up events and conducted both a survey of both existing BOLT and J riders, and an online survey for the general public. During the design phase, which is currently underway, Boulder County and CDOT hosted a virtual public meeting in 2021. Boulder County has also convened two citizen advisory committees to gather in-depth public input and additional public outreach is planned for summer 2022, when FIR level designs for the project will be available. Throughout the project’s development, the project partners have maintained a continued social media and online presence, including a solicitation for input at any time.	
	Other pertinent details:	While Boulder County is the Project Sponsor for the grant application, if awarded funds, Boulder County will turn this project over to CDOT to manage and construct as the project sponsor.	

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)
<u>FOR ALL PHASES</u>	Intergovernmental Agreement (IGA) executed (with CDOT/RTD; assumed process is 4-9 months)	04/2023
<input type="checkbox"/> Design	Design contract Notice to Proceed (NTP) issued (if using a consultant):	
	Design scoping meeting held with CDOT (if no consultant):	
<input type="checkbox"/> Environmental	Environmental contract Notice to Proceed (NTP) issued (if using a consultant):	
	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):	07/2022
	FOR (Final Office Review):	05/2023
	Required clearances:	07/2023
	Project publicly advertised:	10/2023
<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 type="checkbox"/> Other:	First invoice submitted to CDOT/RTD:	

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

Serving residents, employees, and visitors from all across Boulder County and the North Front Range, CO 119 between Longmont and Boulder is the second most travelled corridor in Boulder County, but travelers in both vehicles and on buses face unreliable travel times. This high crash corridor produces more severe crashes per mile than any other in unincorporated Boulder County, which makes the road a significant deterrent to increased active transportation use.

RTD's SH 119 BRT Study estimated that traffic volumes in the corridor will increase 25% by 2040. If left unaddressed, in 2045 southbound transit service on CO 119 at Airport Rd will operate at LOS C in the AM peak with 26 seconds of delay. In the PM peak, southbound transit service would operate at LOS D with 43 seconds of delay, and the orange routing of CO 119 BRT service (which, headed to Longmont, turns left from NB CO 119 to NB Airport Rd), would operate at LOS E with 79 seconds of delay. With end to end transit travel times currently at 66 minutes, delays of half a minute to over a minute at a single intersection represent a significant share of overall transit travel time. If left unaddressed, travel time delays at this intersection will constrain future mobility and access, and hamper transit ridership.

The CO 119 corridor is a high crash corridor, with significant trends in broadside, approach turn, bicycle, rear-end, and single vehicle crashes. High vehicle speeds increase crash severities for all roadway users but pose a particularly high risk for persons travelling via bicycle or foot on the corridor. With only 9 miles separating Boulder and Longmont, the corridor has a lot of untapped potential for bicycle commuting. However, CO 119 has the second-highest number of severe bicycle and pedestrian traffic crashes of all corridors in unincorporated Boulder County, and survey data shows that most of the population finds the shoulders of CO 119 too stressful to consider cycling there. CO 119 & Airport Rd is the confluence of several key bicycling and walking routes, including the existing Airport Rd bike lanes and multi-use path, Longmont-to-Boulder (LoBo) Trail (which turns into the Lefthand Greenway 1 mile east of this intersection) and the future CO 119 Commuter Bikeway; however, connections between these facilities currently involve dangerous weaves with high-speed traffic or excessive crossing distances with conflicting motor vehicle turning movements.

CO 119 is a key subregional and regional travel corridor for Boulder County, but requires urgent improvements to ensure that this corridor is ready to support safety, air quality, mobility and equity goals well into the 21st century.

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

Roadway

Operational Improvements

Grade Separation

Roadway

Railway

Bicycle

Pedestrian

Regional Transit¹

Rapid Transit Capacity (2050 MVRTP)

Mobility Hub(s)

Transit Planning Corridors

Transit Facilities/Service (Expansion/New)

Active Transportation Improvements

Bicycle Facility

Pedestrian Facility

Air Quality Improvements

Improvements Impacting Freight

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

Complete Streets Improvements

Study

Safety Improvements

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.***

The project includes the following improvements at CO 119 & Airport Rd:

Southbound Transit-Only Queue Bypass Lane on CO 119 at Airport Rd:

- 450 ft long transit only queue bypass lane, with 1,000 ft long downstream transit acceleration lane

Intersection Improvements:

- Conversion of the median portion of Airport Rd to a one-way street, northbound only, including transit queue jump lane
- Signing, striping, marking, and signal improvements
- At-grade bicycle and pedestrian crossing improvements
- Commuter bikeway tie-in to the intersection
- Reconfigured lanes on Airport Rd north of CO 119 (to tie-in to the one-way segment)

A conceptual design for the intersection can be found the supplemental PDF.

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 proposed scope has been previously identified in multiple planning documents including the Boulder County Transportation Master Plan (2020 Update), CDOT 10 Year Plan, DRCOG 2050 MetroVision Regional Transportation Plan, and the RTD Northwest Area Mobility Study. RTD has completed a Planning & Environmental Linkages (PEL) Study for the corridor. CDOT is leading the final design for the project, which is currently underway, with FIR anticipated for July 2022, FOR in May 2023, required clearances in July 2023, and the project ready for advertisement in October 2023.

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: Either \$1.53M in DRCOG funds, or \$900k in DRCOG funds.

Outline the differences between the scope outlined above and the reduced scope: This project is comprised of two related components, which could be funded separately with the following commensurate reductions in scope. The total budget for the transit queue bypass lanes is \$1.7M, and could be funded with \$1.53M in DRCOG funding and a \$170k local match. With this reduction in funding, the intersection improvements would not be included in the scope of this project.

If this amount were not available, the intersection improvements have a total budget of \$1M and could be funded with a \$900k in DRCOG funding and a \$100k local match. With this reduction in funding, the transit queue bypass lane on CO 119 would not be included in the scope of this project.

If the DRCOG funding were reduced to less than \$900k, we would need to have further conversations with DRCOG and the Boulder County Forum about what scope could be accomplished for the amount of funding being offered.

Project Financial Information and Funding Request		(All funding amounts in \$1,000s)	
Total amount of Subregional Share Funding Request (in \$1,000's) (No less than \$100,000 and not to exceed 90% of the total project cost)		\$2,427	89.89% of total project cost
<input type="checkbox"/> Check box if requesting only state MMOF funds (requires minimum 50% local funds) ¹			
Match Funds (in \$1,000's) List each funding source and contribution amount.		Contribution Amount	% Contribution to Overall Project Total
Colorado Dept. of Transportation		\$273	10%
		\$	0%
		\$	0%
		\$	0%
		\$	0%
		\$	0%
Total Match (private, local, state, another subregion, or federal)		\$273	10.11%
Project Total		\$2,700	
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"/>	\$2,427	\$ <input type="text"/>	\$2,427
CDOT or RTD Supplied Funds²	\$ <input type="text"/>	\$273	\$ <input type="text"/>	\$273
Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$0
Total Funding	\$0	\$2,700	\$0	\$2,700
Phase to be Initiated	Choose an item	Construction	Choose an item	
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

25%

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.

CO 119 is a vital subregional and regional transportation corridor serving the economic health of Boulder County and the Denver metro area. This corridor is the primary connection between Boulder and Longmont, Boulder County's two largest municipalities, which together make up about two thirds of the total population of Boulder County. Nine of Boulder County's 11 DRCOG-designated urban centers lie directly on the CO 119 corridor, as does the University of Colorado-Boulder, the state's largest university. In 2020, there were 57,000 households and 136,000 jobs within a .5 mile buffer of the full CO 119 corridor.

The annual average daily traffic (AADT) on segments of CO 119 between Boulder and Longmont is currently 45,000 daily vehicles and forecast to rise 15% to 56,000 daily vehicles by 2040, making this the second busiest regional corridor in Boulder County, behind only US 36 connecting Boulder and Denver (reference map in supplemental PDF). The RTD BOLT route which connects Boulder and Longmont is one of the busiest bus routes in Boulder County. Additionally, the "Diagonal Hwy" section of CO 119 has the highest number of serious injury and fatal traffic crashes of any corridor in unincorporated Boulder County.

