# DRCOG Transportation Improvement Program (TIP)

# FY 2024-2027 TIP Subregional Share (Call #4) – Boulder County Subregion Air Quality/Multimodal (AQ/MM) Project Application

## APPLICATION OVERVIEW

**What**: The Regional Share Call for Projects for the FY 2024-2027 TIP (Call #4)
**Funding Available**: $8,329,000 for this subregion and this AQ/MM Track. In the AQ/MM Track, a majority of the funding is in FY26 and FY27, with a very small amount in FY25.
**Eligibility**: Air Quality & Multimodal (AQ/MM) eligible projects only.
**Major Project Eligibility Exceptions**: Roadway capacity, roadway reconstruction, bridge, interchange projects *(Note: these types of projects are only allowed to be submitted with the STBG application)*
**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 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). Reconstruction and added capacity are ineligible for the AQ/MM application (see the STBG application). 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, and datasets for download are available on the TIP Data Hub. Requests for additional data or calculations from DRCOG staff should be submitted to 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

# APPLICATION FORMAT

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

## Project Information

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

## Evaluation Questions

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

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

**Section A. Subregional Impact of Proposed Projects.....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 **substantially** address a **major** subregional problem and benefit people and businesses in multiple communities. |
| **4** | The project benefits will **significantly** address a **major** subregional problem primarily benefiting people and businesses in one community. |
| **3** | The project benefits will either **moderately** address a **major** subregional problem or **significantly** address a **moderate**-level subregional problem. |
| **2** | The project benefits will **moderately** address a **moderate**-level subregional problem. |
| **1** | The project benefits will address a **minor** subregional problem. |
| **0** | The project does not address a subregional problem. |

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

**Section C. Project Leveraging** ("overmatch") **..... 5%**

Scores are assigned based on the percent of other funding sources (non-Subregional Share funds).

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

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

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

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

# Project Information

| | |
|---|---|
| **1.** Project Title | **30th Street Multimodal Improvements** |
| **2.** Project Location<br>*Provide a map, as appropriate (see Page 1)* | Start point: 30th Street & Colorado Avenue<br>End point: 30th Street & Baseline Road<br>OR Geographic Area: Click or tap here to enter text. |
| **3.** Project Sponsor *(entity that will be financially responsible for the project)* | City of Boulder |

**4.** Project Contact Person:

| | |
|---|---|
| Name: Gerrit Slatter | Title: Principal Engineer – Transportation Capital Projects |
| Phone: 303.441.1978 | Email: slatterg@BoulderColorado.gov |

| | |
|---|---|
| **5.** Required CDOT and/or RTD Concurrence: Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service? | ☒ Yes ☐ No<br>*If yes, provide applicable concurrence documentation* |

| | | |
|---|---|---|
| **6.** What planning document(s) identifies this project?<br><br>*Provide link to document(s) and referenced page number if possible, or provide documentation in the supplement* | If this project is listed in the DRCOG 2050 Metro Vision Regional Transportation Plan (2050 MVRTP), provide the staging period: No | |
| | Local/Regional/ Subregional plan: | Planning Document Title: (1) City of Boulder Transportation Master Plan: Transportation Master Plan \| City of Boulder (bouldercolorado.gov); (2) City of Boulder Low Stress Walk & Bike Network Plan: The Low-Stress Walk and Bike Network Plan \| City of Boulder (bouldercolorado.gov); (3) City of Boulder Vision Zero Safe Streets Report: Safe Streets Report \| City of Boulder (bouldercolorado.gov); (4) 30th and Colorado Corridors Study: 30th and Colorado Corridors Study \| City of Boulder (bouldercolorado.gov)<br><br>Adopting agency (local agency Council, CDOT, RTD, etc.): Boulder City Council<br><br>Provide date of adoption by council/board/commission, if applicable: (1) 2019; (2) 2019; (3) 2022; (4) 2019 |
| | Please describe public review/engagement to date: | The City of Boulder conducted a Call for Feedback on DRCOG Call #4 Subregoinal TIP Applications, including a project website, questionnaire, staff office hours, and Transportation Advisory Board and City Council public hearings. |
| | Other pertinent details: | N/A |

**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) |
|---|---|---|
| | ☐ Preconstruction (including studies) ☒ Construction ☐ Both | |
| REQUIRED FOR ALL PHASES | Intergovernmental Agreement (IGA) executed with CDOT/RTD (Assumed process is 4-9 months; any work performed before execution is NOT reimbursable) | 11/2023 |

| | | |
|---|---|---|
| ☒Design | Design contract Notice to Proceed (NTP) issued (if using a consultant): | 02/2025 |
| | Design scoping meeting held with CDOT (if no consultant): | 04/2025 |
| | FIR (Field Inspection Review): | 12/2025 |
| | FOR (Final Office Review): | 06/2026 |
| ☐Environmental | Environmental contract Notice to Proceed (NTP) issued (if using a consultant): | Enter Date |
| | Environmental scoping meeting held with CDOT (if no consultant): | Enter Date |
| ☐Right-of-Way | Initial set of ROW plans submitted to CDOT: | Enter Date |
| | Estimated number of parcels to acquire: Enter Number | |
| | ROW acquisition completed: | Enter Date |
| ☒Construction | Required clearances: | 10/2026 |
| | Project publicly advertised: | 04/2027 |
| ☐Study | Kick-off meeting held after consultant NTP (or internal if no consultant): | Enter Date |
| ☐Bus Service | Service begins: | Enter Date |
| ☐Equipment Purchase (Procurement) | RFP/RFQ/RFB (bids) issued: | Enter Date |
| ☐Other Phase not Listed<br>Describe:<br>Describe | First invoice submitted to CDOT/RTD: | Enter Date |

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

30th St is a primary north-south travel corridor in the City of Boulder providing connections and access to the three University of Colorado (CU) campuses (Williams Village, Main Campus, and East Campus), the 29th Street Retail Center and a considerable share of the city's retailers. Although it is a main transportation corridor in Boulder for both local and regional travel trips, as shown in Attachment A, Figure 1: 30th St Existing Conditions Photos, this segment of 30th St lacks the complete street infrastructure to provide safe, convenient and comfortable travel for those walking, biking or taking transit.

30th St is designated as both a high-priority bicycle route and a high-frequency transit service route by the City of Boulder's Transportation Master Plan and as a designated Active Transportation Corridor in DRCOG's Regional Active Transportation Plan; however, it still reflects a design that prioritizes vehicular mobility. The corridor is autocentric and has seen only minimal investment in multimodal infrastructure: sidewalks that are substandard in width for much of the corridor extent, narrow and un-buffered/unprotected on-street bike lanes, signalized crossings that offer little protection for vulnerable users, long stretches of the corridor that have no pedestrian/bike crossings at all, and transit stops that offer little or no amenities such as seating or shelters. Given these conditions, many residents living along the corridor, students, CU employees, as well as patrons and employees of local businesses, feel compelled to drive or avoid traveling in the corridor at all.

The following problem statements illustrate the issues this multimodal project for the 30th St Corridor between Baseline Rd and Colorado Ave will address:

- ***Mixing high volumes of vehicular, bike, pedestrian and transit travel without adequate protection for all users:*** This one-half mile segment of 30th St has an ADT of 22,000 vehicles and serves transit routes carrying an average of 10,000 passengers per day. Bike and pedestrian counts during the a.m., noon and p.m. travel periods showed 3,700 walk and bike trips in the project area on an average day. The high volume of people traveling in vehicles, on bicycles and by transit on a roadway that was designed primarily for vehicular travel has created a condition where there are conflicts between all modes, travel delay for buses, a high level of stress for bicyclists and pedestrians, and resulting safety issues. Given these conditions, it is not surprising that travelers find active mode options to be limited, and in a recent survey conducted by CU, 21 pecent of respondents (students, staff, and faculty) indicated that they drive alone between the Williams Village and East Campus.
- ***Severity of crashes and high crash rates:*** Between 2015 and 2019, there were 287 crashes in the half-mile project area with five resulting in serious injury or death, earning the project a Critical Corridor designation by DRCOG and a high priority for improvements by Boulder City Council as part of its Core Arterial Network initiative.
- ***Gap in protected bicycle and pedestrian infrastructure on the 30th St Corridor:*** While protected bicycle lanes and enhanced paths are being constructed on 30th St north of Colorado Ave in 2023, without a connection to the south between Colorado Ave and Baseline Rd, the 18% of daily travelers who walk, roll, bike, or ride transit in the corridor will be left to use facilities that are substandard, not accessible, and offer little physical protection.

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

**Roadway**

☒Operational Improvements

**Grade Separation**

☐Roadway

☐Railway

☐Bicycle

☐Pedestrian

**Regional Transit**[1]

☐Rapid Transit Capacity (2050 MVRTP)

☐Mobility Hub(s)

☒Transit Planning Corridors

☒Transit Facilities/Service (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.

[1]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 project will construct multimodal improvements on 30th St between Colorado Ave and Baseline Rd, a distance of one-half mile. Improvements will including raised protected bicycle lanes, wider sidewalks, protected intersections, transit enhancements (including transit signal priority), and enhanced crossings. See Attachment A, Figure 2: 30th St Concept Plan.

**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.*

Preliminary design has been completed. This project will complete final design in 2025-26 and construction in 2027.

**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: $3,000,000

Outline the differences between the scope outlined above and the reduced scope: If a smaller amount of funding is available, the project would be segmented at the intersection with Aurora and would construct improvements between Colorado and Aurora as a first phase of construction and complete the design phase only between Aurora and Baseline Road.

