

**APPLICATION OVERVIEW**

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**What:** The Subregional Share Call for Projects for the FY 2024-2027 TIP (Call #4)

**Funding Available:** \$10,750,000 for this subregion and this STBG Track. In the STBG Track, funding is split fairly evenly over all four years.

**Major Project Eligibility Exceptions:** Transit operations projects (*Note: these types of projects are only allowed to be submitted with the AQ/MM Track*)

**Call Dates:** November 28, 2022 until January 27, 2023, 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 1) this application (**before saving to PDF, press Ctrl-A to select all, and F9 to update all formulas**), 2) one location map/graphic, 3) cost estimate (your own or the CDOT [cost estimate form](#)), 4) CDOT/RTD concurrence response (if applicable), 5) any required documentation based on the application text (i.e., FHWA emissions calculators), and 6) project support letters and/or [peer agency support](#). Please **DO NOT** attach additional cover pages, embed graphics in the application, or otherwise change the format of the application form
2. OPTIONAL: Submit **one additional** PDF document containing any supplemental materials, if applicable
3. REQUIRED: Submit a single zipped GIS shapefile of your project. The shapefile should consist of only your project limits. No particular attributes need to be included. Requests for assistance with creating a shapefile should be submitted to [tipapplications@drcog.org](mailto:tipapplications@drcog.org) no later than December 30, 2022

**Other Notable items:**

- **Eligibility:** Projects must align with the eligibility guidelines in [Appendices B and C](#) of the TIP Policy. Proposed work on roadways must primarily be located on the [DRCOG Regional Roadway System](#) to be eligible for TIP funding (the DRCOG RRS can also be viewed within the [TIP Data Tool](#)). Further details can be found in the [Policies for TIP Program Development](#) document (a [quick-guide](#) is also available for reference)
- **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 December 9, 2022, with CDOT/RTD providing a response no later than January 13, 2023. Submit requests to the following: CDOT Region 1 – [JoAnn Mattson](#), CDOT Region 4 – [Josie Thomas](#), RTD – [Chris Quinn](#)
- **If a submitted application in Calls #1-3 was not funded**, and you wish to resubmit the same application for this call, please [contact DRCOG](#). In these cases, we can unlock the application, change the title, and save the applicant some work in the resubmittal process
- **Application Data:** To assist sponsors in filling out the application, DRCOG has developed a TIP Data Tool. 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](mailto:tipapplications@drcog.org) no later than December 30, 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
- **Evaluation Process:** DRCOG staff will review submittals for eligibility, develop scoring sheets, and post all applications (Jan. 30-Feb. 3, 2023). On Feb. 6, a public comment period will open until Feb. 24. Also at that time, details will be provided to each subregion to begin scoring, discussing, and recommending their projects back to DRCOG by March 15. Each forums' recommendation will then be forwarded to the DRCOG committee process for incorporation into a new 24-27 TIP anticipated to be adopted in August 2023
- If you have any questions or need assistance, reach out to us at [tipapplications@drcog.org](mailto:tipapplications@drcog.org)

# APPLICATION FORMAT

The STBG Subregional Share application contains two parts: *project information* and *evaluation questions*.

## Project Information

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

## Evaluation Questions

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

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

### Section A. Subregional Impact of Proposed Projects.....25%

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

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

### Section B. Metro Vision Regional Transportation Plan Priorities .....60%

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 <b>substantial</b> benefits in the 2050 MVRTP priority area and is determined to be in the <b>top fifth</b> of applications based on the magnitude of benefits in that priority area.
4	The project provides demonstrable <b>significant</b> benefits in the 2050 MVRTP priority area.
3	The project provides demonstrable <b>moderate</b> benefits in the 2050 MVRTP priority area and is determined to be in the <b>middle fifth</b> of applications based on the magnitude of benefits in that priority area.
2	The project provides demonstrable <b>modest</b> benefits in the 2050 MVRTP priority area.
1	The project provides demonstrable <b>slight</b> benefits in the 2050 MVRTP priority area and is determined to be in the <b>bottom fifth</b> 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	30-39.9%
1	20.1-29.9%
0	20%

**Section D. Project Readiness .....10%**

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

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

## Project Information

1. Project Title	South Boulder Road Multimodal Bus Rapid Transit Study	
2. Project Location <i>Provide a map, as appropriate (see Page 1)</i>	Start point: CO 7 & 119 <sup>th</sup> St, City of Lafayette End point: Table Mesa & Broadway, City of Boulder OR Geographic Area: Click or tap here to enter text.	
3. Project Sponsor <i>(entity that will be financially responsible for the project)</i>	Boulder County	
4. Project Contact Person:		
Name: Jeff Butts		Title: Multimodal Transportation Planner II
Phone: 720.564.2754		Email: jbutts@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>	If this project is listed in the <a href="#">DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MV RTP)</a> , provide the staging period: South Boulder Road is a Corridor Transit Planning project, with construction scheduled for the 2040-2050 staging period in the RTP.	
	Local/Regional/Subregional plan:	Planning Document Title: City of Louisville's Transportation Master Plan and South Boulder Road Small Area Plan; City of Boulder's Transportation Master Plan; Boulder County Transportation Master Plan; Northwest Area Mobility Study; 2050 Metro Vision Regional Transportation Plan  Adopting agency (local agency Council, CDOT, RTD, etc.): Louisville, City of Boulder, RTD, Boulder County, DRCOG  Provide date of adoption by council/board/commission, if applicable: August 14, 2014; August 12, 2019; February 18, 2020; September 2022
	Please describe public review/engagement to date:	Recommended improvements and the need to complete a corridor study on South Boulder Road are identified in a number of planning documents listed above. Each had robust community engagement – including extensive public outreach, input from advisory boards, booths at community events, open houses and other in-person, and/or online engagement techniques. Through this variety of engagement strategies, feedback was collected from a broad cross-section of people, including community, business and civic organizations.  During Boulder County's Transportation Master Plan update an online survey was widely distributed with 1,955 respondents. The results show that 41% of respondents identified enhancing transit services and 32% of respondents identified enhancing walking and biking facilities as one of their top three priorities (see Image 1 of the supplemental materials. These priorities were the second and third most popular priorities, respectively.

		<p>The Louisville Transportation Master Plan also showed a clear interest from the public in bicycling and transit. The most popular category of comments received was addressing walking and bicycling connectivity and transit was the third most popular (Image 2 in supplemental materials). Access to destinations through walking and bicycling and regional rail transit services were the top two priorities identified by survey respondents (Image 3 in supplemental materials). Major areas of focus from the online map comments included South Boulder Road, with many of the comments related to improving connectivity and accessibility for multiple modes.</p> <p>In addition, this application was included in the Boulder County Subregional Forum’s public review period prior to Call #4 opening.</p>
	Other pertinent details:	This is the final NAMS corridor in Boulder County.

**7. Identify the project’s key phases and the anticipated schedule of phase milestones.**  
(phases and dates should correspond with the “Phase to be Initiated” in the Funding Breakdown table below)

Phases to be included:	Major phase milestones:	Anticipated completion date (based on 8/16/2023 DRCOG approval date): (MM/YYYY)
	<input checked="" type="checkbox"/> Preconstruction (including studies) <input type="checkbox"/> Construction <input type="checkbox"/> Both	
<b><u>REQUIRED FOR ALL PHASES</u></b>	Intergovernmental Agreement (IGA) executed with CDOT/RTD (Assumed process is 4-9 months; any work performed before execution is NOT reimbursable)	05/2024
<input type="checkbox"/> Design	Design contract Notice to Proceed (NTP) issued (if using a consultant): Design scoping meeting held with CDOT (if no consultant): FIR (Field Inspection Review): FOR (Final Office Review):	Enter Date Enter Date Enter Date Enter Date
<input type="checkbox"/> Environmental	Environmental contract Notice to Proceed (NTP) issued (if using a consultant): Environmental scoping meeting held with CDOT (if no consultant):	Enter Date Enter Date
<input type="checkbox"/> Right-of-Way	Initial set of ROW plans submitted to CDOT: Estimated number of parcels to acquire: Enter Number ROW acquisition completed:	Enter Date Enter Date
<input type="checkbox"/> Construction	Required clearances: Project publicly advertised:	Enter Date Enter Date
<input checked="" type="checkbox"/> Study	Kick-off meeting held after consultant NTP (or internal if no consultant):	02/2025
<input type="checkbox"/> Equipment Purchase (Procurement)	RFP/RFQ/RFB (bids) issued:	Enter Date
<input type="checkbox"/> Other Phase not Listed Describe: Describe	First invoice submitted to CDOT/RTD:	Enter Date

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

South Boulder Road is an important corridor connecting the three communities of Boulder, Louisville, and Lafayette. It is primarily vehicle-focused, lacking a consistent protected bike as well as frequent transit service. While there are bicycle and transit facilities within each three of these cities, the corridor that connects them can be improved to provide better multimodal opportunities.

Out of all Boulder County-owned and maintained roads, the rural section of South Boulder Road has one of the highest rates of severe crashes per mile. One of the most pressing safety concerns is the lack of a consistent protected bike lane. This study will also identify mitigation measures for fatal or serious injury crashes.

There is a clear connection between these three communities where Boulder is an employment center (with 86,300 jobs using data from the Boulder County Transportation Master Plan) and the Cities of Louisville and Lafayette have more affordable housing. According to Realtor.com data, the median home listing is approximately \$665k in Lafayette, \$844k in Louisville, and \$1.1M in Boulder. Due to the high cost of living in Boulder, employees are drawn to live in Lafayette or Louisville opposed to Boulder, which means they need to commute to work along one of the east-west corridors linking the Cities, including South Boulder Road.

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

**Roadway**

- ☒ Operational Improvements
- ☐ General Purpose Capacity (2050 MVRTP)
- ☐ Managed Lanes (2050 MVRTP)
- ☐ Pavement Reconstruction/Rehab
- ☐ Bridge Replace/Reconstruct/Rehab

**Grade Separation**

- ☐ Roadway
- ☐ Railway
- ☒ Bicycle
- ☒ Pedestrian

**Regional Transit<sup>1</sup>**

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

☒ **Safety Improvements**

**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**

☐ **Other**, briefly describe: Click or tap here to enter text.