Addressing the travel time delay on this corridor is critical to supporting the economic health of Boulder County, and addressing the crash history on this highway is essential to achieving CDOT and Boulder County's vision zero goals. Currently, the corridor is also a significant barrier to the growth of active transportation modes; Boulder and Longmont are only 9 miles apart, but to many prospective bicycle commuters appears as daunting as 999 miles due to the adjacent vehicle traffic traveling at 65+ miles per hour. The municipalities of the Northwest metro area, Boulder County, CDOT, and RTD have long recognized the need for change on this corridor and have, starting with the Northwest Area Mobility Study in 2014, developed a vision for Bus Rapid Transit and associated operational and safety improvements on CO 119.

CDOT, RTD, Boulder County, the City of Boulder, the City of Longmont and other stakeholders have now come together to fulfill this vision. CDOT is leading the design for the "CO 119 Safety and Mobility Project," which includes roadway, bus rapid transit and safety improvements, and Boulder County is leading the design for the CO 119 Commuter Bikeway, which will provide a separated multi-use path in the median of the highway for bicyclists and pedestrians. Bookending the "Diagonal Hwy," both Longmont and the City of Boulder are nearing construction of substantial transit, walking, and bicycling improvements on the CO 119 corridor within their communities.

The proposed project in this application represents two components which together will complete the corridor vision for CO 119 & Airport Rd, one of the last unfunded signalized intersections on the Diagonal Hwy, bringing us significantly closer to the vision for the full corridor.

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.

At its core, the proposed project has been designed to tackle the existing corridor's three major challenges: lack of reliable travel times due to congestion, high number of crashes, and lack of low-stress bicycle and pedestrian facilities.

The 2014 Northwest Area Mobility Study (NAMS) determined that implementation of BRT on CO 119 between Boulder and Longmont would support and increase transit usage along CO 119, increase mobility, improve travel time reliability, and was feasible for implementation in the near-term. The 2019 RTD Planning and Environmental Linkages Study recommended managed lanes for the full Diagonal Hwy corridor between CO 157 and Hover St, but subsequent modelling showed similar travel time improvements for both transit and general purpose traffic could be achieved at a fraction of this cost by constructing transit queue bypass lanes at the signalized intersections on the corridor (Jay Rd, N 63rd St, CO 52, Niwot Rd, and Airport Rd). The improvements included in this project will ensure that almost all transit movements at this intersections, including all peak-direction transit movements, operate at LOS A with only 0-5 seconds of delay. With these improvements, general purpose traffic in the peak direction (southbound CO 119 in the AM, and northbound CO 119 in the PM) will operate at LOS A in 2045.

As part of the design process for the CO 119 Safety & Mobility Project on the Diagonal Hwy, CDOT commissioned a Safety Assessment Report for the corridor summarizing and analyzing the crash history. This report documents several broadside and approach turn crash trends at CO 119 & Airport Rd that would be eliminated by the intersection improvements included in this project, including the conversion of the median portion of Airport Rd to a northbound one-way street. Of the 32 crashes analyzed in the report, 9 approach turn and broadside crashes would be eliminated by the proposed project. Other sideswipe, rear end, and single vehicle crashes (representing another 17 crashes analyzed) would also be partly mitigated by the other signing, striping, marking, and signalization improvements included in the project, which will improve the visibility and conspicuity of the intersections.

To support the increased use of active modes on CO 119, the Boulder County Transportation Master Plan and DRCOG Active Transportation Plan also identified a high-comfort or separated bicycle and pedestrian facility and related improvements. The proposed project will complete one node of the CO 119 commuter bikeway at Airport Rd, and improve connections for bicyclists and pedestrians between the bikeway and Airport Rd, which provides access to and from SW Longmont. The bikeway tie-in and connections to Airport Rd represent another installment towards a larger vision (now already partially funded) for a separated commuter bikeway in the median of CO 119 that will connect Boulder and Longmont and provide access to the BRT stations on the “trunk” portion of CO 119 along the way. The commuter bikeway will provide a safe replacement for bicycling on the existing shoulders of CO 119, a configuration which has led to this corridor accounting for the second-highest number of bicycle and pedestrian injury and fatality crashes in unincorporated Boulder County: 24 such crashes between 2009 and 2018.

Together, the intersection safety improvements, transit queue bypass and queue jump lanes, and improved bicycle and pedestrian crossings included in this project will improve safety and travel time reliability for people travelling via all modes on the CO 119 corridor.

- 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.

While the proposed project is geographically located in unincorporated Boulder County, the project will also directly benefit the City of Longmont and the City of Boulder. Recent StreetLight (a “big data” company that uses cell phone data to develop travel metrics) data analysis by Boulder County shows that the City of Longmont is the largest source of “in-commuters” to the City of Boulder (people who work in the City of Boulder but live somewhere else). Functionally, it also provides benefits to many other jurisdictions, including Larimer County and the SW Weld County subregion. The Streetlight data shows that almost 30% of trips on the corridor start in

Larimer or Weld Counties, including the 16% of all trips on CO 119 (about 7,500 per day) that start or end in Weld County.

The project will also have benefits to Broomfield and Adams County subregions. The reason is that for some trip patterns between Broomfield and Longmont, it is faster to take US 36 connecting to CO 119 through Boulder than to use US 287 or I-25. The traffic analysis shows that 1% – or about 500 trips a day – start or end along the US 36 corridor toward Denver.

Improvements to this corridor will have benefits to tens of thousands of people across the north Front Range, not just in Boulder County. The project will also benefit communities in the North Front Range Metropolitan Planning Organization. The FLEX bus route – operated by City of Fort Collins – connects Fort Collins (and Colorado State University) to Boulder (and University of Colorado) via Loveland and Longmont. This inter-regional route – which was initially funded by a DRCOG grant and is now continuing with local funding – will see a delay reduction of 5.1 minutes for each trip within Boulder County once all transit queue bypass lanes on the Diagonal Hwy segment of CO 119 are complete.

While the local match for this specific project is being provided solely by CDOT, the overall CO 119 vision is being funded by CDOT, RTD, Boulder County, the City of Boulder and the City of Longmont.

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	5,984	-	-
	b. Total households	1,949	-	-
	c. Individuals of color	1,292	22%	33%
	d. Low-Income households	48	2%	9%
	e. Individuals with limited English proficiency	16	0%	3%
	f. Adults age 65 and over	454	8%	13%
	g. Children age 5-17	1,656	28%	16%
	h. Individuals with a disability	233	4%	9%
	i. Households without a motor vehicle	18	1%	5%
	j. Households that are housing cost-burdened	641	33%	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*: After housing, transportation often accounts for the second largest share of household spending, and travelling via private vehicle is an expensive way to travel. Using the DRCOG region average of 25.5 miles per day per person (Source: DRCOG, <https://metrovision.drcog.org>), and the IRS mileage rate of 59¢ per mile, individual annual transportation costs for private vehicle travel come to \$4,200- \$5,200 per year. By contrast, 12 months of an RTD regional monthly pass costs \$2,400 per year, and the Victoria Transport Policy Institute (<http://www.vtpi.org/tca/tca0501.pdf>) has estimated the cost of bicycle commuting at 5-15¢ per mile, or roughly six times cheaper than motor vehicle travel. However, these cheaper modes are of little use if they are not safe and reliable.

By constructing connections to the commuter bikeway at CO 119 & Airport Rd, this project will lay the groundwork for a commuting on a separated bikeway on the CO 119 corridor. This project will help open up bicycle travel to those who are physically capable, but unwilling to bicycle on the shoulders of the existing highway unprotected from 60-70 mph vehicle traffic.

Constructing transit queue bypass lanes will help make riding transit on CO 119 a safe and reliable travel option. By greatly improving the viability of much cheaper modes of travel, this project will support low income households, the 33% of households within the project buffer that are housing cost-burdened, households without a motor vehicle, and the tens of thousands of households in both Longmont and Boulder by significantly reducing their annual transportation costs.

For children who are too young to drive, older adults who can no longer drive, and individuals with disabilities that prevent them from driving, this project will improve their personal mobility and provide newfound independence by making bicycling and transit more viable options.