## Project Financial Information and Funding Request (All funding amounts in $1,000s)

***To update the formulas below, enter your information, highlight the formulas, and press F9 or right-click and select Update Field.***

| **Total amount of Subregional Share Funding Request (in $1,000's)**<br>*(Not to exceed **90% of the total project cost**)*<br><br>☐Check box if requesting **only state MMOF funds (requires minimum 50% local funds)**[1] | **$5,840** | **80%**<br>**of total project cost** |
|---|---|---|
| **Match Funds (in $1,000's)**<br>List each funding source and contribution amount. | **Contribution Amount** | **% Contribution to Overall Project Total** |
| City of Boulder | $1,460 | 20% |
| 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% |
| Click or tap here to enter text. | $Match Amount | 0.0% |
| **Total Match**<br>*(private, local, state, regional, or federal)* | **$ 1,460** | **20%** |
| **Project Total** | **$ 7,300** | |

| **Notes:** | 1. If you elect to ONLY receive state MMOF and per CDOT action, the following jurisdictions are only required to provide 25% match on the MMOF funds: Englewood, Jamestown, and Wheat Ridge.<br>Federal Heights, Lakeside, Larkspur, Sheridan, and Ward are not required to provide a match on the MMOF funds.<br>All sponsors will still be required to have 20% match on any added federal funds. |
|---|---|

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

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

| | FY 2025 | FY 2026 | FY 2027 | Total |
|---|---|---|---|---|
| **DRCOG Requested Funds** | $1,460 | $Enter Amount | $4,380 | **$ 5,840** |
| **CDOT or RTD Supplied Funds[2]** | $Enter Amount | $Enter Amount | $Enter Amount | **$ 0** |
| **Local Funds (Funding from sources other than DRCOG, CDOT, or RTD)** | $365 | $Enter Amount | $1,095 | **$ 1,460** |
| **Total Funding** | $1,825 | $ 0 | $5,475 | **$ 7,300** |
| **Phase to be Initiated** | Design | Choose an item. | Construction | |
| **Notes:** | 1. Fiscal years are October 1 through September 30 (e.g., FY 2026 is October 1, 2025 through September 30, 2026). 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 minimum 3% inflation factor.<br>2. Only enter funding in this line if CDOT and/or RTD specifically give permission via concurrence letters or other written source. | | | |
| **Affirmation:** | By checking this box, the applicant's Chief Elected Official (Mayor or County Commission Chair/City or County Manager/Agency Director) has certified it allows this application to be submitted for potential DRCOG-allocated funding and will follow all local, DRCOG, state, and federal policies and regulations if funding is awarded. ☒ | | | |

# 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.*

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

The 30th St Corridor between Colorado Ave and Baseline Rd is a key north-south corridor within Boulder. This project will provide multiple benefits to travelers from throughout the region, including improved bicycling and pedestrian facilities designed for a wider range of ages and abilities, the mitigation of safety issues for all travel modes, as well as safer and more comfortable travel for pedestrians and bicyclists accessing regional and local transit services. Specifically this project is important at the subregional level for the following reasons:

- The project will improve **multimodal connections and access to CU Boulder**, a regionally important and rapidly growing employment center and destination. CU Boulder is one of the city's largest employers, with 10,000 employees and 36,000 students. Currently, 73% of CU staff live outside the city limits and 62% of those drive alone each day. This project will help to reduce the number of employees and students driving alone by providing safe, comfortable and convenient multimodal access for the CU students and staff traveling to, between, and within the three university campuses each day.
- The project fills a north-south gap in the low-stress walk and bike network that when completed, will **connect 30th St to three regional commuter bikeways**: the US36 commuter bikeway connecting Boulder to Denver, the planned CO119 commuter bikeway connecting Boulder to Longmont, and the CO7 commuter bikeway connecting Boulder to east Boulder County and I-25.
- The project will construct transit stop improvements, that when combined with transit enhancements already underway or planned further north along 30th St, will **connect passengers to regional bus routes and BRT**. Specifically, the project connects riders to the CO119 BRT service at CU East Campus (north end of the project) and to the planned CO7 BRT service at 30th St and Arapahoe Ave (north of the project limits).

- 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 project will provide **upgraded protected facilities and separation from traffic**, including widened sidewalks, protected (vertically separated) bike lanes, intersection improvements, enhanced crossings, and transit amenities that will benefit the 4,500 pedestrians, 1,050 bicyclists, and 10,000 transit users in the corridor.

Several of these project elements will specifically implement **Vision Zero safety countermeasures** to help eliminate severe crashes in the corridor, including:

- Protected bicycle lanes;
- Widened sidewalks; and
- A protected intersection at the 30th St and Aurora Ave intersection, to also include operational improvements to accommodate protected left turns, leading pedestrian intervals, and transit signal priority.

Importantly, the project will also **fill gaps in connectivity within the city's multimodal network** by linking to recent and future improvements, as shown in Attachment A, Figure 3: 30th St Current and Planned Multimodal Improvements:

- Colorado Ave/30th St: Protected intersection and underpass (currently under construction)
- 30th St (Colorado Ave to CO7/Arapahoe Ave): Protected bike lane and other multimodal improvements (anticipated construction completion 2024)
- 30th St (CO7/Arapahoe Ave to CO119/Iris Ave): Complete street project (awarded TIP funds in call #2)

When completed, these projects in total will provide travelers with a complete north-south multimodal corridor of almost three miles along 30th St that is safe, comfortable, and reliable, closing a gap along the Core Arterial Network prioritized by Boulder City Council.

- 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.

Yes, while the physical improvements are within the city of Boulder, the project benefits residents, employees, and students who access the regional roadway network, local and regional transit services and commuter bike networks connecting this area to other communities within Boulder County and beyond. Safer and improved facilities will benefit many of the 60,000 non-resident employees working in Boulder who will access regional employment centers in the city, several of which are along, or within blocks of the 30th St Corridor, such as the three CU campuses (Williams Village, Main, and East) and to major employers located just north of the project extent, such as the 29th Street Retail Center and Boulder Junction mixed-use center.

- 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 | 23,755 | - | - |
| | b. Total households | 8,212 | - | - |
| | c. Individuals of color | 5,855 | 25% | 33% |
| | d. Low-income households | 2,431 | 30% | 9% |
| | e. Individuals with limited English proficiency | 235 | 1% | 3% |
| | f. Adults age 65 and over | 1,517 | 6% | 13% |
| | g. Children age 5-17 | 859 | 4% | 16% |
| | h. Individuals with a disability | 573 | 2% | 9% |
| | i. Households without a motor vehicle | 1,176 | 14% | 5% |
| | j. Households that are housing cost-burdened | 4,034 | 49% | 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:*

30th St is envisioned to be a complete street corridor that supports safe and comfortable travel for people walking, rolling, bicycling, taking transit, transporting freight, and using motor vehicles. Within one-half mile of the project area, there are approximately 4,000 households that are cost-burdened (49% [v. 32% regionally]), 2,400 low-income households (30% [v. 9% regionally]) and 1,200 households without access to a motor vehicle (14% [v. 5% regional]). Studies have demonstrated that people with these characteristics have a greater need for affordable, reliable, and safe transportation options, and they are represented in far greater proportions in the project area than the region as a whole. Furthermore, there are approximately 5,800 persons of color (25%), 860 children (4%), and 1,500 older adults over 65 (6%) living within one-half mile of the project area—people likely at a disadvantage in accessing reliable and affordable transportation options to connect to daily needs such as housing, grocery stores, education, and employment. Constructing project improvements will benefit all populations, particularly those that depend on affordable active transportation modes and reliable and convenient transit, connecting users to the over 16,000 jobs directly in the corridor today and an estimated 21,000 jobs by 2050.

- 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 project will move the subegion toward achieving several Metro Vision land use, community, urban development, housing and employment outcomes as follows:

- ***Designated urban growth areas:*** This project is located entirely within the DRCOG designated University Hill Urban Center and provides an important connection the DRCOG designated 28th/30th St (BVRC) Urban Center, with an emphasis on local livability and regional accessibility through multimodal corridors. The project is also within the City of Boulder's Area 1 Planning Area, as defined in the Boulder Valley Comprehensive Plan (BVCP), which fully supports growth and development where urban-level infrastructure already exists and/or there are plans in place for infrastructure and service expansion. This is particularly important as areas adjacent to the 30th St Corridor, such as CU campuses, continue to densify. As shown in Attachment A, Figure 4: CU Boulder 2021 Campus Master Plan, the project connects two CU campuses (East Campus and Williams Village Campus) and provides links to Main Campus:
  - **East Campus:** CU's 200-acre East Campus continues to expand with a mix of uses that, at buildout, will include academic and research facilities, wellness and cultural centers, graduate student housing, and undegraduate residence halls. The campus is expected to grow from approx. 2.4 million square feet today to approx. 3.3 million squre feet of development at buildout, or an increase of 37%.
  - **Williams Village:** CU's 66-acre Williams Village residential campus is home to approximately 3,000 students today and 1.2 million square feet of building space. At buildout Williams Village is expected to expand to approximately 1.4 million square feet of space and incorporate more adacemics spaces and amenities to support a 24-7 student community.
  - **Main Campus:** CU's Main Campus, which is less than a quarter-mile from the 30th St project, is expected to expand from approximately 6 million square feet of building space to 9 million square feet at buildout.
- ***Housing diversification and employment:*** The project is located is within the DRCOG-designated University Hill Urban Center, which is a higher density residential and employment area linking to regional transit service that connects regional commuters to employment and higher education throughout the Urban Center. The complete street corridor project will benefit the existing and planned housing stock within the city and throughout the region; residential zoning and planned land uses along the entirety of the 30th St Corridor support primarily high- and medium-density residential, as well as a limited amount of low-density residential on the east side of the corridor. Diverse housing options within one-half mile of the project range from high-density apartment complexes, such as the Timber Ridge apartment complex to the Golden West affordable senior apartments.

  - 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 project will move the subegion toward achieving several Metro Vision multimodal transportation, safety, reliability, air quality outcomes as follows:

- ***Regional Multimodal Transportation System:*** This project will provide safer transportation choices and first-and-last mile connections that span the entirety of 30th St and connect to current and planned improvements on important east-west travel, transit, and MVRTP major project corridors,

including CO119/Iris Ave and CO7/Arapahoe Ave, and Baseline Rd. This is important to the region because a concentration of travel from the northern and eastern parts of the subregion and surrounding counties enter the city on these east-west corridors and then connect to final destinations via critical north-south corridors like 30th St. In addition, the presence of shared micromobility in the project area, including Lime e-scooters and BCycle stations, will further realize the potential of these first-and-last mile solutions for transit access, thereby bolstering active and transit mode choices.