<sup>1</sup>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.

- 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 proposed project will build off the DRCOG Corridor Planning Study, which is kicking off in Q1 2023 and is anticipated to be completed prior to the proposed project. Based on the results of the DRCOG study, this project will evaluate regional Bus Rapid Transit service enhancements and related bicycle, pedestrian, operational and safety measures for the corridor; the deliverable will build upon the shared vision for future capital projects and corridor enhancements. Building upon the findings of the previous study, it will include desktop environmental review and analysis of freight needs. It will also include an updated modeling estimate of potential transit ridership along the corridor and advance a high-level environmental review for the study area. The study will include robust community engagement in both English and Spanish.

- 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.*

South Boulder Road is identified for multimodal corridor improvements in the Denver Regional Council of Governments' (DRCOG's) 2050 Metro Vision Regional Transportation Plan (2050 MV RTP) as a "corridor transit planning projects and programs." This is the final NAMS corridor in Boulder County to begin the planning phase. DRCOG is preparing to conduct a corridor study on South Boulder Road directly prior this proposed study.

This study will build upon the DRCOG corridor study and other recent or planned work along the South Boulder Road including transit improvements at Downtown Boulder Station and work along Broadway in Boulder, pedestrian crossing improvements on South Boulder Road in Louisville and the Lafayette Park-n-Ride and compliment the CO 7 transit service and future BRT on CO 7 and US 287.

This is a pre-engineering planning study that does not require right-of-way, utilities nor construction permits.

- 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: Click or tap here to enter text.

Outline the differences between the scope outlined above and the reduced scope: Click or tap here to enter text.

Project Financial Information and Funding Request <span style="float: right;">(All funding amounts in \$1,000s)</span>		
<i>To update the formulas below, enter your information, highlight the formulas, and press F9 or right-click and select Update Field.</i>		
<b>Total amount of Subregional Share Funding Request (in \$1,000's)</b> (Not to exceed 80% of the total project cost)	<b>\$399</b>	<b>79.80%</b> of total project cost
<b>Match Funds (in \$1,000's)</b> List each funding source and contribution amount.	<b>Contribution Amount</b>	<b>% Contribution to Overall Project Total</b>
Boulder County	\$76	15.2%
City of Louisville	\$25	5.0%
Click or tap here to enter text.	\$Match Amount	0.0%
Click or tap here to enter text.	\$Match Amount	0.0%
Click or tap here to enter text.	\$Match Amount	0.0%
Click or tap here to enter text.	\$Match Amount	0.0%



<b>Total Match</b> (private, local, state, regional, or federal)		<b>\$ 101</b>		<b>20.2%</b>	
<b>Project Total</b>					
<b>\$ 500</b>					
<b>Funding Breakdown (in \$1,000s) (by program year)<sup>1</sup></b> (Total funding should match the Project Total from above) <i>To update the formulas below, enter your information, highlight the formulas (or Ctrl-A), and press F9. OR close and reopen the file.</i>					
	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Total</b>
<b>DRCOG Requested Funds<sup>2</sup></b>	\$Enter Amount	\$399	\$Enter Amount	\$Enter Amount	\$ 399
<b>CDOT or RTD Supplied Funds<sup>3</sup></b>	\$Enter Amount	\$Enter Amount	\$Enter Amount	\$Enter Amount	\$ 0
<b>Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)</b>	\$Enter Amount	\$101	\$Enter Amount	\$Enter Amount	\$ 101
<b>Total Funding</b>	\$ 0	\$ 500		\$ 0	\$ 500
<b>Phase to be Initiated</b>	Select Phase	Study	Select Phase	Select Phase	
<b>Notes:</b>	1. Fiscal years are October 1 through September 30 (e.g., FY 2024 is October 1, 2023 through September 30, 2024). 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. For the 2024-2027 Subregional Share STBG Call, 23% of DRCOG funding is available in FY 2024, 25% in FY 2025, 26% in FY 2026, and 27% in FY 2027 3. Only enter funding in this line if CDOT and/or RTD specifically give permission via concurrence letters or other written source.				
<b>Affirmation:</b>	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 subregional 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.***

In 2014, RTD adopted the Northwest Area Mobility Study (NAMS), which envisioned a network of multimodal bus rapid transit corridors serving the northwest Denver metro region. Eight years later, all the NAMS corridors in Boulder County are in progress, except one: South Boulder Road. From 2015 – 2019, there were 17 serious injury or fatal crashes in the urban sections of this corridor. Of those, nearly half involved vulnerable roadway users - bicyclists and pedestrians, as seen in Image 4 of the supplemental materials.

South Boulder Road is a critical link in Boulder County, connecting key destinations including downtown Boulder, University of Colorado – Boulder, US 36 & Table Mesa Station, downtown Louisville, the Lafayette Park-n-Ride and downtown Lafayette. It also serves as an important corridor for connections between Broomfield and Boulder County. In 2019, the existing DASH route carried more riders than the JUMP (CO 7) or the BOLT+J (CO 119), both of whose corridors are significantly further along in planning for major transit and multimodal improvements.

South Boulder Road is an important multimodal corridor, as it is part of DRCOG's high injury network and is identified in the 2050 Metro Vision Regional Transportation Plan for multimodal improvements. Approximately 5.5 miles of the corridor is located within a DRCOG freight focus area. The study area has two short trip opportunity zones and one pedestrian focus area.

This project is about connecting people to opportunities. Data from the Denver Regional Council of Governments (DRCOG) projects job growth along South Boulder Road will outpace housing growth, resulting in an increase in trips. Specifically, the density of jobs is expected to increase 67%, while the density of households is only expected to increase by 28% in households. Planning for this growth is essential to ensure the corridor can accommodate increased demand in a sustainable and efficient manner.

This study will also advance transportation master plan recommendations from Boulder County, the City of Boulder and City of Louisville to advance regional Bus Rapid Transit on South Boulder Road. Transit on this corridor provides an important connection to the US 36 Flatiron Flyer, US 287 transit with future plans for regional BRT and connections from Fort Collins to Denver, along with transit service on CO 7, which will soon extend from Boulder to Brighton. South Boulder Road intersects with numerous bicycle and pedestrian trails, providing an opportunity to make multimodal connections that help alleviate strain by providing people transportation choices.

Due to the high cost of living, providing people safe, comfortable, visible and direct alternatives to driving will help alleviate the burden of the high cost of owning and operating a vehicle. Transit and active modes of transportation can lower the cost of living, making the region more accessible to more people.

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.

This study will identify recommendations to enhance transit operations, improve pedestrian and bicycle infrastructure, increase connectivity, and improve overall safety along the corridor. To do this, the study will follow the recommendations from an anticipated DRCOG corridor study in 2023 - 2024. This study will include a high-level environmental review and transit ridership modeling.

As the cost of living in Boulder County continues to increase, more people are living further from where they work. The demand for transportation along the corridor is expected to grow by an anticipated up to 23% by 2035, according to projections in the [City of Boulder's traffic counts](#). The study will consider the current and future needs of all modes of transportation, including analyzing the allocation of limited right-of-way for a bikeway and multi-use trail, as well as improved intersections and enhanced crossings for people walking and riding bicycles. By utilizing Great Streets principles, identified in the Louisville Transportation Master Plan, the study will improve connectivity and accessibility to neighborhoods and developments along the corridor to the region.

The study will identify priority projects that will improve connectivity to and within the communities Lafayette, Louisville and Boulder to the larger transit and multimodal network. This will provide access to healthcare, services, shopping and provide people an opportunity to reduce their expenses through geographic arbitrage. Creating this network of lower-cost transportation choices than the automobile, provide people the opportunity to not only survive but thrive due to reduced expenses.

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

The proposed project will bring a range of significant benefits to the Cities of Lafayette, Louisville, and Boulder as well as Boulder County. By progressing the NAMS network, this project will also advance essential local, subregional and regional transit links for the traveling public. Additionally, this project will explore transferring service to CO 7 BRT – connecting to a growing area of the City and County of Broomfield, a future mobility hub at I-25, the City of Thornton, Adams County and the City of Brighton.

The proposed project will also have a positive impact on regional and inter-regional travel. In recognition of the value of this project, the City of Louisville is contributing \$25,000 and Boulder County will contribute \$76,000 and manage the project. Furthermore, this project will also have positive local impacts by examining opportunities to improve the user experience for people riding bicycles along and across the corridor.

**4. Disproportionately Impacted and Environmental Justice Communities**

This data is available in the TIP Data Tool. *Completing the below table and referencing relevant quantitative data in your response is required.*

***To update the formulas below, enter your information, highlight the formulas (or Ctrl-A), and press F9. OR close and reopen the file.***

	DI & 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	59,070	-	-
	b. Total households	23,801	-	-
	c. Individuals of color	12,568	21%	33%
	d. Low-income households	1,796	8%	9%
	e. Individuals with limited English proficiency	887	2%	3%
	f. Adults age 65 and over	8,234	14%	13%
	g. Children age 5-17	8,586	15%	16%
	h. Individuals with a disability	2,099	4%	9%
	i. Households without a motor vehicle	1,281	5%	5%
	j. Households that are housing cost-burdened	6,660	28%	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 disproportionately impacted and environmental justice population groups identified in the table above, *including the required quantitative analysis*:

The study will focus on enhancing transit operations and improving infrastructure for walking and biking, as well as reducing vehicle emissions by encouraging a shift to different modes of transportation. It will identify recommendations that benefit the 8% of individuals living in poverty by improving access to job opportunities and education through enhanced transit options. The 14% of the corridor population over the age of 65 will have improved access to medical services in Lafayette through transfers on US 287, along the corridor and in Boulder.