This project will promote equity within Boulder County, a county that is becoming increasingly diverse. Latinos are the largest minority population in the county and currently have lower levels of education and are more likely to live in poverty than the population as a whole. (2017-2019 Community Foundation Boulder County Trends Report) According to the 2015 American Community Survey estimates, 27% of Longmont residents identify as Latino, as compared to 21% of Colorado's population overall. Investing in this vital corridor will help connect individuals of all backgrounds with meaningful employment and higher educational opportunities allowing them to increase their ability to realize economic mobility.

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. Channeling housing and employment development into Boulder County's urban areas is contingent on creating strong transportation connections between these urban centers which serve as the arteries for economic activity. It is widely recognized that private dollars follow public investment. In its 2013 report, the Institute for Transportation Development Project found that of 21 transit corridors in North America evaluated, 14 leveraged more than \$1 of TOD investment per \$1 of transit investment, and five of these were BRT projects. (Source: Institute for Transportation & Development Policy, <https://www.itdp.org/2013/11/13/more-development-for-your-transit-dollar-an-analysis-of-21-north-american-transit-corridors/?/moredevelopment>).
- Contain urban development in locations designated for urban growth and services. Through the Boulder County Comprehensive Plan, Boulder County has intergovernmental agreements with the Cities of Boulder and Longmont to ensure development is focused in existing urbanized areas, preserving the rural character of unincorporated Boulder County; please reference the land use map included in the supplemental materials.
- Increase housing and employment in urban centers. The urban centers that are connected by this project are zoned for increased job and housing density, and this project will ensure their ability to thrive including by providing alternate means of travel to single occupancy vehicles, whose numbers limit economic growth in the form of traffic congestion.
- Improve and expand the region's multimodal transportation system, services, and connections. This project is a true multimodal project, with components that together will benefit all modes. Pedestrians and bicyclists will benefit from the intersection improvements that will make it safer and more convenient to access the CO 119 commuter bikeway, transit passengers will benefit from the southbound transit queue bypass lane and the transit queue jump lane on northbound Airport Rd, and motorists will benefit from both the projected decrease in general purpose traffic travel times and the reduction in broadside and approach turn and other crashes.
- Operate, manage, and maintain a safe and reliable transportation system. See above bullet point.
- Improve air quality and reduce greenhouse gas emissions. This project will improve air quality and reduce greenhouse gas emissions by converting single occupant vehicle trips into walking, biking and

transit trips by providing safe and comfortable facilities connecting to the CO 119 commuter bikeway and by improving transit travel time reliability.

- **Connect people to natural resource and recreational areas.** The project connects Boulder County Open Space properties and trails, City of Longmont trails, and City of Boulder Open Space properties and trails. The Longmont-to-Boulder (LoBo) Trail is a multi-agency trail that at Hover St, turns into Longmont's Lefthand Greenway.
- **Reduce the risk of hazards and their impact.** By shifting travel from single occupant vehicles to walking, bicycling, and transit, the project will lessen the transportation system's impact on climate change.
- **Increase access to amenities that support healthy, active choices.** The proposed project will improve travel between SW and SE Longmont for those using the Airport Rd multi-use to connect to the LoBo Trail. By completing the elements of the 119 Commuter Bikeway at Airport Rd, this project will entice more people to travel via bicycle between Boulder and Longmont, and complete a major missing link in the DRCOG Active Transportation network.
- **Improve transportation connections to health care facilities and service providers.** Multimodal projects increase equity by providing mobility options for the many residents and employees of Boulder County that do not or cannot drive a personal car for health, financial or other reasons. It also improves connections to numerous healthcare facilities, including Longmont United Hospital. Enabling people to reach healthcare and education opportunities via transit and bicycling will reduce transportation costs, and allow households to re-allocate their financial resources to other needs.
- **Diversify the region's housing stock.** By reducing reliance on personal vehicles, bicycling and transit can allow cities and developers to construct less parking when housing is built, making cities and neighborhoods more compact, more walkable and more efficient. (Source, People for Bikes: https://bikeleague.org/sites/default/files/Bicycling_and_the_Economy-Econ_Impact_Studies_web.pdf)
- **Improve access to opportunity.** This project improves connections to the two largest education centers in Boulder County: CU-Boulder, and the Longmont campus of Front Range Community College; both will have BRT stations within walking distance that will utilize the transit queue bypass lane and queue jump lane included in this project.
- **Improve the region's competitive position.** Congestion is widely recognized as a limiting factor to economic growth, in the form of lost time and productivity, trips avoided, and increased transportation costs for freight. By allowing transit on the CO 119 corridor to bypass congestion, this project will allow for increased economic activity. This project will also reduce travel times for general purpose traffic and freight, further improving the region's competitive position.
-
- While the connection between increased walking and bicycling and improved health is more intuitive, research indicates that transit riders are also healthier than those who commute via private vehicle (Source: <https://www.bmj.com/content/349/bmj.g4887>), mainly because most transit trips also include a walking or biking trip to get to or from a transit stop. By inducing travel via walking, bicycling and transit, this project will improve the overall health of Boulder County residents and employees, and the CDC outlines a number of ways in which healthier employees are more productive and save employers money (Source: <https://www.cdc.gov/workplacehealthpromotion/model/control-costs/benefits/productivity.html>).
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- Bicycling provides additional economic benefits to both the individuals who ride and to society at large. The economic impact of bicycling to the City of Boulder alone in 2011 was estimated to exceed \$52 million annually, supporting 330 jobs (Source, Bike League: <https://bikeleague.org/sites/default/files/ABsept-oct2012-final.pdf>).
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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: [Twin Peaks Activity Center](#), [Ken Pratt Extension](#), [CBD of Longmont](#), [North Main Street AC](#), [SH66 Mixed Use Corridor](#), [28th/30th Streets BVRC](#), [Downtown Boulder](#), and [University Hill](#)
- Is there a transit stop or station within ½ mile of the project limits?*
- Bus stop: Yes No If yes, how many?
- 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:
- If yes, provide how the area is defined in the relevant planning document:
- 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):

Provide households and employment data*	2020	2050
Households within ½ mile	1,949	2,867
Jobs within ½ mile	941	1,481
Household density (per acre) within ½ mile	0.82	1.21
Job density (per acre) within ½ mile	0.44	0.67

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

Existing transit services on the CO 119/ US 287 corridor- the RTD BOLT route and Transfort FLEX route- will be able to make immediate use of the transit queue bypass lane at Airport Rd. While the project location is not within or directly adjacent to a DRCOG designated urban center, the full CO 119/ US 287 corridor, and the transit service currently operating along it, connects 9 of Boulder County’s 11 DRCOG urban centers.

In Longmont, these urban centers include [Twin Peaks Activity Center](#), [Ken Pratt Extension](#), [CBD of Longmont](#), [North Main Street AC](#), and [SH66 Mixed Use Corridor](#) and in the City of Boulder, include: [28th/30th Streets BVRC](#), [Downtown Boulder](#), and [University Hill](#). Within these urban centers, Longmont has completed a [Main Street Corridor Plan](#) which “creates opportunities for mixed use projects” and is punctuated by the [1st & Main Station](#), Longmont’s rapidly developing new multimodal hub and the location of the planned commuter rail station, and Longmont’s [Coffman Street Busway Project](#). Within Boulder, multimodal corridor plans have been completed for [28th St](#), [30th St](#), [Arapahoe Ave](#), [Canyon Blvd](#)- all of which are served by current and future CO 119 transit service, and are anchored by Boulder Junction, a 160-acre redevelopment area that is being transformed into a mixed-use, transit-oriented community anchored by RTD’s [Boulder Junction at Depot Square Station](#) and home to the future B-Line commuter rail station. Within Boulder Junction, there are more than 24 employers with over 3,600 employees, 1.8 million square feet of commercial uses, and over 1,300 existing and proposed housing units. At full buildout, between 2,800 and 5,000 new residents will live within convenient walking distance of the transit center.

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**.