- ***Safety and Reliability:*** This project will implement improrrtant upgrades to existing infrastructure so that 30th St can operate more reliably and safely for those traveling within and through the corridor, especially by bike and transit, with operations and maintenance considerations and costs being key factors in the design.
- ***Air Quality and Greenhouse Gas Emissions:*** This project supports and encourages the shift towards active transportation and transit modes, reducing single-occupant vehicle trips, as well as air pollutants and greenhouse gas (GHG) emissions.
- ***Hazard Reduction:*** This project will also be designed to mitigate the risk of natural hazards by improving quality and frequency of travel choices in the event of a disaster requiring evacuation. Additionally, the project will identify design concepts that reduce the hazards of walking and biking along the 30th St Corridor.

- 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 project will move the subegion toward achieving Metro Vision connection/accessibility outcomes that support healthy and active choices as follows:

- ***Connections to Natural Resources & Recreation:*** The project will provide safe, comfortable connections to several natural and recreational areas, including Scott Carpenter Park and the Williams Village Recreational Center. It will also provide connections to the city's extensive multi-use path network, including the Bear Creek Greenway (located within one-quarter mile of the south end of the project) and the Boulder Creek Path, located just north of the project area.
- ***Connections to Health Care Facilities & Childcare Services:*** The project will provide direct access to a number of medical offices, childcare centers, and wellness centers located on the south end of the corridor.
- ***Access to Opportunity:*** This project will provide direct access to key destinations, education opportunities, and employers along and near 30th St, such as CU. This project will also support first- and last-mile access to current local and regional transit services such as the US 36 Flatiron Flyer BRT service and anticipated CO119 and CO7 BRT services.

- 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: University Hill, 28th/30th St (BVRC)
  - Does the project connect two or more urban centers?*
    ☐ Yes ☒ No If yes, please provide the names: Click or tap here to enter text.
  - Is there a transit stop or station within ½ mile of the project limits?*
    Bus stop: ☒ Yes ☐ No If yes, how many: 50 bus stops
    Rail station: ☐ Yes ☒ No If yes, how many: Click or tap here to enter text.
  - 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 Valley Comprehensive Plan: https://bouldercolorado.gov/projects/boulder-valley-comprehensive-plan
    If yes, provide how the area is defined in the relevant planning document: Project is located within the Colorado University Regional Center and Williams Village Neighborhood Center.

| Provide households and employment data* | 2020 | 2050 |
|---|---|---|
| Households within ½ mile | 8,213 | 8,923 |
| Jobs within ½ mile | 16,453 | 21,361 |
| Household density (per acre) within ½ mile | 5.03 | 5.55 |
| Job density (per acre) within ½ mile | 10.37 | 13.73 |

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 project will help complete the 30th Corridor of the city's multimodal Core Arterial Network, connecting directly to the Colorado Ave and Baseline Rd Corridors. The project is also entirely within the DRCOG designated Unversity Hill Urban Center and within a half-mile of the 28th/30th St (BVRC) Urban Center. These centers are also highlighted as infill areas in the Boulder Valley Comprehensive Plan (see Attachment A, Figure 5: Boulder Valley Comprehensive Plan, City Structure Map).

This project will improve multimodal access for the approximately 8,200 households living within one-half mile of the improvements and people accessing nearly 16,500 jobs in the same area, which is expected to grow to over 21,000 jobs by 2050 (an increase of 29%).

- 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**.

Boulder is home to both small and large employers and is a key employment center in the Denver Metro area, with 58,000 jobs filled by people living outside the city. When completed, this project will improve access and connections to the many of these employers located directly in the project area, and will provide first- and last-mile access to destinations throughout the city, as described here:

- The project will provide safer and more comfortable access to CU Boulder, one of the city's largest employers, with 10,000 employees and 36,000 students traveling to, between, and within the three university campuses each day.
    - Located at the south end of the project, the CU Williams Village campus is a designated Neighborhood Center in the Boulder Valley Comprehensive Plan. The area provides goods and services for the day-to-day needs of nearby residents, including the 3,000 students living at Williams Village as well as workers accessing surrounding areas, such as the CU Main Campus, by foot, bike and transit.
    - Located at the north end of the project, the rapidly expanding CU East Campus is a 200-acre area that, at buildout, will include academic and research facilities, wellness and cultural centers, graduate student housing, and undegraduate residence halls. The project will also create seamless connections for travelers on foot, bike or transit to the CU Main Campus via multimodal connections along both Colorado Ave and Baseline Rd.
- The project will connect to TIP Call#2 funded multimodal improvements on Baseline Rd that opens up connectivity to an entire residential and local school community, like the East Aurora neighborhood and BCSIS and High Peaks Elementary Schools. It will also provide direct connectivity to the regional RTD Route 225 east/west bus service on Baseline Rd, connecting the area to Lafayette.
- The project will also complete multimodal connections to major destinations further north along 30th St. Enhanced pedestrian, bicycle and transit connections will tie into 30th St improvements north of Colorado Ave that will seamlessly connect users to major destinations such as the Scott Carpenter Park, the Boulder Creek Multi-Use Path, and the Boulder Valley Regional Center, commonly referred to as the 29th Street Retail District, which is a mixed-use, high-intensity regional commercial center that includes a variety of housing types, retail and daily amenities.

## 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.**<br>(drawn from 2050 MVRTP priorities; federal travel time reliability, infrastructure condition, & transit asset management performance measures; & Metro Vision objective 4)<br>Examples of Project Elements: combinations of improvements that support options for a broad range of users, such as complete streets improvements, or a bicycle/pedestrian access to transit, etc. |
|---|---|

- What modes will project improvements directly address?
  ☒Walking ☒ Bicycling ☒ Transit ☐ Roadway Operations ☐ 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, signal interconnection, etc.): Protected bike lanes, widened sidewalks, enhanced bus stops, intersection enhancements
- Will the completed project be a complete street as described in the Regional Complete Streets Toolkit? This data is available in the TIP Data Tool.
  ☒ Yes ☐ No If yes, describe how it implements the Toolkit's strategies in your response.
- Does this project improve travel time reliability?
  ☒ Yes ☐ No
- Does this project improve asset management of active transportation facilities and/or transit vehicle fleets?
  ☐ Yes ☒ No
- Does this project implement resilient infrastructure that helps the 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.*

Today, much of the existing bicycle, pedestrian, and transit facilities in the project area are substandard and do not provide a low traffic stress condition for people traveling by foot, bike, or bus. Therefore, people do not feel comfortable and often avoid traveling in this (DRCOG) High Injury Network Critical Corridor, despite its directness and access to many origins and destinations, including three university campuses, each of which is expected to greatly expand over the coming decade. The following quote summarizes much of the public feedback received through a 2022 Vision Zero Action Plan public online questionnaire: *"All of 30th Street is dangerous for cycling due to high volume of traffic and high vehicle speeds, narrowness of the bike path and its proximity to the road, and drivers not paying attention."*

The project will construct raised, protected bicycle lanes, wider sidewalks, protected intersections, enhanced crossings, improved transit facilities, and will address safety issues for all travel modes. With implementation, the project is expected to increase the number of daily cyclists and pedestrians by 50%.

The improvements will ensure the estimated 1,050 average daily cyclists and 4,500 average daily pedestrians at project implementation will have designated separated spaces from one another to provide safer, more comfortable, and reliable multimodal travel within the University Hill Urban Center. These improvements are imperative to the city and the region achieving their Vision Zero and mode shift goals by reducing conflicts between modes and improving a corridor dense with housing and destinations to link current and future residents, students, and employees more safely to important destinations with better multimodal and first- and last-mile options. In practice, this means that a person living in a housing cost-burdened household, which represent almost half (49%) of households in the project area, is more likely to access opportunity (through three university campuses) and broader access to local, subregional, and regional opportunities (through local, subregional, and regional transit services) by foot, wheel, and/or transit.

The project will follow the City's Design and Construction Standards (DCS) and will use industry best practices, including DRCOG's Complete Streets Toolkit, the Urban Street Design Guide from the National Association of City Transportation Officials (NACTO), American Association of State and Highway Transportation Officials (AASHTO). The project aligns with the city's Transportation Master Plan goals for providing safe, reliable, and equitable transportation choices.

The plan design will support people walking, rolling, bicycling, taking transit, transporting freight, and using motor vehicles to ensure all travelers are both safe and comfortable. As described in the DRCOG Complete Street Toolkit, and consistent with the City's Transportation Master Plan policies, the highest modal priority will be given to those walking and rolling, the most vulnerable users of the system.

| Air Quality | **Improve air quality and reduce greenhouse gas emissions.**<br>(drawn from 2050 MVRTP priorities; state greenhouse gas rulemaking; federal congestion & emissions reduction performance measures; Metro Vision objectives 2, 3, & 6a)<br>Examples of Project Elements: active transportation, transit, or TDM elements; vehicle operational improvements; electric vehicle supportive infrastructure; etc. |
|---|---|

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

| Emissions Reduced *(kg/day)* | CO | NOx | VOCs | PM 10 | $CO_2e$ |
|---|---|---|---|---|---|
| | 8.141 | .502 | .340 | .088 | 787.28 |

*Use the FHWA CMAQ Calculators or a similar reasonable methodology to determine emissions reduced. Base your calculations on the year of opening. Please attach a screenshot of your work (such as the FHWA calculator showing the inputs and outputs) as part of your submittal packet.*
*Note: if not using the FHWA Calculators, please note your methodology in your narrative below.*

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.

When the 30th St Multimodal Improvements project is implemented, an estimated reduction of an average of 1,358 daily passenger vehicle trips are expected due to these trips converting to walking and biking (962 trips converted) and transit (396 trips converted).