Slightly over 2,000 individuals identify as experiencing a disability in the project area. They will have improved access, along with the 5% of people living along the corridor without a personal vehicle by advancing additional transportation options through advancing bikeway and multi-use trail concepts, in addition to the enhanced transit service. Lafayette has a large population of individuals with limited English proficiency, and the study will take this into consideration by making publicly facing materials available in both English and Spanish.

The 2020 Census data shows the population has a high percentage of Hispanic or Latino individuals along the South Boulder Road corridor, east of Public Road in Lafayette. Namely, the Census website data shows 39% of the population identifies as Hispanic or Latino, with up to 66% of individuals identifying as Latino in some census blocks. This highlights the importance of providing materials in both English and Spanish to effectively serve and engage this community. Additionally, this area of Lafayette may also include disproportionately impacted and environmental justice groups, with a notable presence of Native American, Black or African American, and Asian individuals. According to Census data, up to 46.5% of the population along the Lafayette section of the corridor is likely to belong to disproportionately impacted or environmental justice community.

5. How will this project move the subregion toward achieving the shared [regional transportation outcomes](#) established in [Metro Vision](#) in terms of...
- Land Use, community, urban development, housing, employment? *(Improve the diversity and livability of communities. Contain urban development in locations designated for urban growth and services. Increase housing and employment in urban centers. Diversify the region's housing stock. Improve the region's competitive position.)*

- This study will advance regional transportation outcomes by improving connectivity and promoting diverse, livable communities. The study will coordinate local and regional urban growth priorities and support the development of a diverse mix of land uses that allow people to access housing, employment, and services without relying on driving.

Additionally, the study will reinforce the "Super IGA" agreements between municipalities in Boulder County, preserving open space and limiting urban expansion. By creating efficient transportation connections between urban centers, it will contain development in designated growth areas and support the development of high-quality transit and station areas.

Research supports the connection between public transportation investment and private development. A 2013 study from the Institute for Transportation Development Policy found that 14 out of 21 evaluated North American transit corridors leveraged more than \$1 of Transit-Oriented Development (TOD) investment per \$1 of transit investment, with five of these being Bus Rapid Transit (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>)

- Multimodal transportation, safety, reliability, air quality? *(Improve and expand the region's multimodal transportation system, services, and connections. Operate, manage, and maintain a safe and reliable transportation system. Improve air quality and reduce greenhouse gas emissions. Reduce the risk of hazards and their impact.)*
  - This study will identify recommendations to improve the region's multimodal transportation system by examining opportunities to enhance transit services that connect underserved areas to major employment, educational, medical and activity centers between downtown Lafayette, Louisville and Boulder. As a NAMS corridor, the study will likely look at queue jumps, bypass lanes, transit signal priority (TSP), Business Access and Transit (BAT) lanes and other feasible alternatives for making transit a more attractive choice.

This study will also examine opportunities to create protected bikeway infrastructure, such as a detached trail or protected bike lane to improve connectivity and encourage active transportation among people who do not currently ride a bicycle or use transit. There are sections of bike lanes/shoulders along the corridor but no consistent protected bikeway. The study will also improve pedestrian-friendly infrastructure, such as crossings, sidewalks and pathways connectivity will improve safety and accessibility. This may include the analysis of at-grade and grade-separated pedestrian crossings. There are sections of sidewalks/shared use paths but no consistent pedestrian facility along the entire corridor. These improvements will improve safety for all modes by creating a designated space for bicyclists and pedestrians.

This study will help reduce vehicle trips taken by approximately seven percent, as further detailed later in the application. And to further enhance the environmental benefits it will examine opportunities for landscaping to absorb pollutants and improve air quality – which could include elements from the [US 287 Stations Area Toolkit](#) [that is applicable elsewhere].

The study will also examine opportunities to utilize ITS and communications to improve transit operations, traffic flow and safety for all people using the corridor. It may also examine the feasibility of reduced emission transit. Planning for additional transportation options, improved communications and environmental design will help improve reliability of the transportation system and help advance transportation infrastructure that fosters a resilient natural and built environment. By providing people an array of feasible transportation options, this will help reduce risk and impact of hazards. Additionally, this study will include an environmental review to help identify potential future risks or hazards.

- Connection/accessibility to particular locations supporting healthy and active choices? *(Connect people to natural resource and recreational areas. Increase access to amenities that support healthy, active choices. Improve transportation connections to health care facilities and service providers. Improve access to opportunity.)*
  - This South Boulder Road study will identify improved connectivity and accessibility to natural resources and recreational areas for people of all ages and abilities by identify how to enhance transit, bikeways, and trails. This will allow easy access to recreational areas such as the Great Outdoor Water Park and LaMont Does Ballfield, in Lafayette. It will also connect people to destinations, such as, Lake Park, Centennial Park, Cottonwood Park and a “Tai Chi Spot” in Louisville without needing to drive.

The study will also examine opportunities to connect people with a multitude of open spaces, recreational trails, community gardens, waterparks, and other recreational amenities along South Boulder Road, including and improve transportation connections to health care facilities and service providers in Lafayette, Louisville and Boulder. These include the Kerr-Growing Gardens, Louisville Sports Complex, and the East Boulder Recreation Center.

This study will promote safe and convenient active transportation options, encourage healthy and active choices, and improve access to essential resources and amenities for the communities and region. It will also help promote active public spaces and a mix of uses by examining ways to effectively reduce the need to use a personal vehicle.

6. 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: [Downtown Louisville](#)
- Does the project connect two or more urban centers? \*  
☒ Yes ☐ No If yes, please provide the names: [Louisville and Boulder](#)
- Is there a transit stop or station within ½ mile of the project limits? \*  
Bus stop: ☒ Yes ☐ No If yes, how many: [142](#)  
Rail station: ☒ Yes ☐ No If yes, how many: [1](#)
- Is the project in a locally-defined priority growth and development area and/or an area with zoning that supports compact, mixed-use development patterns and a variety of housing options?  
☒ Yes ☐ No  
If yes, provide a link to the relevant planning document: [Boulder County Comprehensive Plan](#)

If yes, provide how the area is defined in the relevant planning document:

[Through the Boulder County Comprehensive Plan](#), Boulder County has intergovernmental agreements with the City of Boulder to ensure development is focused in existing urbanized areas. Unincorporated Boulder County is largely zoned for rural land use. Together, these strategies preserve the rural character of unincorporated Boulder County and focus development in urban areas where existing services exist. 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. The bikeway would close the gap in bike infrastructure between the urban centers of the cities of Boulder, Louisville and Lafayette, and this project would provide options and real choices of travel to single occupancy vehicles

Provide households and employment data*	2020	2050
Households within ½ mile	<a href="#">23,801</a>	<a href="#">30,457</a>
Jobs within ½ mile	<a href="#">27,138</a>	<a href="#">45,413</a>
Household density (per acre) within ½ mile	<a href="#">2.2</a>	<a href="#">2.62</a>
Job density (per acre) within ½ mile	<a href="#">2.81</a>	<a href="#">4.21</a>

Describe how this project will improve transportation options in and between key geographic areas including DRCOG-defined urban centers, multimodal corridors, mixed-use areas, Transit Oriented Development (transit near high-density development), or locally defined priority growth areas, *including the required quantitative analysis*:

This is a key multimodal corridor identified by DRCOG, serving as a vital link between key geographic areas and multimodal corridors, including DRCOG defined urban centers in Louisville and Boulder and the University of Colorado at Boulder (CU)– the state’s largest university and important education and employment center. In addition, it provides a critical connection for the Cities of Lafayette and Louisville with important healthcare centers along South Boulder Road and transfers opportunities to US 287 transit. By conducting a detailed corridor study, we will identify specific projects that will enhance transportation options in this area and improve access to key sub-regional and regional destinations.

The anticipated growth projections make this an ideal location for improving transportation options as employment is projected to outpace household growth nearly 3:1. To accommodate this growth, this study will identify opportunities to encourage active transportation and transit use to reduce reliance on personal vehicles and utilize right of way more effectively. As part of improving active transportation infrastructure, this study will not only improve connectivity and accessibility for people walking and bicycling, but also increase the attractiveness of active modes of transportation as a viable option for accessing key destinations.

This project will identify projects that improve transportation options by planning for enhanced regional BRT transit and examining connectivity to the station areas, as well as opportunities to improve walking and bicycling along the corridor, to the corridor and across the corridor.



7. Describe how this project will improve **access** and **connections** to key employment centers or subregional destinations. In your answer, define the key destination(s) and clearly explain how the project improves **access** and/or **connectivity**.

This South Boulder Road corridor is part of the NAMS network. This study aims to improve access and connections to key employment centers and subregional destinations, including the municipalities along the corridor. The South Boulder Road corridor passes through the urban center of Louisville and connects with downtown Lafayette and Boulder, making it an important link for accessing key employment centers. Additionally, the corridor study will take an in-depth analysis of how to advance the two DRCOG-identified short trip opportunity zones where most trips are less than two miles.

The data projections highlight the importance of improving access and connectivity to these key employment centers and subregional destinations. By conducting this corridor study, we can identify specific projects that will enhance transportation options in this area, including improving active transportation infrastructure, advancing regional BRT transit services and identifying Transit Oriented Development (TOD) initiatives. These improvements will not only benefit those who work in these employment centers, but also those who live in the surrounding area and rely on access to these destinations for their daily commute.

This project will improve access and connections to key employment centers, subregional destinations, and services along the corridor study area. The key destinations include commercial centers such as South Boulder Road and US 287 in Lafayette, as well as South Boulder Road and CO 42, downtown Lafayette, Louisville, Boulder and Colorado State University Boulder. Additionally, it will connect people to a wide range of educational institutions including Centaurus High School, Bilingual Montessori School, and Louisville Middle School. It also connects people to important medical services such as community emergency care, urgent care, and specialized care like retina care, dermatology, dentistry and orthodontics. Furthermore, the corridor connects people to grocery stores and dining options.