CO 119 in its existing state poses numerous barriers to access and connections between key regional destinations in Boulder and Longmont. In the peak periods, travel times are highly variable and significantly longer than during off-peak periods, and it is the highest crash corridor in unincorporated Boulder County, which greatly limits the demand for trying to access transit on the corridor via walking or biking, or trying to bike along the corridor. This project will improve access and connectivity by reducing travel times for both transit riders and motorists, improving travel time reliability and improving safety for all modes.

The CO 119 corridor, and the transit service that utilizes it, provides direct access to the four highest density employment and housing locations in Boulder County: downtown Boulder (2.5M SF of retail and office space with 10,000 employees), downtown Longmont, Boulder Junction, and the University of Colorado-Boulder, the latter of which is also the largest university in the state with 35,000 students. The corridor also provides access to the Longmont campus of Front Range Community College, which is a mere 7 minute walk from the nearest existing BOLT bus stop and future BRT stop. CO 119 transit service also provides connections to Boulder High School, Longmont High School, and Silver Creek High School (Longmont), and will help transport high school students to and from class.

Boulder is a major hub for medical services in Boulder County and the Northwest Metro Area, and the future CO 119 BRT service that will utilize this project's components will provide a direct connection to Longmont United Hospital.

Transit service that provides access to two of Boulder County's largest shopping districts- 29th Street Mall in Boulder and Village at the Peaks in Longmont, will benefit from this project.

The bicycle and pedestrian connections to the CO 119 commuter bikeway included in this project will provide access to both city and county open space properties and trails including the LoBo Trail, which is located on the south side of the CO 119 & Airport Rd intersection. Once on the commuter bikeway, people will also be connected to Boulder County's extensive network of paved roads with bikeable shoulders, and gravel roads, both of which are used heavily for recreation.

By improving access to downtown Boulder, CU-Boulder, and downtown Longmont, the project will improve access to the three largest cultural hubs in Boulder County, anchored by the Boulder Theater, Macky Auditorium and the Longmont Theater Company respectively.

B. MVRTP Priorities

WEIGHT

60%

- **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.): [Transit Queue Bypass Lane](#), [transit queue jump lane](#), [bicycle/pedestrian connections](#), [intersection safety improvements including conversion of segment of Airport Rd to one-way](#)
- 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:*

DRCOG identifies this section of CO 119 as a Regional Connector Street, which primarily functions to "facilitate long distance trips for transit and driving." For this street typology, the Complete Streets Toolkit places high emphasis on sidewalks and pedestrian lighting, travel lanes and transit lanes and stops, with a medium emphasis on bicycle facilities. DRCOG identifies Airport Rd as a Rural Road, and places a high emphasis on travel lanes, with a medium emphasis on bicycle travel. This project will increase mobility choices for people, goods and services by improving access, connections, and reliability for all modes by constructing many of the complete street strategies identified for both regional connector streets and rural roads.

To improve connectivity for pedestrians and bicyclists, the project will construct improved crossings at southbound CO 119 & Airport Rd, for people crossing SB CO 119. These crossings will provide safer connections to the CO 119 Bikeway, which will be located in the median of CO 119, and the LoBo Trail, which is accessed from an existing underpass that connects the median of CO 119 to the south side of the CO 119 right-of-way.

Passengers riding transit through the CO 119 & Airport Rd intersections will benefit from the transit queue bypass lane on CO 119 and the transit queue jump lane on Airport Rd in the form of faster and more reliable travel times. In the PM peak, all bus movements will operate at LOS A, with an average delay of 0-3 seconds. In the AM peak, the dominant transit movement (southbound on CO 119) will also operate at LOS A with a delay of 0 seconds.

This project will also improve asset management of active transportation facilities by replacing a section of the existing high-stress, high crash bicycle route (the shoulders of CO 119) with a low-stress, separated facility (the tie-ins to the Commuter Bikeway) that means current AASHTO and NACTO guidelines given the characteristics of CO 119. The existing shoulders provide no separation from high speed vehicle traffic, and at intersections requires bicyclists and right turning vehicles to merge across each others' paths. The 119 bikeway tie-ins included in this project will address both of these issues.

This project will help address natural and human-made hazards in two ways. First, human-caused climate change is increasing the severity of natural disasters including fires and floods. By shifting travel from SOVs to walking, biking, and transit, this project will contribute to our reduction in GHG emissions and will lessen our collective impact on large natural disasters. Secondly, as in the case of many recent Boulder County disasters (2013 floods, 2016 Cold Springs Fire, and 2021 Marshall Fire), people often either lose their vehicle in a disaster, or have significant rebuilding costs that diminish their ability to afford operating and maintaining their vehicle. By providing viable alternatives to driving, this project addresses both cases.

Air Quality

Improve air quality and reduce greenhouse gas emissions.

(drawn from [2050 MVRTD 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	NOx	VOCs	PM 10
	1.06	0.07	0.05	0.02

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:*

This project improves air quality by converting single occupant vehicle trips into transit, bicycling and walking trips, and by improving the flow of general purpose traffic. The project will reduce congestion, reduce vehicle miles travelled (VMT), and will reduce single occupant vehicle (SOV) travel.

The following methodology was used for the transit FHWA CMAQ calculator: the RTD PEL determined that BRT on CO 119 would result in 423,000 additional annual boardings. The proposed project at CO 119 & Airport Rd accounts for about 1.25% of the transit travel time savings that will be achieved through the delivery of BRT. Therefore, we estimated that the proposed project will account for 1.25% of the anticipated increase in annual transit boardings, or 5,288 trips. Due to the regional nature of the service, average transit trip distance was estimated to be 16 miles.

The methodology for determining the number of new bicycle trips, and the automobile trips they would be replacing (100 trips per day), is described within the Active Transportation Section of this application. By shifting SOV trips to transit, bicycling, and walking, the proposed project will reduce VMT and SOV travel.

The proposed project will also slightly reduce general purpose traffic congestion by improving the LOS of the unsignalized intersection in the PM peak from B to A.

**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? [CO 119](#)
- 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: [Project improves transit service \(reduces transit travel times and improves travel time reliability\) to the following urban centers: Twin Peaks Activity Center, Ken Pratt Extension, CBD of Longmont, North Main Street AC, SH66 Mixed Use Corridor, 28th/30th Streets BVRC, Downtown Boulder, and University Hill, and improves transit service within the Gunbarrel Activity Center 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:*

The 2050 MVRTP identifies the CO 119 corridor as a “Bus Rapid Transit or Busway” corridor, and this project is a critical component of realizing the vision for full Bus Rapid Transit on CO 119. Most definitions of BRT include dedicated running ways or queue jump lanes to protect buses from travel time variability caused by congestion, and this project delivers.

As described earlier in this application, earlier planning work identified the need for managed lanes the full length of CO 119 between Longmont and Boulder, but subsequent analysis showed similar travel time improvements, including for transit, could be achieved at much lower cost through transit queue bypass lanes.

The transit queue bypass lane on southbound CO 119 included in this project is a new auxiliary transit-only lane that will begin in advance of forecasted 2045 traffic queues and will allow transit vehicles to pull into this dedicated lane in advance of the back of the intersection-related queues, bypass the queues, and proceed through the intersection without delay. This lane is sized to extend beyond the back of the forecasted queues to ensure reliable transit operations: 450 ft long in the southbound direction of CO 119. Downstream of the intersection, the 1,000 ft bus acceleration lane will allow transit vehicles to merge back into the general purpose lanes.

The transit queue jump lane on northbound Airport Rd will allow northbound orange line buses (see supplemental materials for map of the two planned “patterns” of CO 119 BRT service) to turn left off of northbound CO 119 and pull up to the stop bar at the signalized intersection, enabling these buses to make it through the light within a single signal cycle. All peak direction transit movements will operate at LOS A in 2045 with the proposed project, which will assist in reducing end to end transit trip times from the existing 66 minutes to 38 minutes, a 28 minute savings per trip.

The existing BOLT and FLEX bus service and future CO 119 BRT service connects numerous urban centers in Longmont and Boulder, whose cities together account for two thirds of the population of Boulder County. While there is not a planned BRT station at CO 119 & Airport Rd, the proposed project will better connect Longmont's local bicycle and pedestrian network to the future CO 119 Bikeway, which will connect to BRT stations at CO 119 & Niwot Rd, and CO 119 & Hover St.