In estimating GHG reductions related to this project's transit enhancements, a ridership forecasting model was developed that assumes a 10% gain in transit ridership for the routes that travel along or intersect the project. The forecasted 10% ridership gain is based upon literature review of various national case studies of ridership gains attributable to introducing TSP and enhancing bus stops, as planned with this project. TSP has resulted in 4-40% ridership gains for LA Metro bus services and a 10% gain for New York City MTA bus services. Case studies from Salt Lake City, Greensboro, Kansas City, and Seattle indicate that bus stop improvements can result in ridership gains between 6 – 40%. Considering the range of these ridership gains, a 10% ridership increase factor was selected as a conservative value for this forecasting model. The model also employs Washington Department of Transportation (WSDOT) formulas to calculate vehicle miles avoided by transit (uses a 0.62 factor) and SOV trips avoided for the GHG calculator. Further information and data sources can be found on the "Model" tab in the ridership model spreadsheet attached with this application.

Each vehicle trip eliminated by switching to walking and/or bicycling reduces air pollutants, vehicle miles traveled, and greenhouse gas emissions. Each single occupancy vehicle trip converted to a transit trip also reduces congestion and emissions associated with highly polluting idling. The emissions reduction data is calculated using the Boulder typical trip distance of 1.6 miles one way.

| Regional Transit | **Expand and improve the subregion's transit network.**<br>(drawn from 2050 MVRTP priorities, Coordinated Transit Plan, RTD's Regional Bus Rapid Transit Feasibility Study)<br>Examples of Project Elements: transit lanes, station improvements, new/expanded service, etc.<br>Note: For any project with transit elements, the sponsor must coordinate with RTD to ensure RTD agrees to the scope and cost. Be sure to include RTD's concurrence in your application submittal. |
|---|---|

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: CO 119 BRT
- 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: Click or tap here to enter text.
- Does this project implement a mobility hub (as defined in the 2050 MVRTP)?
  ☐ Yes ☒ No
- Does this project improve connections between transit and other modes?
  ☒ Yes ☐ No If yes, please describe in your response.
- Is this project adding new or expanded transit service?
  ☐ Yes ☒ No If yes, who will operate the service: Click or tap here to enter text.
- Does this project add and/or improve transit service 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.*

The 30th St Multimodal Improvements Project (Colorado Ave to Baseline Rd) will extend the transit improvements already underway between Colorado Ave and Arapahoe Ave (CO 7) and enhance the transit environment, passenger amenities, bus operations, and pedestrian and bicycle first- and last-mile connections to transit along this one-half mile segment.

This segment of 30th St between Colorado Ave and Baseline Rd is served by local, regional, and campus bus services, and future CO 119 BRT is planned to travel through the 30th St and Colorado Ave intersection. As shown in Attachment A, Figure 6: 30th St High Frequency Transit Map, the following routes operate along or intersect the corridor segment at main intersections and will benefit through this project:

- **RTD BOUND:** The BOUND route runs north/south on 30th Street between Baseline and CO 119/The Diagonal in north Boulder, serving CU Boulder's Main Campus, Williams Village campus housing, the 29th Street Mall, Boulder Junction, and north Boulder. The BOUND connects with Flatiron Flyer BRT on US36 and AB-Denver International Airport services at Broadway and Baseline Rd and will connect with both CO 119 BRT and CO 7 (Arapahoe Ave) planned services. The BOUND averaged 1,100 daily riders in 2019, with approximately 375 daily boardings occurring in this segment of 30th St.

- **CU Buff Bus Williams Village (W) and Williams Village Limited (WL):** The CU Buff Bus W and WL routes travel north on 30th St between Baseline Rd and Colorado Ave to connect CU's Williams Village and Bear Creek residence halls and off-campus housing along 30th St with Main Campus. The Williams Village (W) route averages 3,900 daily riders and the Williams Village Limited (WL) route averages 4,900 daily riders.

- **CU Buff Bus Stampede:** The Stampede travels east/west on Colorado Ave between Main Campus and East Campus and intersects this project at 30th St. The Stampede averages approximately 3,000 riders a day and is planned to provide a critical transfer connection between CO119 BRT service at East Campus and Main Campus via Colorado Ave.

- **RTD BOLT and future CO119 BRT service:** As part of its System Optimization Plan, RTD plans to launch new BOLT service between East Campus and Longmont in 2023 that will travel through the 30th/Colorado intersection. This BOLT pattern to East Campus is being considered as the precursor for planned CO119 BRT service.

- **RTD #225-Baseline (Boulder/Lafayette):** The #225-Baseline (Boulder/Lafayette) provides critical local trips in Boulder and regional travel between Boulder and Lafayette and connects Downtown Boulder Station, Broadway, Main Campus, William Village and Bear Creek residence halls, Baseline Road, US-287, CO7, and downtown Lafayette. The #225 travels through the 30th St/Baseline Rd intersection and carries approximately 1,100 riders per day.

- **CU Buff Bus Bear Creek Express (B):** The CU Buff Bus B route travels between Main Campus via Broadway and Baseline and Williams Village. It also travels through the 30th St/Baseline Rd intersection and averages 1,200 daily passengers.

The project will help implement a portion of the CO119 BRT and also supports transit services that connect with the following DRCOG urban centers: 28th/30th Streets BVRC, Downtown Boulder, University Hill, and Gunbarrel in Boulder and the Central Business District in Longmont.

From an infrastructure perspective the project will feature new and enhanced bus stop platforms and amenities, improved pedestrian and bicycle facilities connected with bus stops, and traffic signal priority (TSP) at the 30th St/Aurora Ave intersection to enhance BOUND operations. Improvements at the 30th St/Colorado Ave intersection

will further support CU Buff Bus Stampede, CU Buff Bus W and WL, RTD CO119 BRT, and RTD BOUND movements through the intersection. The proposed transit elements will improve passenger waiting environments, bus travel time, and the first- and last-mile travel options for transit riders, further improving the attractiveness and benefits of transit services in the corridor. The project will also enhance planned CO119 BRT service to CU's campuses that will be routed via 30th St and Colorado Ave.

| Safety | **Increase the safety for all users of the transportation system.**<br>(drawn from 2050 MVRTP priorities, Taking Action on Regional Vision Zero, CDOT Strategic Transportation Safety Plan, & federal safety performance measures)<br>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.

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

| Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians*<br>*(using the 2015-2019 period – **in the TIP Data Tool, use a 0.02 mile buffer of your project**)*<br>*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., CMF Clearinghouse, NCHRP Report 617, or DiExSys methodology).* |
|---|---|---|
| **Fatal** crashes | 1 | |
| **Serious Injury** crashes | 4 | |
| **Other Injury** crashes | 82 | |
| **Property Damage Only** crashes | 200 | |
| Estimated reduction in crashes applicable to the project scope<br>*(per the five-year period used above)* | | Provide the methodology below: |
| **Fatal** crashes reduced | 1 | Refer to "30th St Multimodal Improvement Estimated Reduction in Crashes" attachment. Crashes rounded. |
| **Serious Injury** crashes reduced | 3 | |
| **Other Injury** crashes reduced | 51 | |
| **Property Damage Only** crashes reduced | 129 | |

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.*

The City of Boulder's 2022 Vision Zero Boulder Safe Streets Report shows that 67% of traffic crashes resulting in severe injury or fatality occur on arterial streets, including 30th Street and the project area. Additionally, DRCOG identifies 30th St. between Baseline Rd and Colorado Ave as a Critical Corridor segment.

Between 2015 and 2019, there was one (1) fatality, four (4) serious injury crashes and 82 other injury crashes that occurred on 30th St between Baseline Rd and Colorado Ave. See Attachment A, Figure 7: 30th St Crashes Map. This corridor experiences crashes involving left turn crashes, speeding, and pedestrians and/or cyclists. These crashes are outlined in the Boulder Safe Streets Report.

Planning for people who walk or bicycle benefits all users of the transportation system, especially those with the greatest risk of suffering an injury or fatality when involved in a crash. The project area includes many vulnerable residents with greater propensity for walking, rolling, cycling, and using transit: 30% of households are low-income, 25% are individuals of color, and 49% of households are housing cost burdened.

Boulder's Vision Zero and DRCOG's Taking Action on Regional Vision Zero recognize that certain safety elements, or safety countermeasures, are proven to reduce severe injury or fatal crashes. Implemented safety improvements are expected to result in the following crash reductions:

- This project is planned to have **protected bike lanes** throughout. Using the crash modification factor for median treatment for bike and pedestrian safety (CMF 9120), the estimated crash reduction for the protected bike lanes, alone, finds that this project will result in 14% reduction in crashes in the project area and provide a greater comfort level for people biking along 30th St.
- Additional imporvements include **widening substandard sidewalk widths** (CMF 2197) which will provide enough space for pedestrians to be comfortable walking, particularly when scooter riders choose to also use the sidewalk. Increasing the sidewalk width will reduce potential conflicts between people walking and people on scooters who choose not to ride in the protected bike lane. This CMF is dependent on the distance the sidewalk is increased but it can be assumed it will provide a reduction of at least 40% if increased by a foot or 80% if increased by two (2) feet.
- Moreover, intersection improvements that are being proposed are outlined in the attachment "30th St Multimodal Improvement Estimated Reduction in Crashes" for 30th St and Aurora Ave. The improvements are converting the existing geometry to a **protected intersection**, updating the signal timing and phasing to accommodate **protected left turns**, installing **leading pedestrian intervals**, and adding **transit signal and lane priority**.

Though the CMF clearinghouse does not have a crash modification factor for all types of the project's proposed improvements, it is anticipated that additional crash reduction over the calculated values shown in this section above will be realized due to the holistic, systemic, corridor-level improvements that will fundamentally change the character of the street and that will work together to amplify safety benefits.

| Freight | **Maintain efficient movement of goods within and beyond the subregion.**<br>(drawn from 2050 MVRTP priorities; Regional Multimodal Freight Plan; Colorado Freight Plan, federal freight reliability performance measure; Metro Vision objective 14)<br>Examples of Project Elements: roadway operational improvements, etc. |
|---|---|

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
  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*.