The project will focus on advancing accessibility for everyone by addressing ADA access and multimodal connectivity needs. This will improve access to not just commercial and educational centers, but also recreational locations, such as LaMont Does Park and The Great Outdoors Waterpark in Lafayette, the Louisville Skate Park, Lake Park, Cottonwood Park and miles of trails in Louisville.

Additionally, it will improve access to spiritual services including Flatirons Community Church Lafayette, Boulder County Community Church, Saint Louis Catholic Church, Louisville United Methodist Church, Living Life Church, Christ the Servant Lutheran Church, Calvary Chapel Boulder Valley, St Ambrose Episcopal Church, Boulder Valley Christian Church, St. Heart of Mary Church, Great Dharma Chan Monastery/Chung Tai Zen Center of Boulder, South Boulder Bible Church, Boulder Mennonite Church, and many more.

The study will also be beneficial for the residents of Boulder County's Kestrel Village housing development, which is within 1,000 feet of the corridor. The study will help connect them to the employment, services and recreational opportunities throughout the corridor. Furthermore, there are other higher density apartments along the corridor that will be supported by the improved transit and multimodal connections this study will identify. This project will provide a comprehensive solution to improve access and connectivity to important destinations and services for people living near and utilizing the corridor study area.

## 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 an interchange project that incorporates transit and freight improvements, etc.

- What modes will project improvements directly address?  
☒ Walking ☒ Bicycling ☒ Transit ☒ SOV ☒ Freight ☐ Other: Click or tap here to enter text.
- List the elements of this project which will address the above modes (i.e., sidewalk, shared use path, bus stop improvements, new general purpose or managed lanes, etc.): [Shared use path, sidewalk, bus stop improvements, transit queue jumps, transit signal priority, signal communications and reflectivity, lighting, pavement markings, signage](#)
- 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 roadway infrastructure, active transportation facilities, and/or transit facilities or vehicle fleets?  
☒ Yes ☐ No
- Does this project implement resilient infrastructure that helps the subregion mitigate natural and/or human-made hazards?  
☒ Yes ☐ No

Question: Describe how this project will help increase mobility choices for people, goods, and/or services. Please include quantitative information, including any items referenced above, in your response. *Note that a majority of the proposed roadway operational improvements must be on the DRCOG [Regional Roadway System](#) and/or [Regional Managed Lanes System](#).*

The South Boulder Road study will play a key role in increasing mobility choices for people, goods, and services along the NAMS corridor by identifying and implementing strategies that improve the efficiency, safety, and accessibility of the South Boulder Road corridor. Our proposed plans will include a comprehensive approach, utilizing the DRCOG Complete Streets Toolkit in addition to local plans. This will include enhanced transit services, improved pedestrian and bicycle infrastructure, and the implementation of intelligent transportation systems (ITS) technologies to address Vision Zero safety concerns.

In addition to increasing accessibility, this project will also improve comfort for active transportation users. By providing separation from motorized vehicles, the potential for conflicts is reduced, and the overall level of comfort is increased. This is particularly important for attracting the "interested but concerned" group of potential bicycle riders, who cite safety as a primary reason for not riding and account for approximately 60% of the population<sup>1,2</sup>.

The study will improve the conditions for people riding bicycles as well as draw new people to utilize a more comfortable facility. Boulder County bicycle counts show 150 people riding bicycles along this corridor. If we create more comfortable and intuitive bicycling facilities, we anticipate a 50% increase in ridership and another 50% increase in ridership leading into 2050 by attracting people who are willing to bicycle but they need a comfortable and safe facility. Creating a more comfortable and safer bicycling facilities along this corridor will provide an additional mobility choice for people.

Transit can be a more viable option for more people with an increase in the frequency, service span, and first and final mile access. After improvements are made to enhance transit service and/or access to transit, we can anticipate attracting more riders. Improving the walking and biking access to transit expands the travel shed for transit riders. In the recent [US 287 Bus Rapid Transit Feasibility Study](#), it was shown that increasing frequencies and improving travel time and reliability, by modifying intersection, station, and turning lane design, we could more than double ridership (see Images 5 and 6 in the Supplemental Materials). Using these same increases would bring DASH ridership from approximately 2,300 daily riders to 4,600 and, potentially, as high as 5,700 given the right conditions.

To improve the efficiency of the corridor, we will explore specific strategies such as the use of signal timing for speed management, special use auxiliary lanes, and the promotion of transit-oriented development. These measures will lead to improved traffic flow, reduced congestion and travel times, more efficient use of the space for the capacity of goods and service vehicles and provide more people more transportation choices. Additionally, utilizing DRCOG's street typology will ensure the proposed improvements are context-sensitive and appropriate for the local area.

<sup>1</sup>*Four Types of Cyclists*, <https://www.portlandoregon.gov/transportation/article/264746>

<sup>2</sup>*Four Types of Cyclists?: Examination of Typology for Better Understanding of Bicycling Behavior and Potential*, <https://journals.sagepub.com/doi/10.3141/2387-15>)

<b>Air Quality</b>	<b>Improve air quality and reduce greenhouse gas emissions.</b> (drawn from <a href="#">2050 MVRTP priorities</a> ; <a href="#">state greenhouse gas rulemaking</a> ; <a href="#">federal congestion &amp; emissions reduction performance measures</a> ; <a href="#">Metro Vision objectives 2, 3, &amp; 6a</a> ) Examples of Project Elements: active transportation, transit, or TDM elements; vehicle operational improvements; electric vehicle supportive infrastructure; etc.					
	<ul style="list-style-type: none"> <li>Does this project reduce congestion?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No         </li> <li>Does this project reduce vehicle miles traveled (VMT)?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No         </li> <li>Does this project reduce single-occupant vehicle (SOV) travel?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No         </li> </ul>					
<b>Emissions Reduced</b> (kg/day)		<b>CO</b>	<b>NOx</b>	<b>VOCs</b>	<b>PM 10</b>	<b>CO<sub>2</sub>e</b>
		25.586	-0.413	0.602	-1.153	-145.557
Use the <a href="#">FHWA CMAQ Calculators</a> 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.						

Question: Describe how this project helps reduce congestion and air pollutants, including but not limited to carbon monoxide, ground-level ozone precursors, particulate matter, and greenhouse gas emissions. Please include quantitative information, including any items referenced above, in your response.

The proposed project has a significant impact on reducing congestion and air pollutants in the region. The recently completed US 287 Bus Rapid Transit Feasibility Study provides insight into the potential impact of similar transit investments on South Boulder Road. The study's modeling estimates a doubling of bus miles traveled and a 2.56 increase in transit ridership, increasing daily riders from 2038 to 5220.

Based on the data from the US 287 Bus Rapid Transit Feasibility Study, it was observed that only 20% of patrons access that route by car (see Image 7 in the supplemental materials). This trend is likely to be replicated in the proposed South Boulder Road route, as the majority of patrons are expected to access the route through walking, biking, or transferring from another route. It can be observed that even if all 606 average utilized spaces at US 36 & Table Mesa and 67 average utilized spaces at the downtown Lafayette Park-n-Ride were exclusively for DASH riders, this would still only constitute 28% of the total daily ridership of 2,361 in 2019. This highlights the significance of the multimodal connections to make transit an even more attractive choice. As a result of the improved service, there will be a reduction in the number of vehicles on the road, which will result in decreased congestion and improved air quality.

Using these similar assumptions but increasing transit miles by 75%, tripling transit ridership and assuming 80% of patrons accessing the bus by walking, bicycling, or transit transfer, the data shows a decrease in the emissions of carbon monoxide and volatile organic compounds, but negative impacts on other aspects. Specifically, there is a decrease of 25.586 in carbon monoxide, -0.413 in PM10, 0.602 in Nitrogen Oxides, 0.602 in Volatile Organic Compounds and -145.557 in CO<sub>2</sub>e. .

<b>Regional Transit</b>	<p><b>Expand and improve the subregion's transit network.</b>          (drawn from <a href="#">2050 MVRTP priorities</a>, <a href="#">Coordinated Transit Plan</a>, <a href="#">RTD's Regional Bus Rapid Transit Feasibility Study</a>)          Examples of Project Elements: transit lanes, station improvements, etc.  <i>Note:</i> 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.</p>
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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 (as defined in the [2050 MVRTP](#))?\*
- ☐ Yes ☒ No If yes, which specific corridor will this project focus on: [Click or tap here to enter text.](#)
- Does this project involve a regional transit planning corridor (as defined in the [2050 MVRTP](#))?\*
- ☒ Yes ☐ No If yes, which specific corridor will this project focus on: [South Boulder Road](#)
- 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.
- Does this project add and/or improve transit access to or within a DRCOG-defined urban center?\*
- ☒ Yes ☐ No

Question: Describe how this project improves connections to or expands the subregion's transit system, as outlined in the [2050 MVRTP](#). Please include quantitative information, including any items referenced above, in your response.  
*Note that rapid transit improvements must be on the [Regional Rapid Transit System](#).*

This study will enhance the subregion's transit system by improving connections to key employment centers and subregional destinations in the cities of Boulder, Louisville, and Lafayette, as outlined in the 2050 MVRTP. The South Boulder Road NAMS corridor is a vital link in the subregional transit system, providing reliable and efficient connections to the Lafayette Park-n-Ride, US 36 and Table Mesa station, as well as the future Louisville rail station and is the final NAMS corridor to advance in planning (see Image 8).

The JUMP and 225 operate at 15-minute frequencies during weekdays while the DASH operates every 15-30 minutes. This study will make recommendations to improve transit service and access to/from bus stops along the corridor. To improve transit reliability, the project will consider strategies such as queue jumps, bypass lanes, business access and transit lanes, transit signal priority, and improved stations.

The study will focus recommendations on improving access for the approximately 23,801 households and 27,138 jobs located within half a mile of the South Boulder Road corridor. With projected growth of 27.8% in households and 67.55% in jobs by 2050, it is essential to plan for improved transit operations that can accommodate this growth and encourage the use of active transportation and transit, reducing reliance on personal vehicles.