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	2	
Other Injury crashes	22	
Property Damage Only crashes	23	Provide the methodology below: Used a 20% reduction for overall crashes, described more fully below
Estimated reduction in crashes <u>applicable to the project scope</u> <i>(per the five-year period used above)</i>		
Fatal crashes reduced	0.00	
Serious Injury crashes reduced	0.40	
Other Injury crashes reduced	4.40	
Property Damage Only crashes reduced	4.60	

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

As the CO 119 “The Diagonal Hwy” corridor is responsible for the largest number of serious injury and fatal traffic crashes in unincorporated Boulder County, improving safety on the CO 119 corridor is critical to achieving Boulder County’s, DRCOG’s and CDOT’s safety and vision zero goals.

The Safety Assessment Report that CDOT commissioned as part of the design process for the CO 119 corridor identified approach turn and broadside crash histories at the two CO 119 & Airport Rd intersections, among other crash types. Compared with all crashes overall, a higher percentage of both approach turn and broadside crashes result in serious injuries or fatalities due to their involving impacts to the sides of vehicles, where the crumple zone is the smallest and vehicle occupant protection is weakest.

At the southbound CO 119 & Airport Rd intersection (the signalized intersection), approach turn crashes occur when northbound drivers on Airport Rd do not safely judge gaps in southbound Airport Rd traffic. By converting the median portion of Airport Rd to a northbound one-way street (thereby eliminating southbound Airport Rd traffic), the proposed project will eliminate the potential for approach turn crashes at the signalized intersection, which from 2015 to 2019 accounted for 4 crashes.

At the northbound CO 119 & Airport Rd intersection (the unsignalized intersection), broadside crashes occur when southbound drivers on Airport Rd (destined for Ogallala Rd) do not safely judge gaps in northbound CO 119 traffic, which is typically travelling at 65+ mph. By converting the median portion of Airport Rd to a northbound one-way street (thereby eliminating southbound Airport Rd traffic), the proposed project will eliminate the potential for broadside crashes at the unsignalized intersection, which from 2015 to 2019 accounted for 5 crashes, 4 of them injury.

The intersection safety improvements at both intersections including upgraded traffic signal poles, signing, striping, lighting are estimated to reduce rear end, side-swipe and single vehicle crashes by 10%.

While there has not been a significant history of bicycle or pedestrian crashes at CO 119 & Airport Rd, the overall CO 119 corridor accounts for the second highest number of bicycle and pedestrian injury and fatal crashes in unincorporated Boulder County, and the same conditions that exist at other intersections on CO 119 exist at Airport Rd. Vision Zero demands a proactive, safe systems approach.

Currently, bicyclists headed to the median of CO 119 (where the existing underpass connection to the Longmont-to-Boulder Trail is located, and the location for the future 119 commuter bikeway) using the southbound bike lane on Airport Rd must complete a weave with southbound motor vehicle traffic on Airport Rd (speed limit 45 mph) that is focused on accelerating to merge with southbound CO 119 traffic. Bicyclists opting to cross southbound CO 119 at the crosswalk (located on the east side of the signalized intersection) are faced with an 84 ft crossing distance across four lanes of traffic.

In addition to the potential for crashes where high speed motor vehicle traffic and bicyclists and pedestrians mix, improving the perceived safety and comfort on the CO 119 corridor is critical to inducing more people to walk and bike along the corridor between Longmont, Boulder and points in between. When people decide whether or not to travel by foot or bike, most people do not consult a crash history, but rather decide based on how a route feels. Indeed, a recent DRCOG Active Transportation Plan survey found that 70% of respondents said they would ride more if they felt safer from traffic while bicycling (Source, DRCOG, https://drcog.org/sites/default/files/resources/DRCOG_ATP.pdf).

Perceived safety has been quantified as a Level of Traffic Stress (LTS) rating system to describe which types of bicycle facilities will appeal or be comfortable to which types of users:

- LTS 1- Suitable for children
- LTS 2- A level of traffic stress that most adults can tolerate, suitable for the “interested but concerned.”
- LTS 3- A level of traffic stress acceptable to those classified as “enthused and confident.”
- LTS 4- A level of stress acceptable only to those classified as “strong and fearless.”

Source: Northeastern University, <http://www.northeastern.edu/peter.furth/research/level-of-traffic-stress/>

With traffic volumes ranging from 30,000 to 60,000, the shoulders on CO 119 and the existing options for crossing southbound CO 119 fall clearly in the LTS 4 category, meaning that only about 1% of the population is willing to use them.

The proposed project will greatly improve the safety and perceived comfort of crossing options for bicyclists and pedestrians travelling between Airport Rd and the median of CO 119. For bicyclists using the southbound bike lanes on Airport Rd, the southbound motor vehicle traffic will be channelized with a new pork-chop island, with a designated crosswalk where motor vehicle traffic will yield to bicycle traffic. From this new island, southbound bicyclists will have a 50 ft crossing distance with no conflicting motor vehicle turning movements to access the median of CO 119 and the commuter bikeway. On the east side of the signalized intersection, another porkchop island will be created, which will reduce the existing 84 ft crossing distance to a 45 ft crossing distance, and a separate 15 ft crossing distance across the right turn traffic, with the raised porkchop island serving as a refuge between the two crossings. With the median portion of Airport Rd converted to a northbound one-way street, the 45 ft crossing distance will be across three lanes of traffic, none of them including any turning movements, and one of them being a transit-only lane.

The CO 119 commuter bikeway, for which this project completes the required elements at Airport Rd, virtually eliminates the possibility of “Hit From Behind” and “Passing Bike” crashes. While crashes involving turning

vehicles can still occur with a separated bikeway, they can be greatly reduced through the intersection improvements included in this project scope.

These safety countermeasures and other project elements are designed to mitigate the following crash types: crashes involving bicyclists or pedestrians, broadside, approach turn, rear end, side swipe and single vehicle crashes. Overall, the safety improvements included in the project scope are estimated to result in a 20% reduction in overall crashes within the project scope.

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: [Northwest Metro](#)
- 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: [CO 119 & Airport Rd](#)
- 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:*

The proposed project is located on the Tier 2 Regional Highway Freight Vision Network and will positively impact access to and from the adjacent Northwest Metro Freight Focus Area. The Regional Multimodal Freight Plan identified several Needs and Issues for the Northwest Metro Freight Focus Area, including the safety of local truck movements and residential delivery demand, and multimodal and nonmotorized traveler safety.

The proposed project will address truck and freight safety at the CO 119 & Airport Rd intersections through the conversion of the section of Airport Rd in the median of CO 119 to a way-way street (northbound only), which will eliminate approach turn crashes at the southbound CO 119 & Airport Rd intersection (the signalized intersection) and broadside crashes at the northbound CO 119 & Airport Rd intersection (the unsignalized intersection).

DRCOG’s Regional Multimodal Freight Plan shows that this intersection has a travel time reliability index of 1.6-2, meaning travel times in the peak periods take 1.6-2x longer than off-peak periods. As crashes also contribute to traffic congestion, this project will also improve freight travel time reliability. The proposed project will address non-motorized traveler safety through the inclusion of improved bicycle and pedestrian connections, and tie-ins to the 119 commuter bikeway.

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:	250	
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.	250	400
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>	125	200
4. = Initial number of new bicycle trips from project (#2 – #3)	125	200
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>	25.00	40.00
5. = Number of SOV trips reduced per day (#4 - #5)	100.00	160.00
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>	200.00	320.00
7. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	190.00	304.00
8. If values would be distinctly greater for weekends, describe the magnitude of difference:		
9. If different values other than the suggested are used, please explain here: For the second #1 above, we are estimating to only pull 20% of these trips from other non-SOV modes due to the regional nature of this facility. Since SOVs are the dominant mode on CO 119, we expect that the vast majority of new bicycle trips would be pulled from SOV travel, instead of other non-SOV modes.		