The 30th St Multimodal Improvement project area serves 252 freight vehicles on an average day (Streetlight data).

The three needs and issues of freight vehicles identified for the Northwest Metro Freight Focus Area that will be addressed through this project include:

1) Safety of local truck movements and residential delivery demand
2) Multimodal and nonmotorized traveler safety
3) Growing consumer base and land use changes.

When constructed, the complete street corridor on 30th St between Baseline Rd and Colorado Ave will address all three needs and issues through providing raised, protected bicycle lanes (supportive of cargo bikes); wider sidewalks; protected intersections; enhanced crossings; and improved transit facilities in the University Hill Urban Center, an area designated for additional land use changes and densification (Boulder Valley Comprehensive Plan Area 1 Planning Area).

Importantly, reorganizing the street and adding protective street design elements for vulnerable users helps make the movements of all modes more predictable and visible to one another. Research completed by Wesley Marshall and Norman Garrick found that implementing facilities to increase the safety of people who bicycle and walk also improves safety for drivers (Evidence on Why Bicycle-Friendly Cities Are Safer for All Road Users, Environmental Practice 13, no. 1, 2011, p. 16–27). Thus, implementation of this project will also improve the safety of local truck movements as well as residential and commercial delivery.

| Active Transportation | **Expand and enhance active transportation travel options.**<br>(drawn from 2050 MVRTP priorities; Denver Regional Active Transportation Plan; & Metro Vision objectives 10 & 13)<br>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.

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

**Bicycle Use**

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

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

| | | | |
|---|---|---|---|
| **1.** | Current Average Single Weekday Bicyclists: | | 700 |
| | 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. | 1,050 | 1,213 |
| **3.** | Enter number of the bicycle trips (in #2 above) that will be diverting from a different bicycling route.<br>(Example: **{#2 X 50%}** *or other percent, if justified on line 10 below)* | 525 | 606 |
| **4.** | = Initial number of new bicycle trips from project (#2 – #3) | 525 | 606 |
| **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.).<br>(Example: **{#4 X 30%}** *(or other percent, if justified on line 10 below)* | 158 | 182 |
| **6.** | = Number of SOV trips reduced per day (#4 - #5) | 368 | 424 |
| **7.** | Enter the value of **{#6 x 2 miles}**. (= the VMT reduced per day)<br>*(Values other than 2 miles must be justified by sponsor on line 10 below)* | 735 | 849 |
| **8.** | = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.) | 698 | 806 |
| **9.** | If values would be distinctly greater for weekends, describe the magnitude of difference:<br>N/A | | |
| **10.** | If different values other than the suggested are used, please explain here:<br>N/A | | |

**Pedestrian Use**

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

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

| | | | |
|---|---|---|---|
| **1.** | Current Average Single Weekday Pedestrians (including users of non-pedaled devices such as scooters and wheelchairs): | | 3,000 |
| | 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 | 4,500 | 5,198 |
| **3.** | Enter number of the new pedestrian trips (in #2 above) that will be diverting from a different walking route<br>(Example: **{#2 X 50%}** *or other percent, if justified on line 10 below)* | 2,250 | 2,599 |
| **4.** | = Number of new trips from project (#2 – #3) | 2,250 | 2,599 |
| **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.).<br>(Example: **{#4 X 30%}** *or other percent, if justified on line 10 below)* | 675 | 780 |
| **6.** | = Number of SOV trips reduced per day (#4 - #5) | 1,575 | 1,819 |
| **7.** | Enter the value of **{#6 x .4 miles}**. (= the VMT reduced per day)<br>*(Values other than .4 miles must be justified by sponsor on line 10 below)* | 630 | 728 |

| | | | |
|---|---|---|---|
| **8.** | = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.) | 599 | 691 |
| **9.** | If values would be distinctly greater for weekends, describe the magnitude of difference:<br>N/A | | |
| **10.** | If different values other than the suggested are used, please explain here:<br>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.

The 30th St Multimodal Improvements project is located within a DRCOG Regional Active Transportation Corridor, a Short-Trip Opportunity Zone, and a Pedestrian Focus Area. Additionally, the City of Boulder identified the project area as a high-priority bicycle route and has elevated the project area as an important corridor in the city's bicycle and pedestrian transportation networks through its 2019 Transportation Master Plan and 2019 Low-Stress Walk and Bike Network Plan because the corridor connects to educational campuses, neighborhood and regional serving retail, large employers, bike paths, community parks, and local, subregional, and regional transit services. When completed, this project will help to provide travelers with a complete north-south multimodal corridor along 30th St that is safe, comfortable, and reliable, closing a gap along this Core Arterial Network prioritized by Boulder City Council.

This project will include protected bicycle lanes, wider sidewalks, protected intersections, enhanced crossings, and improved transit facilities—with pedestrian, bicycle, and transit facilities being designated as separated spaces from one another for increased comfort and safety.

When implemented, these improvements will shift the average trip in Boulder, which is only 1.6 miles one-way, to more active modes:

- The average number of single weekday bicyclists is expected to increase from 700 to 1,050, a 50% increase, and
- the average number of single weekday pedestrians (including non-pedaled devices such as scooters and wheelchairs) is expected to also increase by 50%, from 3,000 to 4,500.

These increases are possible because the project is located in a corridor currently dense with multi-family housing, destinations, and ample access to local and regional transit. The corridor is also anticipated to experience increased development and densification, particularly at the north and south ends of the corridor at the CU East Campus and Williams Village Neighborhood Center. Between 2020 and 2050, the number of jobs within the project area is projected to increase by 30%.

As a result, the project will advance the Metro Vision 2050 goal for 35% of commuters to use a non-SOV mode to work and will support the 2019 DRCOG Active Transportation Plan objectives of increasing bicycling and pedestrian activity; expanding and connecting comfortable transportation facilities for people who bike and people who walk; improving bicycle and pedestrian access to and from transit; and improving and expanding equitable access to active transportation corridors.

## C. Project Leveraging

**WEIGHT 5%**

| | | |
|---|---|---|
| What percent of outside funding sources (non-Subregional Share funding) does this project have?<br>*(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)* | **20%** | 60%+ outside funding sources ..... 5 pts<br>50-59.9% ..... 4 pts<br>40-49.9% ..... 3 pts<br>20-39.9% ..... 2 pts<br>10.1-19.9% ..... 1 pt<br>10%..... 0 pts |

## D. Project Readiness

**WEIGHT 10%**

*Provide responses to the following items to demonstrate the readiness of the project. DRCOG is prioritizing those projects that have a higher likelihood to move forward in a timely manner and are less likely to experience a delay.*

**Section 1. Avoiding Pitfalls and Roadblocks**

a. Has a licensed engineer (CDOT, consultant, local agency, etc.) reviewed the impact the proposed project will have on utilities, railroads, ROW, historic and environmental resources, etc. and have those impacts and pitfalls been mitigated as much as possible to date before this submittal?

☒ Yes ☐ No ☐ N/A (for projects which do not require engineering services)

If yes, please type in the engineer's name below which certifies their review and that impacts have been evaluated and mitigated as much as possible before your application is submitted:

Gerrit Slatter, City of Boulder Principal Transportation Projects Engineer

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

- Utilities: Base Utility Mapping
- Railroad: N/A
- Right-of-Way: Existing Right-of-Way Mapping Completed
- Environmental/Historic: None
- Other: Click or tap here to enter text.

b. Is this application for a single project phase only (i.e., design, environmental, ROW acquisition, construction only, study, bus service, equipment purchase, etc.)?

☐ Yes ☒ No

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

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

c. Has all required ROW been identified? ☐ Yes ☒ No ☐ N/A

Has all required ROW already been acquired and cleared by CDOT? ☐ Yes ☒ No ☐ N/A

d. Based on the current status provided in Project Information, question 11, do you foresee being able to execute your IGA by October 1 of your first year of funding (or if requesting first year funding, beginning discussions on your IGA as soon as possible), so you can begin your project on time?

☒ Yes ☐ No

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

If yes, are they knowledgeable with the federal-aid process? ☒ Yes ☐ No ☐ N/A

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

☒ Yes ☐ No ☐ N/A

If yes, who are the stakeholders?

RTD, University of Colorado (CU), City of Boulder Transportation Advisory Board and City Council

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

Click or tap here to enter text.

**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:

All local match will be provided by the City of Boulder Transportation Fund and will be available starting in 2025.

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

☒ Yes ☐ No

Please describe:

There is sufficient capacity in the current City of Boulder Capital Improvement Program budget to meet local match requirements.

**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 30th and Colorado Corridors Study community engagement process, which included robust public involvement and concluded in 2019, informed preliminary concept designs.

Several outreach efforts were implemented to notify adjacent property owners and the community about the TIP submittal process for this project. All outreach efforts and information materials were provided in English and Spanish. There is a project webpage that includes information about the project. A mailing was sent to property owners, residents, and businesses adjacent to the project and other interested stakeholders in the community notifying them of the upcoming TIP grant application process. Community members were invited to review a project factsheet and informational video, provide online feedback, and schedule virtual office hours with staff. This information was also included in a city press release and social media postings by the city and Transportation Advisory Board members. Fifty-three people provided feedback.

The city's Transportation Advisory Board (TAB) considered items related to this TIP submittal at its August 8, 2022, September 12, 2022, and October 10, 2022 meetings. A public hearing was held at the November 14, 2022 Transportation Advisory Board meeting and a City Council public hearing was held December 1, 2022.