Additionally, the study will include updated modeling to better understand market needs and identify effective strategies to attract a high number of people from other modes of transportation to transit. Quantitatively, these efforts will lead to an estimated reduction in VMT along South Boulder Road of up to 2.1% by increasing active transportation and transit mode share and a decrease in motor vehicle trips.

Safety	<b>Increase the safety for all users of the transportation system.</b> (drawn from <a href="#">2050 MVRTP priorities</a> , <a href="#">Taking Action on Regional Vision Zero</a> , <a href="#">CDOT Strategic Transportation Safety Plan</a> , & <a href="#">federal safety performance measures</a> ) Examples of Project Elements: bike/pedestrian crossing improvements, vehicle crash countermeasures, traffic calming, etc.	
	Items marked with an asterisk (*) below are available in the TIP Data Tool.	
<ul style="list-style-type: none"> <li>Does this project address a location on the <a href="#">DRCOG High-Injury Network or Critical Corridors</a> or corridors defined in a local Vision Zero or equivalent safety plan?*</li> <li><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>Does this project implement a safety countermeasure listed in the <a href="#">countermeasure glossary</a>?</li> <li><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> </ul>		
Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians* (using the 2015-2019 period – <b>in the TIP Data Tool, use a 0.02 mile buffer of your project</b> ) NOTE: if constructing a new facility, report crashes along closest existing alternative route		Sponsor must use industry accepted crash modification factors (CMF) or crash reduction factor (CRF) practices (e.g., <a href="#">CMF Clearinghouse</a> , <a href="#">NCHRP Report 617</a> , or <a href="#">DiExSys</a> methodology).
Fatal crashes	2	
Serious Injury crashes	18	
Other Injury crashes	284	
Property Damage Only crashes	903	
Estimated reduction in crashes <u>applicable to the project scope</u> (per the five-year period used above)		Provide the methodology below:
Fatal crashes reduced	0.4	20% crash reduction, see below
Serious Injury crashes reduced	3.6	
Other Injury crashes reduced	56.8	
Property Damage Only crashes reduced	180.6	

Question: Describe how this project will implement safety improvements (roadway, active transportation facility, etc.), particularly improvements in line with the recommendations in [Taking Action on Regional Vision Zero](#). Please include quantitative information, including any items referenced above, in your response. *Note that any improvements on roadways must be on the DRCOG [Regional Roadway System](#).*

This study will identify a range of safety improvements for all modes of transportation, in line with the recommendations in Taking Action on Regional Vision Zero. To achieve this, we will collaborate closely with allied agencies and local municipalities to identify the most effective countermeasures from DRCOG's list. These may include retrofitting roadways to prioritize safety, improving signal timing and coordination, and enhancing infrastructure for pedestrians and cyclists.

One of our key goals is to increase awareness and adoption of Vision Zero principles throughout the region, through outreach and education efforts targeting both the general public and key decision-makers. This will involve promoting a culture of safety and responsibility among road users, with a focus on reducing high-risk behaviors that can lead to serious or fatal crashes and improving the infrastructure with proven safety mitigation strategies.

The data in Image 4 of the Supplemental Materials illustrates a significant need for safety improvements along the South Boulder Road corridor. Analysis of crash data from 2015-2019 reveals that nearly half of all serious injury or fatal crashes involved people walking or bicycling. There were six serious injury or fatal crashes involving bicycles and two involving pedestrians. To address this issue, this project will conduct a detailed analysis of crash data and other relevant factors, including traffic volume, roadway geometry and the needs of pedestrians and bicyclists. This analysis will inform the identification of specific safety improvements to reduce the risk of severe crashes for all road users.

Possible measures could include, but are not limited to, these mitigating measures from DRCOG's Taking Action on Regional Vision Zero: advanced warning signs, bike conflict zone markings, co-location of bus stops and pedestrian crossings, dual curb ramp upgrades, extended bike lanes, high visibility crosswalks, grade-separated crossings, leading pedestrian intervals, marked crossings, pedestrian refuge medians, protected/separated bikeways, sidewalk improvements, traffic signal bike detection, bike boxes and other appropriate counter measures identified within the document. We will also consider ways to improve sight lines, lighting, pavement markings and other factors that enhance safety for all road users.

The study will focus on identifying and addressing the high-risk crash types that have known mitigation measures along the South Boulder Road corridor. In particular, the study will analyze data on broadside and approach turn collisions, which have been identified as a significant issue in the area. Between 2015 and 2019, there were a total of six serious injury or fatal crashes involving these types of collisions, with broadsides accounting for the majority at four crashes. Potential mitigating measures may include improved sight distance, lighting, positive left turn off set for visibility, prohibited left turns, raised median, adjusting stop lines, traffic calming, addressing the traffic signal coordination and potential other potential countermeasures.

The countermeasures will help improve safety for all modes of transportation and align with the County's Vision Zero goal of eliminating fatalities and serious injuries on our roads by 2035 and are in line with other safety plans and initiatives. Our analysis of the Crash Modification Factor (CMF) Clearing House data for the specified treatments shows that we can expect a conservative 20% reduction in crashes. For example, the implementation of a cycle track of 6 to 15 feet from the road has an average CMF of 0.55, while dynamic speed feedback signs have an average CMF of 0.912 and 0.785 for the installation of mid-block rectangular rapid flashing beacons. Those sample elements lead to an average CMF of 0.748 among these complete streets' treatments for bicycles, vehicles, and pedestrians. It is important to note that while a range of studies, details, and factors were considered, the CMF was made more conservative at 0.8 to provide a representative sample of potential treatment outcomes that can be difficult to predict.



<b>Freight</b>	<p><b>Maintain efficient movement of goods within and beyond the subregion.</b>          (drawn from <a href="#">2050 MVRTP priorities</a>; <a href="#">Regional Multimodal Freight Plan</a>; <a href="#">Colorado Freight Plan</a>, <a href="#">federal freight reliability performance measure</a>; <a href="#">Metro Vision objective 14</a>)          Examples of Project Elements: bridge improvements, improved turning radii, increased roadway capacity, etc.</p>
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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](#)
- 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.
- Is the project located on the [Tier 1 or Tier 2 Regional Highway Freight Vision Network](#)?\*  
☒ Yes ☐ No
- 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 ☐ Highway Bottleneck  
☐ Low-Clearance or Weight-Restricted Bridge  
 Please provide the location(s) being addressed: [Click or tap here to enter text.](#)
- 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.

Question: Describe how this project will improve the efficient movement of goods. In your response, identify those improvements identified in the [Regional Multimodal Freight Plan](#), include quantitative information, and include any items referenced above. *Note that any improvements on roadways must be on the DRCOG [Regional Roadway System](#).*

This will improve the efficient movement of goods in the Northwest Metro region, as it is identified as a Tier 2 corridor in the Regional Highway Freight Vision Network in the DRCOG Regional Multimodal Freight Plan. From these plans this study will specifically address the northwest metro needs such as a focus on addressing safety concerns of all users related to local truck movements and residential delivery demand.

Safety concerns involve high injury or fatal crashes, especially for vulnerable users such as people riding a bicycle or walking, and approach turn crashes. Together bike/ped and approach turn crashes make up over 50% of reported crashes between 2015 and 2019. A part of ensuring safe travels for all users is providing intuitive, comfortable and predictable bicycle infrastructure that encourages safe riding behavior. Having predictable bicycling movements, that account for the movement of freight, will improve the safety and comfort of all users.

To achieve these goals, we will consider a range of strategies and actions. This could include initiatives to address the growing demand for residential parcel delivery, including potential for e-bike freight deliveries, as well as coordinating planning near existing industrial clusters to ensure that freight-generating businesses have the infrastructure and support they need to thrive. Given the projected growth on South Boulder Road, future trips associated with the increased employment and housing can be achieved by planning for an increase in walking at the local levels, bicycling and transit trips for local and regional levels. These plans will connect to a larger network of transit, bikeways and destinations

In terms of quantitative improvements, we anticipate that these efforts will lead to a reduction in the number of truck-related crashes, as well as fewer conflicts between trucks and other road users. This will not only improve safety for all modes of transportation, but also improve the flow of goods through the region. Additionally, by preserving freight rail assets and improving rail grade crossing safety, we can help ensure that the region's rail network remains a viable and efficient means of moving goods in the long term by adapting to the growing consumer base that will come with the anticipated changes along the corridor.

Active Transportation	Expand and enhance active transportation travel options. (drawn from <a href="#">2050 MVRTP priorities</a> ; <a href="#">Denver Regional Active Transportation Plan</a> ; & <a href="#">Metro Vision objectives 10 &amp; 13</a> ) Examples of Project Elements: shared use paths, sidewalks, regional trails, grade separations, etc.	
Items marked with an asterisk (*) below are available in the TIP Data Tool.		
<ul style="list-style-type: none"> <li>Does this project close a gap or extend a facility on a <a href="#">Regional Active Transportation Corridor</a> or locally-defined priority corridor?*</li> <li><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>Does this project improve pedestrian accessibility and connectivity in a <a href="#">pedestrian focus area</a>?*</li> <li><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>Does this project improve active transportation choices in a <a href="#">short trip opportunity zone</a>?*</li> <li><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>Does this project include a high-comfort bikeway (like a sidepath, shared-use path, separated bike lane, bicycle boulevard)?</li> <li><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe in your response.</li> </ul>		
<b>Bicycle Use</b>		
NOTE: if constructing a new facility, report bike usage along closest existing alternative route		
<b>To update the formulas below, enter your information, highlight the formulas (or Ctrl-A), and press F9. OR close and reopen the file.</b>		
1. Current Average Single Weekday Bicyclists:	150	
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.	225	337
3. Enter number of the bicycle trips (in #2 above) that will be diverting from a different bicycling route. (Example: {#2 X 50%} or other percent, if justified on line 10 below)	113	169
4. = Initial number of new bicycle trips from project (#2 – #3)	113	169
5. Enter number of the new trips produced (from #4 above) that are replacing a trip made by another non-SOV mode (bus, carpool, vanpool, walking, etc.). (Example: {#4 X 30%} or other percent, if justified on line 10 below)	34	51
6. = Number of SOV trips reduced per day (#4 - #5)	79	118
7. Enter the value of {#6 x 2 miles}. (= the VMT reduced per day) (Values other than 2 miles must be justified by sponsor on line 10 below)	158	236
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	150.1	224.2
9. If values would be distinctly greater for weekends, describe the magnitude of difference:  Based on previous transit ridership data, values would not be greater for weekends.		
10. If different values other than the suggested are used, please explain here:  N/A		
<b>Pedestrian Use</b>		
NOTE: if constructing a new facility, report pedestrian usage along closest existing alternative route		
<b>To update the formulas below, enter your information, highlight the formulas (or Ctrl-A), and press F9. OR close and reopen the file.</b>		
1. Current Average Single Weekday Pedestrians (including users of non-pedaled devices such as scooters and wheelchairs):	1431	
Pedestrian Use Calculations	Year of Opening	2050 Weekday Estimate
2. Enter estimated additional average weekday pedestrian one-way trips on the facility after project is completed	2146	3219
3. Enter number of the new pedestrian trips (in #2 above) that will be diverting from a different walking route (Example: {#2 X 50%} or other percent, if justified on line 10 below)	1073	1610
4. = Number of new trips from project (#2 – #3)	1073	1609
5. 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.). (Example: {#4 X 30%} or other percent, if justified on line 10 below)	322	483
6. = Number of SOV trips reduced per day (#4 - #5)	751	1126