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):	20	
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	20	50
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>	0	0
5. = Number of new trips from project (#2 – #3)	20	50
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>	6.00	15.00

7. = Number of SOV trips reduced per day (#4 - #5)	14.00	35.00
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)	5.60	14.00
9. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	5.32	13.30
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:		

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 Denver Regional Active Transportation Plan identifies the CO 119 corridor between Boulder and Longmont as a “Future Regional Active Transportation Corridor.” In addition, CDOT has identified the CO 119 corridor as a Tier 1 “High Demand Bicycle Corridor,” which was “selected based on bicycle levels of use, connectivity to the transportation network, crash rates, and bicycle level of stress.” (<https://www.codot.gov/programs/bikeped/high-demand-bicycle-corridors>). Currently it is a gap in the regional active transportation network.

Longmont and Boulder are separated by only 9 miles, but for those desiring to travel by bike (or foot), they are isolated from each due to the lack of a direct, safe, year-round bicycle and pedestrian facility. Currently, users can choose between the shoulders of CO 119 (the second-highest bicycle/pedestrian crash corridor in unincorporated Boulder County) and a 50-60% longer, non-contiguous soft-surface route, which cannot be maintained in winter and is usually covered in ice for several months.

The tie-ins to the 119 commuter bikeway would create and extend an active transportation facility on the CO 119 corridor and the intersection improvements and connection across southbound CO 119 to the bicycle lanes and multi-use path on Airport Rd will create a safer connection to Longmont’s local bicycle network, beginning to close this regional gap and linking the two largest economic, cultural and essential services hubs in Boulder County with a direct, safe, high comfort, and year-round active transportation connection.

Currently, we estimate there are 250 daily bicyclists using CO 119. Bicycle counts for CO 119 were not available, but this number was estimated by looking at bicycle count data for adjacent county roads, US 36 north of Boulder and US 36 Bikeway (where CDOT does have bicycle counters) and Strava data. We are estimating that the construction of the new bicycle connections in this project, which will be incorporated into the Commuter Bikeway, will initially double bicycle use on the CO 119 corridor due to a protected facility offering a much safer and attractive route as compared to the existing shoulders.

The estimated 20 new daily pedestrian trips on opening day are largely related to the intersection improvements component of this project which will create a safer walking connection between SW Longmont and the CO 119 commuter bikeway.

Within a half mile buffer of the project area, this portion of SW Longmont is projected to see 918 additional households by 2050 (a 47% increase), and 540 new jobs by 2050 (a 57% increase). This job and population growth will be nearly entirely contained within the existing developed footprint of Longmont through both Boulder County open space lands and Boulder County and Longmont land use policy. The increased density of SW Longmont will spur more pedestrian, bicycle, and transit trips, and the active transportation facilities included in this project will further induce active transportation trips.

C. Project Leveraging	WEIGHT	5%
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<p>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></p>	10.11%	<table style="width: 100%; border-collapse: collapse;"> <tr><td>60%+ outside funding sources</td><td style="text-align: right;">5 pts</td></tr> <tr><td>50-59.9%</td><td style="text-align: right;">4 pts</td></tr> <tr><td>40-49.9%</td><td style="text-align: right;">3 pts</td></tr> <tr><td>20-39.9%</td><td style="text-align: right;">2 pts</td></tr> <tr><td>10.1-19.9%</td><td style="text-align: right;">1 pt</td></tr> <tr><td>10%</td><td style="text-align: right;">0 pts</td></tr> </table>	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
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%
-----------------------------	---------------	------------

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.

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:

[Steven Humphrey, Muller Engineering Company \(CDOT’s consultant for the design of this project\)](#)

Please describe the status to date on each, including 1) anticipated/known pitfalls/roadblocks, and 2) mitigation activities taken to date:

- **Utilities:** The project design team has completed a Quality Level C and D review of the subsurface utilities for the entire CO 119 corridor. This information is now allowing us to identify any potential conflicts or relocations that will be required for the proposed project at Airport Rd, and will give us ample time to coordinate with the appropriate utility companies and ensure that the utilities will be cleared for construction.
- **Railroad:** As the proposed project would occur within the existing ROW and not impact a railroad crossing, no impacts to railroads are anticipated.
- **Right-of-Way:** The proposed project would occur within the existing ROW
- **Environmental/Historic:**
- **Historic:** The project design team is going to build off the historic review previously completed by RTD during their PEL and we are the process of reviewing and updating that information. To date, the roadway itself has not been deemed historic.
-
- **Environmental Resources:** The project design team has completed the data collection for wetlands and other resources within the corridor and is in the process of consultation with the US Army Corps of Engineers. Wetlands have been identified and the project team will attempt to avoid them wherever possible. If for some reason they cannot be avoided, then work would be done to mitigate. We have an online GIS database of all environmental resource info that has been collected.
- **Other:**
- **Irrigation:** The project design team has already generated a list of irrigation companies within the corridor and reached out to those companies to discuss potential impacts or relocations of existing facilities at Airport Rd. Identified irrigation facilities have been mapped and we have a spreadsheet inventory of the irrigation companies, contacts and planned next steps.

- Floodplains: The proposed project lies within one floodplain; the project design team has held initial consultation meetings with the appropriate floodplain administrators/reviewers (Colorado Water Conservation Board and Boulder County). At this point the proposed project is not anticipated to require a CLOMR/LOMR, or to have a long lead time for floodplain permitting at Airport Rd.
-
- Other Projects: The project design team is coordinating closely with CDOT Region 4's adaptive signal project to ensure that both projects are planned, designed and constructed in the most efficient manner possible.

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: [In Progress](#)

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? [The proposed project is being designed as part of a larger project for the entire CO 119 corridor connecting Boulder and Longmont, with CDOT leading the design of the roadway improvements, and Boulder County leading the design for the bikeway improvements, including the bicycle and pedestrian underpasses included in this project.](#)

Stakeholders for this project include CDOT, RTD, Boulder County, City of Boulder, City of Longmont, FHWA, HPTE, and Commuting Solutions. For this project, a leadership structure has been developed with an Executive Committee of elected officials and director level staff providing executive oversight, a Project Leadership Team of policy-level staff providing policy oversight, and a Project Management Team comprised of technical staff working through the design and technical decisions. For the leadership structure organization chart, please refer to the supplemental PDF.

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

[While Boulder County is the project sponsor for the TIP application, if this project is funded, it would be transferred to CDOT, with CDOT assuming the role of project sponsor and constructing the project.](#)

[Design of the project is not yet complete, but FIR is anticipated for July 2022, FOR in May 2023, required clearances in July 2023, and the project will be ready for advertisement in October 2023.](#)

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:

CDOT is committing \$273k in local match for this project, with this commitment described in their concurrence letter (included in this application).

- b. Is all funding for this project currently identified in the sponsor agency's Capital Improvement Program (CIP)?
 Yes No

Please describe:

CDOT has identified \$40M for CO 119 in Years 1-4 of the current 10 Year Plan; their \$273k local match will come from these funds.

While Boulder County is the project sponsor for the TIP application, if this project is funded, it would be transferred to CDOT, with CDOT assuming the role of project sponsor and constructing the project.

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:

During the planning phase for this project, RTD was the lead agency for the roadway improvements, including the transit queue bypass lane, and CDOT was the lead agency for the commuter bikeway elements. During this phase, three rounds of in-person meetings were held in Boulder, Longmont, and Niwot between 2017 and 2019. These meetings were a combination of both "open house" and "public hearing" formats. Also during this time, RTD conducted an on-board (the BOLT and J) survey of existing transit riders, an online survey for the general public, community events, and several rider "pop up" events, with materials available in English and Spanish. Together, over 1,000 people were reached.

During the design phase (currently underway), CDOT is the lead agency for the roadway improvements, and Boulder County is the lead agency for the bikeway improvements. Boulder County and CDOT hosted a virtual public meeting with over 100 attendees in August of 2021 to gather input. Boulder County has also convened both a Community Advisory Committee (comprised of diverse residents and commuters who use CO 119) and a Latino Equity Committee (comprised of leaders of the Latino community, with meetings conducted in Spanish) to gather in-depth public input on some of the more challenging design decisions for the corridor. Additional public outreach is planned beginning in summer 2022, when FIR level designs for the project will be available.