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

☒ Yes ☐ No ☐ N/A

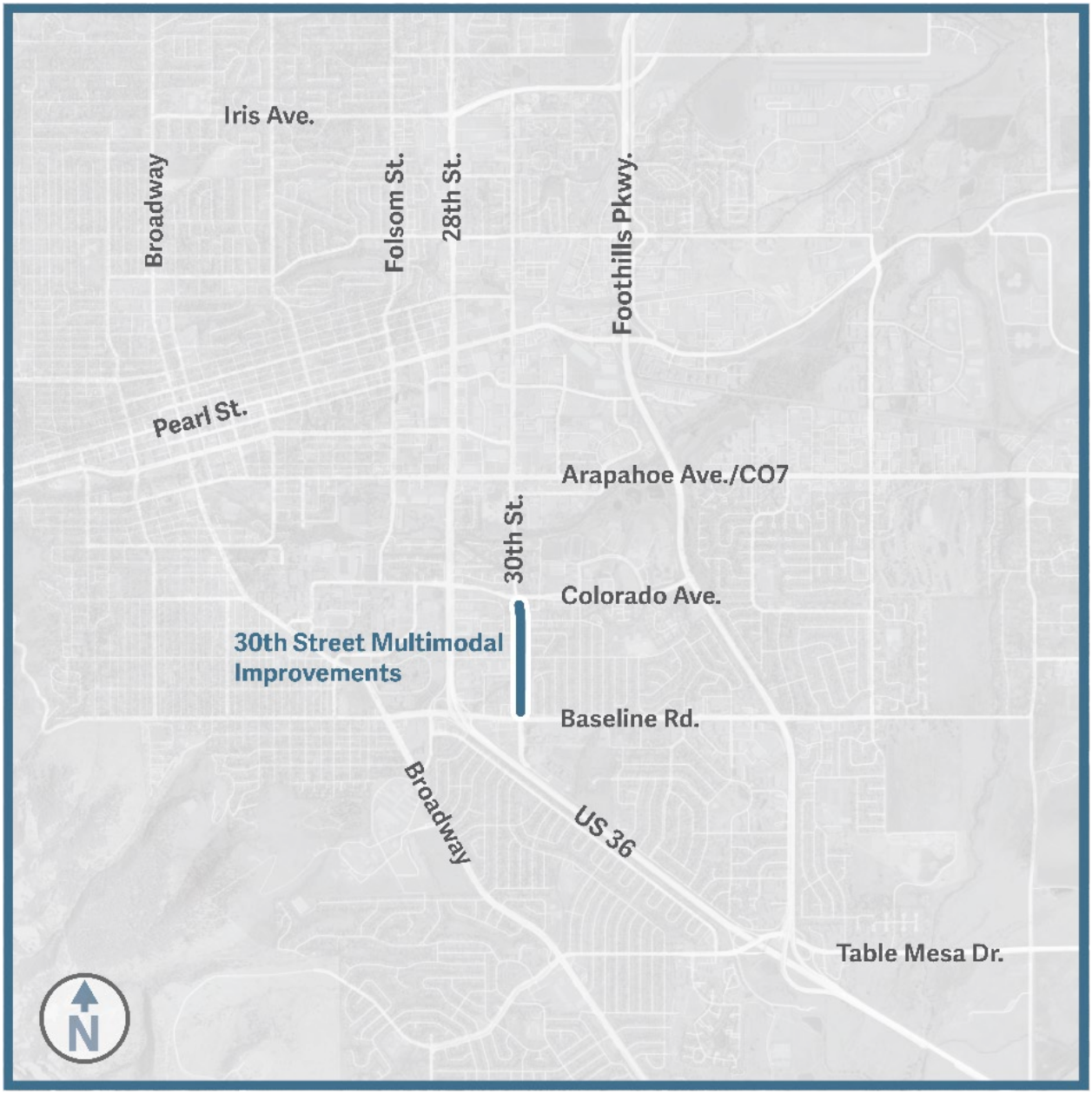
Please provide any additional details on the items in Section 3, if applicable.

Click or tap here to enter text.

**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.

## Project Location



**Project:** 30th Street Corridor - Baseline to Underpass Limits
5% Cost Estimate for TIP Application
**Date:** October 31, 2022

| ITEM | CONTRACT ITEM | UNIT | UNIT COST | BASELINE thru AURORA SECTION A QUANTITY | BASELINE thru AURORA SECTION A COST | AURORA to UNDERPASS SECTION B QUANTITY | AURORA to UNDERPASS SECTION B COST | BASELINE to UNDERPASS TOTAL PROJECT COST |
|---|---|---|---|---|---|---|---|---|
| 201-00001 | CLEARING AND GRUBBING | LS | $ 30,000.00 | 1 | $ 30,000.00 | 1 | $ 30,000.00 | $ 60,000.00 |
| 202-00010 | REMOVAL OF TREE | EA | $ 800.00 | 20 | $ 16,000.00 | 10 | $ 8,000.00 | $ 24,000.00 |
| 202-00250 | REMOVAL OF PAVEMENT MARKING | SF | $ 0.75 | 1,488 | $ 1,116.00 | 667 | $ 500.25 | $ 1,616.25 |
| 202-00019 | REMOVAL OF INLET | EA | $ 1,600.00 | 6 | $ 9,600.00 | 2 | $ 3,200.00 | $ 12,800.00 |
| 202-00200 | REMOVAL OF SIDEWALK | SY | $ 40.00 | 1,445 | $ 57,800.00 | 1,000 | $ 40,000.00 | $ 97,800.00 |
| 202-00203 | REMOVAL OF CURB AND GUTTER | LF | $ 18.00 | 2,841 | $ 51,138.00 | 1,609 | $ 28,962.00 | $ 80,100.00 |
| 202-00206 | REMOVAL OF CONCRETE CURB RAMP | SY | $ 40.00 | 240 | $ 9,600.00 | 145 | $ 5,800.00 | $ 15,400.00 |
| 202-00210 | REMOVAL OF CONCRETE PAVEMENT | SY | $ 30.00 | 3,728 | $ 111,840.00 | 3,118 | $ 93,540.00 | $ 205,380.00 |
| 202-00220 | REMOVAL OF ASPHALT MAT | SY | $ 18.00 | 633 | $ 11,394.00 | 556 | $ 10,008.00 | $ 21,402.00 |
| 202-00840 | REMOVAL OF TRAFFIC SIGNAL POLE | EA | $ 13,000.00 | 4 | $ 52,000.00 | 0 | $ - | $ 52,000.00 |
| 207-00205 | TOPSOIL (COMPLETE IN PLACE) | CY | $ 45.00 | 34 | $ 1,530.00 | 33 | $ 1,485.00 | $ 3,015.00 |
| 210-00035 | RESET WATER METER | EA | $ 1,800.00 | 15 | $ 27,000.00 | 7 | $ 12,600.00 | $ 39,600.00 |
| 210-00050 | RESET FIRE HYDRANT | EA | $ 6,000.00 | 3 | $ 18,000.00 | 3 | $ 18,000.00 | $ 36,000.00 |
| 210-00810 | RESET GROUND SIGN | EA | $ 500.00 | 20 | $ 10,000.00 | 15 | $ 7,500.00 | $ 17,500.00 |
| 210-04010 | ADJUST MANHOLE | EA | $ 1,200.00 | 6 | $ 7,200.00 | 9 | $ 10,800.00 | $ 18,000.00 |
| 210-04060 | ADJUST WATER METER | EA | $ 1,250.00 | 5 | $ 6,250.00 | 5 | $ 6,250.00 | $ 12,500.00 |
| 210-00845 | RESET TRAFFIC SIGNAL CONTROLLER | EA | $ 1,800.00 | 1 | $ 1,800.00 | 0 | $ - | $ 1,800.00 |
| 212-00006 | SEEDING (NATIVE) | AC | $ 18,000.00 | 0.10 | $ 1,800.00 | 0.10 | $ 1,800.00 | $ 3,600.00 |
| 212-00032 | SOIL CONDITIONING | AC | $ 17,500.00 | 0.10 | $ 1,750.00 | 0.10 | $ 1,750.00 | $ 3,500.00 |
| 212-00050 | SOD | SF | $ 2.50 | 1,460 | $ 3,650.00 | 700.00 | $ 1,750.00 | $ 5,400.00 |
| 213-00012 | MULCH TACKIFIER | AC | $ 5,500.00 | 1 | $ 5,500.00 | 1 | $ 5,500.00 | $ 11,000.00 |
| 21400000 | LANDSCAPE MAINTENANCE | LS | $ 10,000.00 | 1 | $ 10,000.00 | 1 | $ 10,000.00 | $ 20,000.00 |
| 304-06007 | AGGREGATE BASE COURSE (CLASS 6) | CY | $ 65.00 | 1,102 | $ 71,630.00 | 1,103 | $ 71,695.00 | $ 143,325.00 |
| 403-34741 | HOT MIX ASPHALT (GRADING SX) (75) (PG 64-22) | TON | $ 125.00 | 207 | $ 25,875.00 | 182 | $ 22,750.00 | $ 48,625.00 |
| 412-01000 | CONCRETE PAVEMENT (10-INCH) | SY | $ 145.00 | 3,419 | $ 495,755.00 | 2,229 | $ 323,132.50 | $ 818,887.50 |
| 412-00800 | CONCRETE PAVEMENT (8-INCH) | SY | $ 115.00 | 700 | $ 80,500.00 | 200 | $ 23,000.00 | $ 103,500.00 |
| 601 | CONCRETE WALL | LF | $ 250.00 | 373 | $ 93,250.00 | 0 | $ - | $ 93,250.00 |
| 603 | CULVERT EXTENSION WORK | LS | $ 150,000.00 | 1 | $ 150,000.00 | 0 | $ - | $ 150,000.00 |
| 603-01245 | 24-INCH RCP (COMPLETE IN PLACE) | LF | $ 195.00 | 300 | $ 58,500.00 | 200 | $ 39,000.00 | $ 97,500.00 |
| 604-19105 | INLET TYPE R L 5 (5 FOOT) | EA | $ 6,500.00 | 6 | $ 39,000.00 | 2 | $ 13,000.00 | $ 52,000.00 |
| 604-30005 | MANHOLE (SLAB BASE) (5 FOOT) | EA | $ 6,600.00 | 2 | $ 13,200.00 | 4 | $ 26,400.00 | $ 39,600.00 |
| 608-00006 | CONCRETE SIDEWALK (6 INCH) | SY | $ 85.00 | 2,200 | $ 187,000.00 | 1,960 | $ 166,600.00 | $ 353,600.00 |
| 608-00010 | CONCRETE CURB RAMP | SY | $ 190.00 | 340 | $ 64,600.00 | 230 | $ 43,700.00 | $ 108,300.00 |
| 608-00015 | DETECTABLE WARNINGS | SF | $ 105.00 | 440 | $ 46,200.00 | 240 | $ 25,200.00 | $ 71,400.00 |
| 608-00040 | CONCRETE BIKEWAY (6 INCH) (COLORED) | SY | $ 190.00 | 630 | $ 119,700.00 | 415 | $ 78,786.67 | $ 198,486.67 |
| 609-21020 | CURB AND GUTTER (CITY STANDARD) | LF | $ 45.00 | 2,652 | $ 119,340.00 | 2,300 | $ 103,500.00 | $ 222,840.00 |
| 614 | TRAFFIC SIGNAL | LS | $ 375,000.00 | 1 | $ 375,000.00 | 0 | $ - | $ 375,000.00 |
| 625-00000 | CONSTRUCTION SURVEYING | LS | $ 45,000.00 | 1 | $ 45,000.00 | 1 | $ 45,000.00 | $ 90,000.00 |
| 627-00008 | MODIFIED EPOXY PAVEMENT MARKING | GAL | $ 500.00 | 20 | $ 10,000.00 | 10 | $ 5,000.00 | $ 15,000.00 |
| 627-30205 | THERMOPLASTIC PAVEMENT MARKING (WORD-SYMBOL | SF | $ 26.00 | 170 | $ 4,420.00 | 390 | $ 10,140.00 | $ 14,560.00 |
| 627-30210 | THERMOPLASTIC PAVEMENT MARKING (XWALK-STOP L | SF | $ 26.00 | 2,500 | $ 65,000.00 | 2,300 | $ 59,800.00 | $ 124,800.00 |
| **PAY ITEMS SUBTOTAL** | | | | | **$ 2,508,938** | | **$ 1,354,149** | **$ 3,863,087** |
| | EASEMENTS | SF | $ 55.50 | 15,374 | $ 853,277 | 6,665 | $ 369,908 | $ 1,223,184 |
| | TRAFFIC CONTROL | 12% | | | $ 301,073 | | $ 162,498 | $ 463,570 |
| | EROSION CONTROL | 3% | | | $ 75,268 | | $ 40,624 | $ 115,893 |
| | MISCELLANEOUS ITEMS & CONTINGENCIES | 5% | | | $ 125,447 | | $ 67,707 | $ 193,154 |
| | MOBILIZATION | 10% | | | $ 250,894 | | $ 135,415 | $ 386,309 |
| | Landscaping, Irrigation, Urban Desgin Improvements | 5% | | | $ 125,447 | | $ 67,707 | $ 193,154 |
| | Private Landscaping Restoration | 3% | | | $ 75,268 | | $ 40,624 | $ 115,893 |
| | Lighting | 6% | | | $ 150,536 | | $ 81,249 | $ 231,785 |
| | City Utility Relocations | 0.5% | | | $ 12,545 | | $ 6,771 | $ 19,315 |
| | Flood Mitigation Costs (Section 1 Only) | 1% | | | $ 25,089 | | $ - | $ 25,089 |
| | Wetlands Mitigation Costs (Section 1 Only) | 0.5% | | | $ 12,545 | | $ - | $ 12,545 |
| | Construction Management | 8% | | | $ 200,715 | | $ 108,332 | $ 309,047 |
| | Material Testing | 2% | | | $ 50,179 | | $ 27,083 | $ 77,262 |
| | Design Services During Construction | 3% | | | $ 75,268 | | $ 40,624 | $ 115,893 |
| **TOTAL ESTIMATED COST** | | | | | **$ 4,842,488** | | **$ 2,502,693** | **$ 7,345,181** |
| **TOTAL ESTIMATED COST (ROUNDED)** | | | | | **$ 4,843,000** | | **$ 2,503,000** | **$ 7,346,000** |