7. 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)	300	450
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	285	428
9. If values would be distinctly greater for weekends, describe the magnitude of difference:  The weekend values will not be greater than weekdays		
10. If different values other than the suggested are used, please explain here: N/A		

Question: Describe how this project helps expand the active transportation network, closes gaps, improves comfort, and/or improves connections to key destinations, particularly improvements in line with the recommendations in the [Denver Regional Active Transportation Plan](#). Please include quantitative information, including any items referenced above, in your response.

This project will expand the DRCOG's Complete Streets network in the northwest metropolitan area by addressing transit and the walking and bicycling facilities gaps between eastern Lafayette and Broadway in Boulder. This study will connect South Boulder Road transit and multimodal network with the future CO 7 Bus Rapid Transit station and 119th Street and Baseline, we will improve transportation options for residents and visitors to the multimodal network with the future CO 7 Bus Rapid Transit station and 119th Street and Baseline. This area includes two DRCOG defined urban centers of Louisville and Boulder, two short trip opportunity zones and one pedestrian focus area in the eastern part of Boulder.

Currently, there are limited protected bikeways along the corridor, with a 3.2-mile stretch between the cities of Louisville and Boulder lacking separated pathways or sidewalks. (see Images 9 and 10 in the Supplemental Materials). This project aims to close these gaps by analyzing opportunities to create a low stress facility, such as a separated bikeway and/or multi-use paths, closing gaps in sidewalks and incorporating design elements in and between the cities of Lafayette, Louisville, and Boulder that focus on integrating walking and bicycling with transit.

This project will also address specific challenges faced by certain communities. In Lafayette, two mobile home communities lack bike lanes for over one-half mile. This project will work to improve accessibility and safety for these communities. Additionally, the project will examine opportunities to improve safety for people walking and bicycling, including across US 287 and South Boulder Road, by re-examining the utilization of right of way, identifying opportunities for protected and separated bikeways and sidewalks.

In addition to advancing active transportation options, this project will also include the examination of lighting, signage, pavement markings, and crime prevention through environmental design (CPTED) to further increase the real and perceived comfort to enhance the user experience and encourage more individuals to choose active transportation modes. These improvements will align with the recommendations outlined in the Denver Regional Active Transportation Plan, and local plans, which prioritize the creation of safe and convenient connections for active transportation users.

This project is expected to reduce the vehicle miles traveled (VMT) along the South Boulder Road corridor by an estimated 300 miles per day, projected to increase to 450 miles per day in 2050. The project is expected to result in a significant increase in walking and bicycling mode share by 50%, and a decrease in vehicle miles traveled by an estimated 1.0 – 2.1%. As no pedestrian counts were available for the corridor, this estimation is based on the correlation between transit use and pedestrian counts, as every transit trip starts and ends with a walk. To get an estimation of pedestrian counts, 65% of DASH ridership was used to estimate pedestrian counts. Data for this estimation was gathered by analyzing the DRCOG facilities map and utilizing Google Maps for distance estimates.

C. Project Leveraging		WEIGHT	5%
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. If this has not updated, select the box to the right and click F9)</i>	<div>20.2%</div>	60%+ outside funding sources ..... 5 pts 50-59.9% ..... 4 pts 40-49.9% ..... 3 pts 20-39.9% ..... 2 pts 10.1-19.9% ..... 1 pt 10%..... 0 pts	
D. Project Readiness		WEIGHT	10%
<i>Provide responses to the following items to demonstrate the readiness of the project. DRCOG is prioritizing those projects that have a higher likelihood to move forward in a timely manner and are less likely to experience a delay.</i>			
Section 1. Avoiding Pitfalls and Roadblocks			
<p>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?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A (for projects which do not require engineering services)</p> <p>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:</p> <p>N/A</p> <p>Please describe the status to date on each, including 1) anticipated/known pitfalls/roadblocks, and 2) mitigation activities taken to date:</p> <ul style="list-style-type: none"> <li>Utilities: N/A</li> <li>Railroad: This project will identify methods for preserving freight lines and future needs.</li> <li>Right-of-Way: This study will include GIS right-of-way lines. There will be no survey included.</li> <li>Environmental/Historic: This study will take a desktop review of environmental resources</li> <li>Other: Click or tap here to enter text.</li> </ul> <p>b. Is this application for a single project phase only (i.e., design, environmental, ROW acquisition, construction only, study, equipment purchase, etc.)?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, are the other prerequisite phases complete? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>If this project is for construction, please note the NEPA status: N/A</p> <p>c. Has all required ROW been identified? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p> <p>Has all required ROW already been acquired and cleared by CDOT? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</p> <p>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?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Does your agency have the appropriate staff available to work on this project? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, are they knowledgeable with the federal-aid process? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>			

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

☒ Yes ☐ No ☐ N/A

If yes, who are the stakeholders?

Cities of Lafayette, Louisville and Boulder; RTD and CDOT

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

The county held a meeting with the local municipalities to discuss support for this application. The Cities of Lafayette and Boulder were supportive. The City of Louisville offered \$25,000 in financial support.

## Section 2. Local Match Availability

- a. Is all the local match identified in your application currently available and not contingent on any additional decisions, and if a partnering agency is also committing match, do you have a commitment letter?

☒ Yes ☐ No

Please describe:

Boulder County Board of County Commissioners approved local match and the City of Louisville has provided a letter committing \$25,000 toward the project.

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

☒ Yes ☐ No

Please describe:

Boulder County has identified the local match for this project in the [transportation sales tax](#), which was recently extended by the voters.

## Section 3. Public Support

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

☒ Yes ☐ No

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

☒ Yes ☐ No

Please describe:

The Boulder County Transportation Master Plan had English and Spanish community engagement, including surveys on paper and over the telephone with around 100 responses in Spanish. The plan also included two Spanish only in-person events.

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

☐ Yes ☐ No ☒ N/A

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

This study will build on the findings of the upcoming DRCOG pre-NEPA/PEL corridor study, which aims to identify existing conditions, develop a shared regional vision, and prioritize implementation plans. It will further advance the needs of the corridor, building on the momentum of the DRCOG corridor study.

**Submit completed applications through the [TIP Data Hub](#) no later than 3pm on January 27, 2023.**

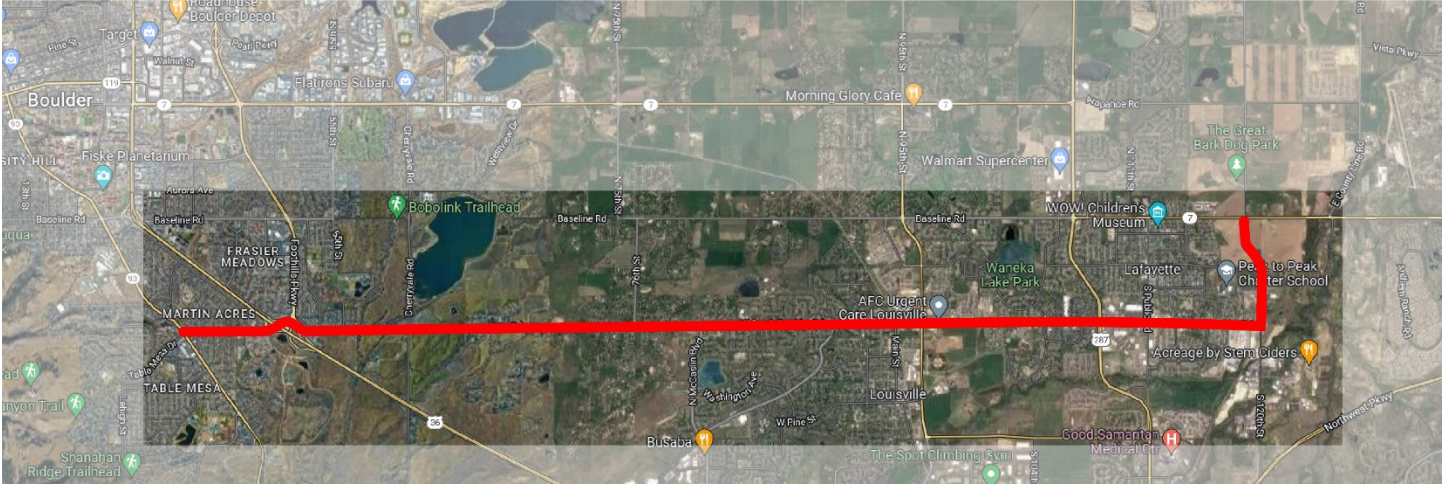
Prior to submitting, press Ctrl+A to select all, then press F9 to update all formulas. You can then print to PDF.