- 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.

Residents who live along the corridor including adjacent property owners have been provided project concepts and opportunities for feedback at the multiple rounds of public meetings described above.

The largest adjacent private property owner is the BNSF Railroad, which borders the CO 119 corridor the southeast, but as this project will remain within CDOT right-of-way, there will be no impacts to the railroad. Nevertheless, the project team is in communication with BNSF about the project.

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

Cost Estimate

Summary

Project Component	Cost
Transit Queue Bypass Lanes	\$ 1,700,000
Intersection Improvements	\$ 1,000,000
Total	\$ 2,700,000

Detailed Cost Estimate

SH119 Queue Jump - Airport				
6/22/2022				
A	Major Construction Items			
	Major Pavement Items	Unit	Unit Cost	Quantity Cost
	Removal Asphalt Mat	SY	\$ 3.00	500 \$ 1,500.00
	Aggregate Base Course (CI 6)	CY	\$ 57.00	500 \$ 28,500.00
	Hot Mix Asphalt	Ton	\$ 100.00	1,300 \$ 130,000.00
	Major Earthwork Items	Unit	Unit Cost	Quantity Cost
	Embankment Material (CIP)	CY	\$ 35.00	3,700 \$ 129,500.00
	Embankment Material (CIP) (R40)	CY	\$ 30.00	1,500 \$ 45,000.00
	Signals	Unit	Unit Cost	Quantity Cost
	NB Signal Improvements	LS	\$500,000.00	1 \$ 500,000.00
A. Total Major Items				\$ 835,000
B	Minor Construction Items	Effort	% of (A)	Cost
	B-01 Pavements & Bases	Below Average	0%	\$0.00
	B-02 Earthwork	Below Average	1%	\$8,350.00
	B-03 Removals / Resets	Above Average	5%	\$41,750.00
	B-04 Environmental	Below Average	5%	\$41,750.00
	B-05 Structural	Below Average	1%	\$8,350.00
	B-06 Drainage / Utilities	Average	5%	\$41,750.00
	B-07 Roadway Appurtenances / Guardrail	Above Average	5%	\$41,750.00
	B-08 Mobilization	Average	10%	\$83,500.00
	B-09 Construction Traffic Control / Detour	Average	8%	\$66,800.00
	B-10 Lighting & Electrical	Average	2%	\$16,700.00
	B-11 Permanent Signing, Signals, ITS	Extensive	15%	\$125,250.00
	B-12 Permanent Striping	Average	5%	\$41,750.00
	B-13 Miscellaneous	Average	2%	\$16,700.00
B. Total Minor Items				\$ 534,000
CONSTRUCTION BID ITEMS (A+B)				\$ 1,369,000
C	FORCE ACCOUNT ITEMS	(% CBI)		Cost
	C-1 F/A - General	6%		\$ 82,140.00
	C-2 F/A - Minor Contract Revisions (MCR's)	3%		\$ 41,070.00
	C-3 F/A - Project Communications	1%		\$ 6,845.00
C. Force Account Items				\$ 130,000
CONSTRUCTION ITEMS (A+B+C)				\$ 1,499,000
D	CONSTRUCTION ENGINEERING AND INDIRECTS	(% CI)		Cost
	D-1 Construction Contingency	25.0%		\$ 374,750.00
	D-2 Construction Engineering	12.5%		\$ 234,218.75
	D-3 Construction Indirects	13.5%		\$ 252,956.25
D. Construction Engineering and Indirects				\$ 862,000
PROJECT CONSTRUCTION BUDGET (A+B+C+D)				\$ 2,361,000
E	PRECONSTRUCTION ITEMS	(% CI+%Indirect)	%(E1+E2)	Cost
	E-1 Design and Engineering	10.0%		\$ 187,375.00
	E-2 Subsurface Utility Engineering (SUE)	1.75%		\$ 32,790.63
			12.0%	\$ 26,419.88
E. Preconstruction Items				\$ 247,000
PROJECT BASE COST ESTIMATE				\$ 2,610,000
COST-CONSTRUCTION ESCALATION:				\$ 120,000
TOTAL PROJECT CONSTRUCTION COST ESCALATED:				\$ 2,730,000

ESCALATION	
Construction Start Date:	6/6/2023
Duration of Construction(Months):	12
Escalation from Estimate Date:	6/22/2022
Construction Mid-Point:	12/3/2023
Percent Escalated:	4.40%

CDOT Concurrence



COLORADO Department of Transportation

Region 4
Regional Director's Office
10601 10th Street
Greeley, CO 80634-9000

May 20, 2022

Alex Hyde-Wright
Boulder County
PO Box 471
Boulder, CO 80306

Dear Mr. Hyde-Wright,

This letter is to inform you that the Colorado Department of Transportation (CDOT) concurs with Boulder County's DRCOG FY22-25 Subregional Call application for the CO 119 & Airport Road BRT, Safety and Mobility Improvements Project. Additionally, CDOT Region 4 supports your funding request of \$273,000 with the CO 119 Corridor funds identified in the 10-Year Plan. It is important to note that CDOT is currently working through a 10-Year Plan update and is allocating funding to projects for FY23-26. For funds identified in FY23-26, funds are expected to be approved by the Colorado Transportation Commission in August 2022 (date is subject-to-change) and this funding commitment is contingent upon that formal approval.

If this project is awarded funding, Boulder County will need to reaffirm CDOT's concurrence at that time and amend the current Intergovernmental Agreement in place for this project. This concurrence is conditionally granted based on the scope of work 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, Boulder County will need to work closely with CDOT Regional staff to ensure continued concurrence.

This project must comply with all CDOT requirements, including those associated with clearance for right-of-way, utilities, railroad and environmental. All costs associated with clearances, including right-of-way acquisition, utilities relocation and environmental mitigation measures, such as wetland creation, 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/localagency/manual>.

If you have any questions regarding this concurrence, please contact Josie Hadley at <mailto:josie.hadley@state.co.us>.

Sincerely,
Heather
Paddock

Digitally signed by
Heather Paddock
Date: 2022.05.23
12:08:57 -0600

Heather Paddock, P.E.

CDOT Region 4 Transportation Director

Cc: Josie Hadley, CDOT Region 4 Planning & Local Agency Environmental Manager
Bryce Reeves, CDOT Region 4 Local Agency Resident Engineer



[EXTERNAL] 21497 CO 119 and Airport Road - Message (HTML)

File Message Help Mimecast Acrobat Tell me what you want to do

Delete Archive Reply Reply All Forward Share to Teams

Delete Respond Teams Quick Steps Move Tags Editing Speech Language Zoom Add-in Report Message

[EXTERNAL] 21497 CO 119 and Airport Road

 Murtic - CDOT, Adnana <adnana.murtic@state.co.us>

To: Hyde-Wright, Alexander
Cc: Daniel Marcucci - CDOT

Retention Policy: BOCO Default Retention (1 year) Expires: 6/22/2023

You replied to this message on 6/22/2022 8:45 AM. If there are problems with how this message is displayed, click here to view it in a web browser.

CDOT concurs with the approach Boulder County has outlined in the CO 119 & Airport Rd TIP application, in that if funded, Boulder County will transfer this project to CDOT to manage and construct as the project sponsor.

Adnana Murtic
PE I

 **COLORADO**
Department of Transportation

P 303.546.5657 | F 303.444.0751
1050 Lee Hill Drive, Boulder CO 80302
adnana.murtic@state.co.us | codot.gov | cotrip.org



RTD Concurrence

[EXTERNAL] RE: request for RTD support for Call 2 project - Message (HTML)

File Message Help Mimecast Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting IM More Move OneNote Actions Mark Unread Categorize Follow Up Tags Find Related Select Editing Read Aloud Translate Zoom

[EXTERNAL] RE: request for RTD support for Call 2 project

 Christopher Quinn <Chris.Quinn@RTD-Denver.com>
To: ● Hyde-Wright, Alexander
Cc: ● Bracke, Kathleen; ○ Todd Cottrell

Reply Reply All Forward ...