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

**From:** Christopher Quinn
**To:** Sanson, Jean
**Cc:** Todd Cottrell
**Subject:** RE: TIP Call #4 RTD Concurrence
**Date:** Friday, January 13, 2023 4:03:37 PM

---

## External Sender

Jean,

This email is to provide RTD's concurrence with the three project applications noted below:

1. West Colorado Ave. Multimodal Improvements
2. 30th Street Multimodal Improvements
3. Folsom Street Multimodal Improvements

We would request that you coordinate with RTD as these projects proceed to ensure that our mutual interests are supported.

Thanks

Chris

**Chris Quinn**
Project Manager
Planning
he | him | his
o. 303.299.2439
chris.quinn@rtd-denver.com
rtd-denver.com

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

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

CMAQ Emissions Calculator Toolkit

# Bicycle and Pedestrian Improvements

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

Navigator

**Bicycle and Pedestrian Improvements**

## INPUT

User Guide

Reset Interface

(1) What is your project evaluation year? 2019

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

| Daily Passenger Vehicle Trips | | |
|---|---|---|
| Before | After | Change |
| 24500 | 23538 | 962 |

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

| Trip Distance Source |
|---|
| Average |

<- Fill National Values

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

| Typical Trip Distance (miles one way) | Distribution of Trip Distances (daily fraction per mileage bin) | | | | | |
|---|---|---|---|---|---|---|
| | x < 1 | 1 ≤ x < 2 | 2 ≤ x < 3 | 3 ≤ x < 4 | 4 ≤ x ≤ 5 | Sum |
| 0.5 | | | | | | |

## OUTPUT

Calculate Output

**EMISSION REDUCTIONS**

| Pollutant | Total |
|---|---|
| Carbon Monoxide (CO) | 3.166 |
| Particulate Matter <2.5 µm ($PM_{2.5}$) | 0.008 |
| Particulate Matter <10 µm ($PM_{10}$) | 0.025 |
| Nitrogen Oxide (NOx) | 0.236 |
| Volatile Organic Compounds (VOC) | 0.177 |
| Carbon Dioxide ($CO_2$) | 214.712 |
| Carbon Dioxide Equivalent ($CO_2e$) | 218.014 |
| Total Energy Consumption (MMBTU/day) | 2.907 |

*Units in kg/day unless otherwise noted

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

User Guide

Reset to Default Values

(1) What is your project evaluation year? 2027

(2) Please input the number of days that the bus service is operated annually: 365

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

**Transit Bus Information**

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

| | Before | After | |
|---|---|---|---|
| **Transit Bus Miles Traveled** | 492,065 | 492,065 | 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** — Transit Bus Model Year Distribution

**Allocations of Fuel Types** — Transit Bus Fuel Type Distribution

**Allocations of Road Types** — Transit Bus Road Type Distribution

**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 | |
|---|---|---|---|
| **Passenger Vehicle Activity** | 596,337 | 0 | Miles |

**Average One-Way Trip Distance** 4.13 Miles

*Note: National Default value is 4.52*

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

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

## OUTPUT

Calculate Output

**FLEET PERFORMANCE**

| | | |
|---|---|---|
| **Transit Bus VMT increase** | 0 | Miles |
| **Passenger Vehicle Trip Reduction** | 144,392 | Trips |
| **Passenger Vehicle VMT reduction** | 596,337 | Miles |

**EMISSION REDUCTIONS**

| Pollutant | Total kg/day |
|---|---|
| Carbon Monoxide (CO) | 4.976 |
| Particulate Matter <2.5 µm ($PM_{2.5}$) | 0.017 |
| Particulate Matter <10 µm ($PM_{10}$) | 0.063 |
| Nitrogen Oxide (NOx) | 0.266 |
| Volatile Organic Compounds (VOC) | 0.163 |

| | |
|---|---|
| Carbon Dioxide ($CO_2$) | 563.986 |
| Carbon Dioxide Equivalents ($CO_2e$) | 569.269 |
| Total Energy Consumption (MMBTU) | 7.431 |

**30th St Multimodal Improvements**

**Emissions Reductions**

| Bike/Ped | | Transit | | Total (Bike/Ped + Transit) |
|---|---|---|---|---|
| **Pollutant** | **Total** | **Pollutant** | **Total kg/day** | |
| **Carbon Monoxide (CO)** | 3.166 | **Carbon Monoxide (CO)** | 4.976 | 8.141 |
| **Particulate Matter <2.5 µm ($PM_{2.5}$)** | 0.008 | **Particulate Matter <2.5 µm (PM2.5)** | 0.017 | 0.025 |
| **Particulate Matter <10 µm ($PM_{10}$)** | 0.025 | **Particulate Matter <10 µm (PM10)** | 0.063 | 0.088 |
| **Nitrogen Oxide (NOx)** | 0.236 | **Nitrogen Oxide (NOx)** | 0.266 | 0.502 |
| **Volatile Organic Compounds (VOC)** | 0.177 | **Volatile Organic Compounds (VOC)** | 0.163 | 0.340 |
| | | | | |
| **Carbon Dioxide ($CO_2$)** | 214.712 | **Carbon Dioxide (CO2)** | 563.986 | 778.698 |
| **Carbon Dioxide Equivalent ($CO_2$e)** | 218.014 | **Carbon Dioxide Equivalents (CO2e)** | 569.269 | 787.283 |
| **Total Energy Consumption (MMBTU/day)** | 2.907 | **Total Energy Consumption (MMBTU)** | 7.431 | 10.338 |