# DRCOG Transportation Improvement Program (TIP) FY 2024-2027 TIP Subregional Share (Call #4) – Boulder County Subregion Surface Transportation Block Grant (STBG) Project Application REQUIRED MATERIALS


## Material 1: Project Area Map from CO 7 in Lafayette to Table Mesa in Boulder



## Material 2: Cost Estimates

South Boulder Road Multimodal Bus Rapid Transit Study		% of overall	Assumptions
Project Management	\$ 20,000	4%	
Existing conditions	\$ -	0%	Assume this will be covered in DRCOG study
Public involvement	\$ 35,000	7%	One in-person, one virtual, 3 online updates
Stakeholder coordination	\$ 15,000	3%	
Alternatives and screening	\$ -	0%	Assume this will be covered in DRCOG study
Recommendations	\$ -	0%	Assume this will be covered in DRCOG study
Transit modeling	\$ 30,000	6%	
Transit recommendations and service planning	\$ 20,000	4%	
Identification and prioritization of projects, phasing	\$ 80,000	16%	
Conceptual design	\$ 255,000	51%	Up to 10 discrete projects
High level environmental	\$ 40,000	8%	Desktop environmental review
Direct expenses (mileage, social media posts, spanish translation, traffic counts, ect.)	\$ 5,000	1%	
Total		\$ 500,000	

## Material 3: Air quality inputs and outputs within the CMAQ calculator for transit bus service and fleet expansion



CMAQ

Emissions Calculator Tool Kit

# 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**

(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	
<b>Transit Bus Miles Traveled</b>	<input style="width: 150px;" type="text" value="6,458,310"/>	<input style="width: 150px;" type="text" value="11,303,425"/>	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.

**Allocations of Model Years**

**Allocations of Fuel Types**

**Allocations of Road 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 be entered in miles.

**Passenger Vehicle Activity Type**

Passenger Activity Type

☒ Passenger Vehicle Miles Traveled

☐ Passenger Vehicle Trips

	Before	After	
<b>Passenger Vehicle Activity</b>	<input style="width: 150px;" type="text" value="31,900,270"/>	<input style="width: 150px;" type="text" value="23,076,030"/>	Miles

**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**

**FLEET PERFORMANCE**

<b>Transit Bus VMT increase</b>	<input style="width: 150px;" type="text" value="4,845,115"/>		Miles
<b>Passenger Vehicle Trip Reduction</b>	<input style="width: 150px;" type="text" value="1,952,265"/>		Trips
<b>Passenger Vehicle VMT reduction</b>	<input style="width: 150px;" type="text" value="8,824,240"/>		Miles

**EMISSION REDUCTIONS**

Pollutant	Total kg/day
Carbon Monoxide (CO)	25.586
Particulate Matter <2.5 µm (PM <sub>2.5</sub> )	-0.413
Particulate Matter <10 µm (PM <sub>10</sub> )	-1.153
Nitrogen Oxide (NOx)	-20.682
Volatile Organic Compounds (VOC)	0.602
Carbon Dioxide Equivalents (CO <sub>2</sub> e)	-145.557
Total Energy Consumption (MMBTU)	-10,990.374





# COLORADO

## Department of Transportation

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

December 20, 2022

Jeff Butts  
Multimodal Transportation Planner II  
Boulder County  
PO Box 471  
Boulder, CO 80306

RE: CDOT Region 4 Concurrence Request for DRCOG TIP Subregional Call FY24-27

Dear Jeff Butts:

This letter is to inform you that the Colorado Department of Transportation (CDOT) Region 4 concurs with Boulder County's application for the DRCOG Subregional FY24-27 TIP Call. This concurrence applies only for the South Boulder Road Bus Rapid Transit Feasibility & Multimodal Corridor Study project, in the event this project is selected by DRCOG as a subregional project in this Call. If this subregional project is awarded DRCOG funds at a later date, the local agency will need to submit a separate request for CDOT's concurrence and funding contribution at that time.

Projects impacting state highways should assume that CDOT will manage the project and the local agency is responsible for payment of CDOT's work including indirect charges. Please note that per the DRCOG TIP Policy, if project costs increase on DRCOG-selected projects, sponsors must make up any shortfalls.

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

This project must comply with all CDOT and/or FHWA requirements including those associated with clearance for right-of-way, utilities, and environmental. All costs associated with clearances including right-of-way acquisition, utilities relocation, and environmental mitigation measures, 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: [http://www.coloradodot.info/business/designsupport/bulletins\\_manuals](http://www.coloradodot.info/business/designsupport/bulletins_manuals).

Should you have any questions regarding this concurrence, or if your agency would like to schedule time to meet with CDOT specialty units, please contact Josie Thomas at (970) 888-4006.

Sincerely,

Heather Paddock  
CDOT Region 4 Transportation Director

HP:dmm

cc: Dan Marcucci, CDOT Region 4 Professional Engineer  
Josie Thomas, CDOT Region 4 Planning & Local Agency Environmental Manager  
James Eussen, CDOT Region 4 Planning & Environmental Manager  
Deanna McIntosh, CDOT Region 4 Planner  
Whitney Holcombe, CDOT Region 4 STIP and Project Creation Technician



## REQUEST FOR CDOT / RTD SUPPORT OF DRCOG PROJECT

Select one of the following: **FY22-25 TIP Regional Call** ☐ **FY22-25 TIP Subregional Call** ☐

Complete a separate form for each. **FY24-27 TIP Regional Call** ☐ **FY24-27 TIP Subregional Call** ☒

Select the agency from which support is being requested. Complete a separate form for each.

**Colorado Department of Transportation** ☒ **Regional Transportation District** ☐

### APPLICANT INFORMATION

1. SUBREGION / AGENCY REQUESTING SUPPORT:

Boulder County

2. SPONSOR AGENCY:

Boulder County

3. SUPPORTING AGENCIES:

Boulder County, Lafayette, Louisville, Boulder

4. CONTACT PERSON

Jeff Butts

TITLE:

Multimodal Transportation Planner II

EMAIL:

jbutts@bouldercounty.org

5. AGENCY MAILING ADDRESS:

P.O. Box 471

CITY:

Boulder

STATE:

CO

ZIP:

80306

### PROJECT DESCRIPTION

6. PROJECT NAME:

South Boulder Road Bus Rapid Transit Feasibility & Multimodal Corridor Study

7. PROJECT LOCATION/ADDRESS:

South Boulder Road

8. PROJECT LIMITS: (mileposts, intersecting roads, rivers, etc...)

Lafayette to Boulder

9. COUNTY:

Boulder

10. MUNICIPALITY:

Lafayette, Louisville, Boulder

11. PROJECT LENGTH:

11.41 - 15.73 miles

12. BRIEF DESCRIPTION OF PROJECT:

The project is a study to determine the feasibility of and options for implementation Bus Rapid Transit service on the South Boulder Road corridor between the Lafayette Park-n-Ride and Downtown Boulder Station. This study will evaluate opportunities including alignments, service planning, capital investments and costs. It will build upon the work completed as part of the NAMS Study, local transportation plans and dovetail with existing corridor plans the intersect with this corridor. The study will also evaluate related bicycle, pedestrian, operational and safety measures for the corridor; the deliverable will establish a shared vision for future capital treatments and transit service enhancements for the corridor. This study will build upon other recent or planned work along the corridor including transit improvements at Downtown Boulder Station and work along Broadway in Boulder, crossing changes on South Boulder Road in Louisville and at the Lafayette Park-n-Ride.

13. PRIOR WORK / PHASES COMPLETED IN THIS LOCATION:

The corridor is part of the Northwest Area Mobility Study and that vision is carried through to Boulder County's Transportation Master Plan. There have been spot treatments on the corridor but there is no comprehensive vision.

14. PRIORITY RANKING WITHIN SUBREGION:

NA

15. IS THIS PROJECT ON THE STATE HIGHWAY SYSTEM?

Crosses CO 93, US 36, CO 157, CO 42, & US 287

16. WILL THIS PROJECT IMPACT ADJACENT PROPERTIES, INCLUDING ROW OR EASEMENTS?

No

17. WILL THIS PROJECT REQUIRE COORDINATION WITH ONE OR MORE RAILROADS?

No

## SUPPORT REQUEST

### 18. TYPE OF SUPPORT REQUESTED

PLEASE NOTE: CDOT AND RTD HAVE VERY LIMITED FUNDS, AND MAY NOT BE ABLE TO PROVIDE MATCHING FUNDS TO A PROJECT. IF CDOT/RTD DETERMINES THAT IT WILL PROVIDE MATCH TO SUPPORT A PROJECT, THIS SUPPORT IS LIMITED TO THE PROJECT SELECTED WITHIN THIS SUBREGIONAL CALL FOR PROJECTS, BASED ON THE FUNDS AVAILABLE WHEN THE CALL IS OPENED. ANY SUBSEQUENT CALL FOR PROJECTS OR ADDITION OF FUNDS WILL REQUIRE A SEPARATE REQUEST FORM AND WILL BE EVALUATED INDEPENDENTLY OF THIS CALL FOR PROJECTS.

REQUESTING CDOT / RTD CONCURRENCE:

☒

REQUESTING CDOT FUNDING CONTRIBUTION:

☐

AMOUNT SPONSOR IS REQUESTING FROM CDOT FOR THIS PROJECT: \$0

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### 19. PROVIDE FINANCIAL PACKAGE FOR THIS PROJECT BY SOURCE, INCLUDING ANY FUNDS REQUESTED ABOVE:

TIP Grant - \$399,000

Boulder County - \$101,000

Total: \$500,000

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**From:** [Christopher Quinn](#)  
**To:** [Hyde-Wright, Alexander](#)  
**Cc:** [Bracke, Kathleen](#); [Todd Cottrell](#)  
**Subject:** [EXTERNAL] RE: Boulder County Concurrence Requests to RTD for TIP Call #4  
**Date:** Friday, January 13, 2023 4:10:00 PM

---

Hi Alex,

This email is to provide RTD's concurrence with the following TIP project requests from Boulder County.