Thu 5/26/2022 3:31 PM

Hi Alex,
This email is to provide RTD's concurrence with the Boulder County's TIP application for the CO 119 & Airport Road BRT, Safety and Mobility Improvements.
Please let me know if I can provide any other needed information.
Thanks
Chris

From: Hyde-Wright, Alexander <ahyde-wright@bouldercounty.org>
Sent: Friday, May 13, 2022 11:59 AM
To: Christopher Quinn <Chris.Quinn@RTD-Denver.com>
Cc: Bracke, Kathleen <kbracke@bouldercounty.org>
Subject: request for RTD support for Call 2 project

Hi Chris,

Please find attached Boulder County's request for RTD support for a Call 2 project.

Thanks,

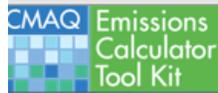
Alex

Alex Hyde-Wright
Principal Transportation Planner
Transportation Planning Division
Community Planning & Permitting Dept.
(303) 441-4910 (office)
ahyde-wright@bouldercounty.org

follow us on Twitter: <https://twitter.com/BcCoDoT>

Due to COVID-19, Boulder County is conducting business and providing services virtually. Please visit us online at <https://www.boco.org/cpp> for more information.

FHWA Air Quality Calculators



Transit Bus Service and Fleet Expansion

This calculator will estimate the reduction in emissions from projects which expand transit bus service and fleets, including new routes, new schedules, and new vehicles. Emissions reductions are associated with the mode shift from passenger vehicle to transit activity. Users are recommended to forecast activity by mode with an external travel demand model.

Navigator

Transit Bus Service and Fleet Expansion

Model Year Distribution

Fuel Type Distribution

Road Type Distribution

INPUT

User Guide

Reset to Default Values

(1) What is your project evaluation year?

(2) Please input the number of days that the bus service is operated annually

*Note: Default is 365 days per year.
For weekdays only, enter 260 days per year.
For weekends only, enter 105 days per year*

Transit Bus Information

(3a) Enter the estimated vehicle miles traveled annually by the transit buses before and after the transit project is completed.

	Before	After	
Transit Bus Miles	<input type="text" value="5,508,000"/>	<input type="text" value="5,508,000"/>	Miles

(3b) Enter the VMT allocations of your transit bus fleet on the separate tabs before and/or after project completion. If desired, default national average distributions can be used to fill these tables.

Years

Types

Types

Passenger Vehicle Information

(4a) Enter the annual passenger vehicle activity information before and after the project. Annual passenger vehicle activity can be entered either in terms of vehicle miles traveled, or number of passenger trips diverted. The passenger vehicle average one-way trip distance should

Passenger Vehicle Activity Type
 Passenger Vehicle Miles Traveled
 Passenger Vehicle Trips

	Before	After	
Activity	<input type="text" value="11,000,000"/>	<input type="text" value="11,094,712"/>	Trips

Average One-Way Trip Distance Miles
Note: National Default value is 4.52

(4b) Do you expect most passenger vehicle trips to be linked with bus trips as a result of the service or fleet expansion?

Linked Passenger Vehicle Trips
 Yes, passengers will drive to transit hubs to use the expanded transit bus service or fleet.
 No, the expansion will eliminate full passenger vehicle trips (reduction of running and start activity)

OUTPUT

Calculate Output

FLEET PERFORMANCE

Transit Bus VMT increase Miles

Passenger Vehicle Trip Reduction Trips

Passenger Vehicle VMT reduction Miles

EMISSION REDUCTIONS

Pollutant	Total kg/day
Carbon Monoxide (CO)	0.327
(PM _{2.5})	0.002
Particulate Matter < 10 μm (PM ₁₀)	0.008
Nitrogen Oxide (NO _x)	0.017
(VOC)	0.003
(CO ₂ e)	0.845
(MMBTU)	64.156

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

User Guide

(1) What is your project evaluation year?

Reset Interface

(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="40,000"/>	<input type="text" value="39900"/>	<input type="text" value="100"/>

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

Average
 Fill National Values

(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)	Distribution of Trip Distances (daily fraction per					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"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

OUTPUT

Calculate Output

EMISSION REDUCTIONS

Pollutant	Total	*Units in kg/day unless otherwise noted
Carbon Monoxide (CO)	0.736	
Particulate Matter < 2.5 μm (PM _{2.5})	0.002	
Particulate Matter < 10 μm (PM ₁₀)	0.008	
Nitrogen Oxide (NOx)	0.049	
Volatile Organic Compounds (VOC)	0.047	
Carbon Dioxide Equivalent (CO _{2e})	64.956	
Total Energy Consumption (MMBTU/day)	0.843	

Project Support Letters



City of Boulder Transportation & Mobility

June 21, 2022

Todd Cottrell, Senior Planner
Denver Regional Council of Governments
1001 17th Street, Suite 700
Denver, CO 80202
tcottrell@drcog.org

RE: LETTER OF SUPPORT FOR THE CO 119 & Airport Rd BUS RAPID TRANSIT (BRT), SAFETY & MOBILITY IMPROVEMENTS DENVER REGIONAL COUNCIL OF GOVERNMENTS (DRCOG) SUBREGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (TIP) APPLICATION

Mr. Cottrell:

The City of Boulder is pleased to provide this letter of support for the CO 119 BRT, Safety and Mobility Improvements: Airport Rd for the DRCOG Subregional FY22- 25 TIP Call.

The CO 119 BRT, Safety and Mobility Improvements project will be critical to optimizing regional connectivity and mobility between and within Boulder and Longmont by providing multimodal improvements that result in faster and more reliable travel. The project is also consistent with the Northwest Mayors & Commissioners Coalition policy statement supporting RTD's Northwest Area Mobility Study (NAMS) arterial BRT corridors and the multiagency commitment between the City of Boulder, City of Longmont, Boulder County, CDOT and RTD to working together to leverage resources toward achieving a multimodal corridor.

Investing in multimodal improvements within the SH 119 corridor is essential to creating regional linkages and to building the multimodal network needed for our citizens and business community over the next 20 years. For these reasons we support funding construction of this project.

Thank you for consideration of Boulder County's application for this important project.

Sincerely,

A handwritten signature in black ink, appearing to read "N. Stiffler".

Natalie Stiffler
Interim Director of Transportation and Mobility



CITY OF LONGMONT | Office of the Mayor & City Council

June 22, 2022

Todd Cottrell, Senior Planner
Denver Regional Council of Governments
1001 17th Street, Suite 700
Denver, CO 80202

Dear Mr. Cottrell:

The City of Longmont is pleased to provide this letter in support of the Boulder County's subregional TIP application for the CO 119 BRT, Safety and Mobility Improvements at Airport Rd for the DRCOG Regional FY22-25 TIP Call.

The CO 119 BRT, Safety and Mobility Improvements project will be critical to optimizing regional connectivity and mobility between and within Boulder and Longmont by providing multimodal improvements that result in faster and more reliable travel. The project is also consistent with the Northwest Mayors & Commissioners Coalition (MCC) policy statement supporting RTD's Northwest Area Mobility Study (NAMS) arterial BRT corridors and the multiagency commitment between the City of Longmont, City of Boulder, Boulder County, CDOT and RTD to work together, leveraging resources toward achieving these multimodal corridors.

Investing in multimodal improvements within the CO 119 corridor is essential to creating regional linkages and to building the multimodal network needed for our community over the next 25 years. This collaborative, regional partnership will achieve these important goals of our communities and we thank you for submitting the project application.

Thank you for your consideration of Boulder County's application. The City of Longmont looks forward to the completion of the essential elements along this critical travel corridor.

Sincerely,

A handwritten signature in black ink, appearing to read "Joan Peck".

Joan Peck
Mayor

City Council

MAYOR:
Joan Peck
(303) 774-3619

MAYOR PRO TEM, AT-LARGE:
Aren Rodriguez
(303) 774-3615

WARD 1:
Tim Waters
(303) 774-3614

WARD 2:
Marcia Martin
(303) 774-3617

WARD 3:
Susie Hidalgo-Fahring
(303) 774-3612

AT-LARGE:
Shiquita Yarbrough
(303) 774-3613