# 30th St Multimodal Improvement: Estimated Reduction in Crashes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **30th Street & Aurora Avenue** | | HSIP Cat: | **Signal** | | | | |
| **Countermeasure** | | | | **CMF** | **Fatal** | **Serious Injury** | **Other** | **PDO** |
| Change to protected intersection | | | | 0.59 | 0 | 1 | 8 | 27 |
| Change from perm.-prot. to prot.-only on major approach (operations only) | | | | 0.58 | 0 | 1 | 8 | 27 |
| Install Leading Pedestran Interval | | | | 0.9 | 0 | 1 | 8 | 27 |
| Upgrade signal heads from 8" to 12" | | | | 0.97 | 0 | 1 | 8 | 27 |
| Transit Prioirty Signal and Lane Priority | | | | 0.836 | 0 | 1 | 8 | 27 |
| | | | | 0.249747 | 0 | 0.249747142 | 1.997977 | 6.743173 |
| | | | | reduced | 0 | 0.750252858 | 6.002023 | 20.25683 |
| | | | | | | | | |
| | | | | | | | | |
| **30th Street** | | | | **CMF** | **Fatal** | **Serious Injury** | **Other** | **PDO** |
| Protected bicycle lanes | | | | 0.86 | 1 | 4 | 82 | 200 |
| Widened sidewalks | | | | 0.172045 | 1 | 4 | 82 | 200 |
| | | | | 0.4558 | 0.4558 | 1.8232 | 37.3756 | 91.16 |
| | | | | reduced | 0.5442 | 2.1768 | 44.6244 | 108.84 |
| | | | | | | | | |
| | | | | | **Fatal** | **Serious Injury** | **Other** | **PDO** |
| | | | intersection reduced | | 0 | 0.750252858 | 6.002023 | 20.25683 |
| | | | segment reduced | | 0.5442 | 2.1768 | 44.6244 | 108.84 |
| | | | | | | | | |
| | | | Total Reduction | | 0.5442 | 2.927052858 | 50.62642 | 129.0968 |
| | | | | | 1 | 3 | 51 | 129 |

# Center for People With Disabilities

*Overcoming barriers to Independent Living since 1977*

January 23, 2023

To Whom It May Concern,

The Center for People With Disabilities (CPWD) would like to show support for the City of Boulder's three federal funding grant applications (DRCOG TIP) for safety and multimodal improvement projects on the Core Arterial Network. The three projects include:

- 30th Street Multimodal Improvements (Colorado Avenue to Baseline Road);
- Folsom Street Multimodal Improvements Pre-Design (Pine Street to Colorado Avenue); and
- West Colorado Avenue Multimodal Improvements (Regent Drive to Folsom Street).

As a center for independent living, our mission is to provide resources, information and advocacy to assist people with disabilities in overcoming barriers to independent living. We believe that these multimodal improvement projects above will provide increased accessibility, improved safety, and equitable access to transportation for people with disabilities promoting independence.

Additionally, City's commitment to engaging with diverse stakeholders for feedback and collaboration in community-wide projects is evident to us. We would like to express our support and appreciation for City's inclusive processes and would like to offer our services and participation in continued collaboration to serve Boulder residents.

Sincerely,

Maria Stepanyan
Executive Director
Center for People With Disabilities
Maria@CPWD.org
303-442-8662 ext. 243

COMMUNITY CYCLES
Creating a culture of cycling

2601 SPRUCE ST, UNIT B
BOULDER, CO 80302

COMMUNITYCYCLES.ORG

Community Cycles Letter of Support for City of Boulder TIP Applications - Call #4

Community Cycles is made up of people who ride bicycles, love bicycles, and support bicycle-based transportation. We promote abundant and equitable access to safe cycling infrastructure for everyone in our community.

**Folsom St Multimodal Improvements Design (Pine St – Colorado Ave)**

The Folsom St Multimodal Improvements Design (Pine St - Colorado Ave) project will eventually lead to safe, multimodal, north-south connectivity within the City of Boulder for local and subregional travel. Currently this rare northsouth bike corridor has substandard and stressful bike lanes directly adjacent to automobiles and trucks with a speed limit of 30mph. Part of this corridor has the DRCOG High Injury Network designation.

With added protection for cyclists and pedestrians, this corridor will help meet our Vision Zero and mode-shift goals. In addition, it will serve an underserved population of Boulder. This corridor connects to CU and provides access to a core retail business area.

Generally, Boulder has excellent, well-developed bicycling corridors for east-west travel but no safe corridors for north-south travel in the eastern half of the city. Earlier attempts to rapidly improve pedestrian and bicyclist safety were reversed. A more complete planning process would allow engagement and consideration of multiple options for this complex transportation corridor, and a better chance of success.

**30th Street Multimodal Improvements (Baseline Rd - Colorado Ave)**

30th Street is a main transportation corridor in Boulder for local and regional travel, but 30th Street presently lacks the complete street infrastructure to provide safe, convenient and comfortable travel for those biking, walking, or taking transit.

It is no surprise, then, that the City of Boulder's Safe Streets Report (2022) identified 30th Street as one of the worst crash locations in the city and, thus,"earned" a Critical Corridor designation by DRCOG.

Thousands of people live, work, and attend university within the project area, many of whom rely on biking and walking to reach their destinations: roughly 30% of households are low-income, and half of the households are housing cost burdened. 30th Street is a primary north-south travel corridor in Boulder that provides connections and access to the three University of Colorado (CU) campuses, the 29th Street Retail Center and a considerable share of the city's retailers.

Providing complete street connections to the many residences, destinations, and bus services along the corridor, the project will provide safer and improved biking, walking, and transit facilities for a wider range of ages and abilities.

Although we are disappointed that the project plans to retain the existing four to five general purpose lanes, Community Cycles supports the project because the improvements identified through the planning and design, such as protected bicycle lanes, protected intersections, enhanced crossings, and wider sidewalks, will meet the safety needs of those who use the corridor and, therefore, lead to more people cycling safely and comfortably. With the current work at 30th and Colorado intersection, the funded enhancements of 30th between CO7 & Colorado Ave, the planning work for 30th Street north of CO7, along with the adjacent Baseline Road improvements are the start of a great multimodal transportation corridor.

**West Colorado Avenue Multimodal Improvements (Regent Drive – Folsom Street)**

This West Colorado Avenue segment sees thousands of CU students, faculty and staff commuters every day. Nearly half of the corridor residences are low income, a quarter are individuals of color, and a majority are housing cost burdened, many without access to a motor vehicle. It is also a part of a Boulder's Core Arterial network that will provide safe and low stress travel to key destinations in Boulder, including connecting East & West Campus. This is a building block that is needed to enable more people to commute with active transportation and reduce the potential for severe injury crashes and reduce greenhouse gas emissions. Community Cycles sees opportunities to reduce the cost of the project and improve safety by narrowing and simplifying the intersections involved.

Sincerely
Community Cycles Advocacy Committee

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

**FROM:**
John Tayer, President & CEO, Boulder Chamber
Amanda Mansfield, Senior Manager of Transportation, Boulder Chamber and Boulder Transportation Connections
Jonathan Singer, Senior Director of Policy Programs, Boulder Chamber

**SUBJECT:**
City of Boulder TIP Funding Applications: 30th Street, W. Colorado Avenue, Folsom Street

**January 20, 2023**

Dear Mr. Cottrell:

The Boulder Chamber of Commerce and Boulder Transportation Connections are pleased to provide this letter of support for the City of Boulder's projects: W. Colorado, 30th St, and Folsom St Multimodal Improvements.

These projects are important for the City of Boulder as we work to grow our Complete Streets network, making transportation options safer and more equitable within our community.

30th Street is an area with high potential for safety enhancements. This street connects the University of Colorado's main campus with the East Campus and Williams Village. Over 23,000 residents live in this corridor, 30% of whom are low-income, 25% are people of color, and 14% do not have personal motor vehicles. The existing bike and sidewalk facilities do not meet current standards and has been identified by DRCOG as a High Injury Network and Critical Corridor.

Funding the improvements along 30th Street will tie-in to improvements already happening further north in the corridor allowing more users to take advantage of a safe and comfortable corridor for all users, especially those not in motor vehicles. Complete Streets design will allow people to better access education, health care, groceries, and other retail and business in the area. Enhancements in the 30th Street corridor will also help solidify a much-needed north-south biking and transit corridor for the entire community.

Enhancements along Folsom Street will also provide a welcome north-south corridor connecting the main CU campus with points north. Folsom Street has protected lanes north of Pine Street. We recognize the value in extending this protection to Colorado Avenue and the CU campus, provided this can be done safely for all modes involved and without impeding traffic flow and travel times for all modes. Ideally, through this preliminary design phase, the City will be able to develop a plan that would include sufficient right-of-way to retain existing vehicle travel lanes and add protected bike lanes, similar to the proposed construction plan for 30th St.

The Folsom corridor houses over 30,000 residents, including the Mapleton Manufactured Housing Community. Folsom Street intersects with both the Goose Creek Multi-Use Path and Boulder Creek Path allowing access to multiple points throughout the City of Boulder. 36% of corridor residents are low-income and 13% lack personal motor vehicles. This area is identified as a High Injury Network. We look forward to working with the city to engage a diverse and representative group of community stakeholders throughout the preliminary design phase discussion to help ensure a productive, thoughtful and collaborative outcome for all involved.

Colorado Avenue helps tie these projects together providing a needed east-west link. This project will construct bicycle, pedestrian, and transit facilities, including vertically separated bike lanes, continuous, ADA-compliant sidewalks, and a dedicated transit lane for more efficient transit service and safer and more comfortable first- and last-mile connectivity.

Colorado Avenue has been identified in the City of Boulder's Core Arterial Network with projects already underway to improve conditions between 28th Street and 30th Street, this funding will help to complete the connections to the University of Colorado campus. With over 23,000 residents in the area and thousands already using sustainable modes through this area, enhanced comfort and safety will provide a more welcoming environment that encourages more sustainable transportation use.

The City of Boulder grant applications are an important first step in providing safer, more convenient, cost efficient and sustainable transportation options for corridor-wide students, residents, employees, and customers. We strongly support the City of Boulder project application team in requesting funding to contribute to the build-out of Complete Streets serving key commuter corridors.

Thank you for your consideration of these impactful projects.

Sincerely,

John Tayer, President & CEO, Boulder Chamber

Amanda Mansfield, Senior Manager of Transportation, Boulder Chamber and Boulder Transportation Connections

Jonathan Singer, Senior Director of Policy Programs, Boulder Chamber