1. Boulder County Super Flex Service
2. LoBo Trail- Jay Rd Connection
3. **South Boulder Rd Bus Rapid Transit Feasibility & Multimodal Corridor Study**
4. Countywide Strategic Transit Plan

We would request that as these projects proceed you coordinate with RTD. Also, in the case of the Flex Service, as you are aware, RTD would not have the ability to operate the service, but we would request that you work with us to plan how connections to existing RTD services would be managed.

Please let me know if I can provide any additional information.

Thanks

Chris

**Chris Quinn**

Project Manager

Planning

he | him | his

o. 303.299.2439

[chris.quinn@rtd-denver.com](mailto:chris.quinn@rtd-denver.com)

[rtd-denver.com](http://rtd-denver.com)



Regional Transportation District  
1660 Blake Street, BLK-21  
Denver, CO 80202

***We make lives better through connections.***

---

**From:** Hyde-Wright, Alexander <ahyde-wright@bouldercounty.org>

**Sent:** Thursday, December 8, 2022 8:43 PM

**To:** Christopher Quinn <Chris.Quinn@RTD-Denver.com>

**Cc:** Bracke, Kathleen <kbracke@bouldercounty.org>

**Subject:** Boulder County Concurrence Requests to RTD for TIP Call #4

Hi Chris,

Please find attached Boulder County's requests for RTD's concurrence for the following projects in

the DRCOG TIP Call #4 (24-27 subregional share):

As always, we are more than happy to discuss any of these requests in more detail.

Thanks,

Alex

**Alex Hyde-Wright**

Regional Multimodal Planning Division Manager

Transportation Planning Division

Community Planning & Permitting Dept.

(303) 441-4910 (office)

[ahyde-wright@bouldercounty.org](mailto:ahyde-wright@bouldercounty.org)

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

## FY2022-2027 TIP PROCESS: REQUEST FOR PEER AGENCY SUPPORT

Complete the sections with green headers below, then provide this form to the agency you are requesting support from. That agency will complete the blue section and return the form. Providing additional project materials and attending meetings of the agency/forum from whom support is requested is encouraged.

☐ 22-25 Regional Call ☐ 22-25 Subregional Call ☐ 24-27 Regional Call ☒ 24-27 Subregional Call

APPLICANT INFORMATION		
1. Who is requesting support? Subregional Forum: Local Agency: Boulder County		
2. Project Sponsor: Boulder County	3. Current Supporting Agency(ies):	
4. Contact Person: Jeff Butts Email: jbutts@bouldercounty.org		Title: Multimodal Transportation Planner Phone: 720.564.2754
PROJECT DESCRIPTION		
5. Project Title: South Boulder Road Bus Rapid Transit Feasibility and Multimodal Corridor Study		Total Project Cost: \$500,000
Project Location: South Boulder Road		Project Limits: (mileposts, intersecting roads, rivers, etc.) 119th St./CO-7 in Lafayette to Table Mesa/Broadway in Boulder
County: Boulder	Municipality(ies): Lafayette, Louisville, Boulder	Project Length: 10+ miles
<b>Brief Description of Project:</b> The project is a study to determine the feasibility of and options for implementation Bus Rapid Transit service on the South Boulder Road corridor between the Lafayette and Boulder with examination of operations analysis for connecting with CO 7 BRT. This study will evaluate opportunities including alignments, service planning, capital investments, projects and costs. It will build upon the work completed as part of the NAMS Study, local transportation plans and dovetail with existing corridor plans the intersect with this corridor. The study will also evaluate related bicycle, pedestrian, operational and safety measures for the corridor; the deliverable will build off of the DRCOG preliminary corridor study that establishes a shared vision for future capital treatments and transit service enhancements for the corridor. This study will build upon other recent or planned work along the corridor including transit improvements at Downtown Boulder Station and work along Broadway in Boulder, crossing changes on South Boulder Road in Louisville and at the Lafayette Park-n-Ride and connecting to CO 7 transit starter service and future Bus Rapid Transit on CO 7 and US 287.		
SUPPORT REQUEST		
6. Based on who is requesting support (see #1), from whom are you are requesting support? <i>If you are requesting support from multiple forums or local agencies, please fill out and send a separate form to each.</i> <input type="checkbox"/> Subregional Forum, Specify: <input checked="" type="checkbox"/> Local Agency, Specify: Louisville		
7. Type of Support Requested: <input type="checkbox"/> Support Only <input checked="" type="checkbox"/> Financial Pledge: <input type="checkbox"/> Subregional Funds: Amount: <input checked="" type="checkbox"/> Local (non-DRCOG) Funds: Amount: \$25,000		
8. Please type your name and date below which certifies the above information is accurate and complete: Name: Jeff Butts Date: December 16, 2022		

RESPONSE (to be completed by agency/subregion from whom support is requested)		
9. The forum/agency in #1 above has requested for you to support their project. Who are you? Subregional Forum: Boulder County      Local Agency: City of Louisville		
10. Contact person at supporting forum/agency: Megan Davis Title: Deputy City Manager      Email: mdavis@louisvilleco.gov      Phone: 303-335-4359		
11. Does your subregion/agency support this project? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
12. Does your subregion/agency pledge financial support to this project, if requested? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If yes, provide amount: \$25,000    Fiscal year(s) funds are provided in: 2025 If yes, where are funds coming from: <input type="checkbox"/> Local Agency (i.e., non-DRCOG funds) <input type="checkbox"/> Subregional Funding Target (forum must approve)		
13. Please enter your name and date below which certifies the above information is accurate and complete, and your subregion/agency will honor any financial commitments made above: Name: Megan Davis      Date: 1/23/2023		



## FY2022-2027 TIP PROCESS: REQUEST FOR PEER AGENCY SUPPORT

Complete the sections with green headers below, then provide this form to the agency you are requesting support from. That agency will complete the blue section and return the form. Providing additional project materials and attending meetings of the agency/forum from whom support is requested is encouraged.

☐ 22-25 Regional Call   ☐ 22-25 Subregional Call   ☐ 24-27 Regional Call   ☒ 24-27 Subregional Call

APPLICANT INFORMATION		
1. Who is requesting support? Subregional Forum: _____ Local Agency: Boulder County		
2. Project Sponsor: Boulder County	3. Current Supporting Agency(ies): _____	
4. Contact Person: Jeff Butts      Title: Multimodal Transportation Planner Email: jbutts@bouldercounty.org      Phone: 720.564.2754		
PROJECT DESCRIPTION		
5. Project Title: South Boulder Road Bus Rapid Transit Feasibility and Multimodal Corridor Study		Total Project Cost: \$500,000
Project Location: South Boulder Road		Project Limits: (mileposts, intersecting roads, rivers, etc.) 119th St./CO-7 in Lafayette to Table Mesa/Broadway in Boulder
County: Boulder	Municipality(ies): Lafayette, Louisville, Boulder	Project Length: 10+ miles
<p><b>Brief Description of Project:</b></p> <p>The project is a study to determine the feasibility of and options for implementation Bus Rapid Transit service on the South Boulder Road corridor between the Lafayette and Boulder with examination of operations analysis for connecting with CO 7 BRT. This study will evaluate opportunities including alignments, service planning, capital investments, projects and costs. It will build upon the work completed as part of the NAMS Study, local transportation plans and dovetail with existing corridor plans the intersect with this corridor. The study will also evaluate related bicycle, pedestrian, operational and safety measures for the corridor; the deliverable will build off of the DRCOG preliminary corridor study that establishes a shared vision for future capital treatments and transit service enhancements for the corridor. This study will build upon other recent or planned work along the corridor including transit improvements at Downtown Boulder Station and work along Broadway in Boulder, crossing changes on South Boulder Road in Louisville and at the Lafayette Park-n-Ride and connecting to CO 7 transit starter service and future Bus Rapid Transit on CO 7 and US 287.</p>		
SUPPORT REQUEST		
<p>6. Based on who is requesting support (see #1), from whom are you are requesting support? <i>If you are requesting support from multiple forums or local agencies, please fill out and send a separate form to each.</i></p> <p style="margin-left: 40px;"> <input type="checkbox"/> Subregional Forum, Specify: _____  <input checked="" type="checkbox"/> Local Agency, Specify: City of Boulder </p>		
<p>7. Type of Support Requested:</p> <p style="margin-left: 40px;"> <input checked="" type="checkbox"/> Support Only  <input type="checkbox"/> Financial Pledge:    <input type="checkbox"/> Subregional Funds: Amount: _____  <span style="margin-left: 150px;"><input type="checkbox"/> Local (non-DRCOG) Funds: Amount: _____</span> </p>		
<p>8. Please type your name and date below which certifies the above information is accurate and complete:</p> <p style="margin-left: 40px;">Name: Jeff Butts      Date: December 16, 2022</p>		

**RESPONSE (to be completed by agency/subregion from whom support is requested)**

9. The forum/agency in #1 above has requested for you to support their project. Who are you?  
Subregional Forum: Local Agency: City of Boulder

10. Contact person at supporting forum/agency: Jean Sanson  
Title: Principal Planner Email: sansonj@bouldercolorado.gov Phone: 303.870.5227

11. Does your subregion/agency support this project? ☒ Yes ☐ No

12. Does your subregion/agency pledge financial support to this project, if requested?

☐ Yes ☐ No ☒ N/A

If yes, provide amount: \$ Fiscal year(s) funds are provided in:

If yes, where are funds coming from:

☐ Local Agency (i.e., non-DRCOG funds)

☐ Subregional Funding Target (forum must approve)

13. Please enter your name and date below which certifies the above information is accurate and complete, and your subregion/agency will honor any financial commitments made above:

Name: Jean Sanson

Date: 1/2/23